The impact of training police officers in identifying PTSD and shame-based behaviours in victims of sexual assault

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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.

Signature:

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Overview

This thesis focuses on how sexual assault victims are viewed by the police and is presented in three sections. The work was part of a joint project conducted with another DClinPsy trainee, David Turgoose (Turgoose, 2015).

The literature review considers research which examines the psychological and physical consequences for victims of rape and sexual assault who receive a negative reaction from others to their disclosure of their experience. The most common effect of a negative reaction was an increase in the likelihood of victims' experiencing Post Traumatic Stress Disorder (PTSD). Additionally, a link between negative reactions to disclosure and other psychological and physical difficulties were found.

The empirical paper reports on a quantitative study exploring the outcome of a PTSD training programme for specialist police officers working with victims of rape. Officers' knowledge and attitudes improved immediately following the training, however these changes were not maintained at follow-up. The majority of officers found the training useful, potentially indicating that further clinical psychology collaboration with the police would be helpful.

The critical appraisal reflects on the process of completing this research, with a focus on the challenges of collaborating with the police and the way in which those were negotiated. Additionally, more general considerations of the challenges of conducting research are discussed.

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Part 1: Literature review

The impact of negative responses to disclosure of sexual assault

Abstract

Introduction: Social support can be helpful for adjustment following a stressful event however, it is not always the case that reactions from others are perceived as positive. This review examined the effects of receiving a negative reaction to a disclosure of sexual assault either from informal support providers (family, friends or partners) or formal support providers (the police, mental health clinicians or legal professionals).

Methods: The databases of PsychINFO, Medline, Web of Science and PILOTS were searched. Studies were included if they contained a quantitative measure of negative social reactions to disclosure (e.g. blaming reactions, disbelief, criticism or controlling reactions) and explored potential consequences of these reactions. In total, 21 studies were included.

Results: All of the studies reported adverse psychological and/or physical consequences of a negative reaction to disclosure of sexual assault. The most consistent finding was the link between negative reactions and increased PTSD. Other negative consequences included depression, reduced self-esteem, and increased reliance on unhelpful coping strategies, physical difficulties and revictimisation.

Conclusions: There are a number of potential significant negative consequences for victims who have an unhelpful experience when disclosing a sexual assault, emphasising the importance of the reaction of the trusted confidante. However, not all negative reactions are perceived in this way, and to a certain extent the experience of a reaction as negative is partly influenced by the person receiving it.

Introduction

Following a traumatic event, social support has consistently been found to be important for psychological wellbeing (Brewin, Andrews & Valentine, 2000; Ozer, Best, Lipsey & Weiss, 2003). One theory suggests that social support serves as a way to protect individuals from the effects of stressful or traumatic events by equipping them with resources with which to cope, thus reducing the potential negative impact of the event (Cohen, 2004). However, social support is not always experienced as positive or useful, and people intending to offer support may inadvertently say or do things that are perceived as unhelpful (Lehman, Ellard & Wortman, 1986).

Sexual assault or rape is an example of a highly traumatic experience. It is distressing in its nature and is an aggressive act which involves the violation of the victim's personal integrity at the hands of at least one other human being. Due to the interpersonal nature of rape, the victim's beliefs about others may be profoundly affected, which has the potential to impact on social bonds (Herman, 1992). For example victims may find it more difficult to trust other people following the experience of sexual assault, and this may, in turn, impact their experience of social support and its effects.

Following a sexual assault, as many as 92% of people disclose this experience to another person (Ahrens, Campbell, Ternier-Thames, Wasco, & Sefl, 2007; Starzynski, Ullman, Filipas, & Townsend, 2005). Social support and disclosure to informal support providers, such as friends and relatives, can be an important way to cope with and process the difficult aftermath of a stressful event such as this. Additionally, rape has a number of physical, psychological and legal implications which means that victims may also choose to disclose to

formal support providers, such as the police, health professionals and legal teams.

Victims often report experiencing a mixture of positive and negative reactions from those they tell. Whilst positive responses are much more commonly reported, some evidence suggests that the detrimental effects of negative responses to disclosure are more strongly linked to individual wellbeing than the supportive impact of positive disclosure (Major, Zubek, Cooper, Cozzarelli & Richards, 1997; Ullman, 1999), a finding which is echoed in the wider trauma literature (Andrews, Brewin & Rose, 2003).

Within the research literature, a number of negative social reactions to victims of sexual assault have been identified. Some unhelpful responses are predominantly about the way the victim is made to feel about themselves following disclosure, such as feeling blamed or criticised (Holmstrom & Burgess, 1979) or responsible (White & Rollins, 1981), whereas other reactions are more focussed on the way in which the other person behaves following the disclosure, for example becoming over-protective or controlling of the victim, treating them differently, trying to distract them, withdrawing from them or the other person becoming absorbed in their own rage and desire for retribution (Holmstrom & Burgess, 1979; Silverman, 1978). Additionally, as well as these active negative social reactions, negative responses can also occur when there is an absence of a predicted positive response, for example the victim not experiencing emotional support from someone when there was an expectation that the other person would be able to provide this.

The impact of a negative reaction to the disclosure of any stressful event can be significant. Indeed, there is a body of literature which indicates that

negative responses to disclosure of rape can be so distressing that they can be considered “the second rape” (Ahrens et al., 2007) and research indicates that post-assault social support is an important predictor for adjustment following a trauma (Brewin, et al., 2000; Ozer et al., 2003). For example, there is evidence to suggest that post-trauma thoughts related to negative appraisals from others following the assault (e.g. “Other people are ashamed of me”) were more strongly predictive of PTSD than assault characteristics, including assault severity or perceived threat to life in the moment (Dunmore, Clark & Ehlers, 2001). It seems likely that reactions from others can serve to compound or contradict beliefs that the victim may have about themselves following an assault, and that this in turn impacts future adjustment (Charuvastra & Cloitre, 2008). Additionally, within the qualitative literature, there are findings which indicate that receiving a negative reaction to disclosure can reduce people’s willingness to further disclose their experience, an effect known as ‘silencing’ (Ahrens, 2006).

It is important to note that although victims may experience negative social reactions, it rarely the intention of the people they disclose to give them a negative experience. In the case of informal support providers for people who have been sexually assaulted, this is a role which may be something they were unprepared for and therefore do not necessarily know how to respond in a helpful way. Additionally, their own emotional reaction to the disclosure may impact on their ability to be centred on providing the most useful help to the victim. In the case of formal support providers, there may be instances where their other professional responsibilities, for example obtaining an account within a certain timeframe, get in the way of offering the type of support that a

victim would find helpful. Additionally, in the case of both types of support provider, it may be that they are unaware that the response they are giving is unhelpful, and it is possible that the distressing nature of sexual assault means that victims are less able to recognise positive responses in the people that they disclose to (Maddox, Lee & Barker, 2011).

This review

The aim of this review is to consider the consequences for victims of receiving a negative reaction to disclosure of sexual assault. Its focus is solely on negative reactions, given the previous findings that positive reactions have minimal or no impact on later adjustment (Ullman, 1999). Additionally, research suggests that the perceived quality of the social support (i.e. how helpful or unhelpful it was) received by people who have been traumatised is more predictive of later development of PTSD than quantitative measures of social network (e.g. the number of friends a person has) (Kessler, Price & Wortman, 1985; Sarason, Shearin, Pierce & Sarason, 1987; Shinn, Lehmann & Wong, 1984). Therefore, a focus of this review is on the subjective experience of reactions to disclosure, and will exclude studies solely focused on the amount or type of support received. Finally, given that from both a clinical and academic perspective child sexual abuse is considered to be an experience distinct from adult sexual assault, this review will only consider studies of sexual assault and rape as it occurs in adulthood. In line with this, the majority of included papers use a version of the Sexual Experiences Survey (SES; Koss & Gidycz, 1985; Koss et al., 2007) in order to establish the nature of the sexual assault that occurred. Within this the minimum age at the time of assault is 14 years old, therefore the

same cut-off age has been used within this review.

Methods

Inclusion and Exclusion Criteria

Inclusion criteria.

1. Studies with adult participants (18 years or over) who had experienced a sexual assault at age 14 or above
2. Participants had disclosed the sexual assault to either formal sources (e.g. police officers, lawyers, medical professionals or mental health clinicians) or informal sources (e.g. friends, family, a partner) and at least some participants had received a negative reaction
3. Studies included a quantitative measure of the physical or psychological impact of disclosure on the victim
4. Peer-reviewed journals published in English

Exclusion criteria.

1. Studies of other types of violent crime, or where the majority of participants have not disclosed a sexual assault
2. Studies of child sexual abuse or assault occurring below the age of 14

Search Strategy

The electronic databases of PsychINFO, Medline, Web of Science and PILOTS, a database specifically for PTSD and trauma literature, were searched. Search terms were:

(self disclosure OR social support OR social reaction OR disclosure)

AND

rape OR sexual assault

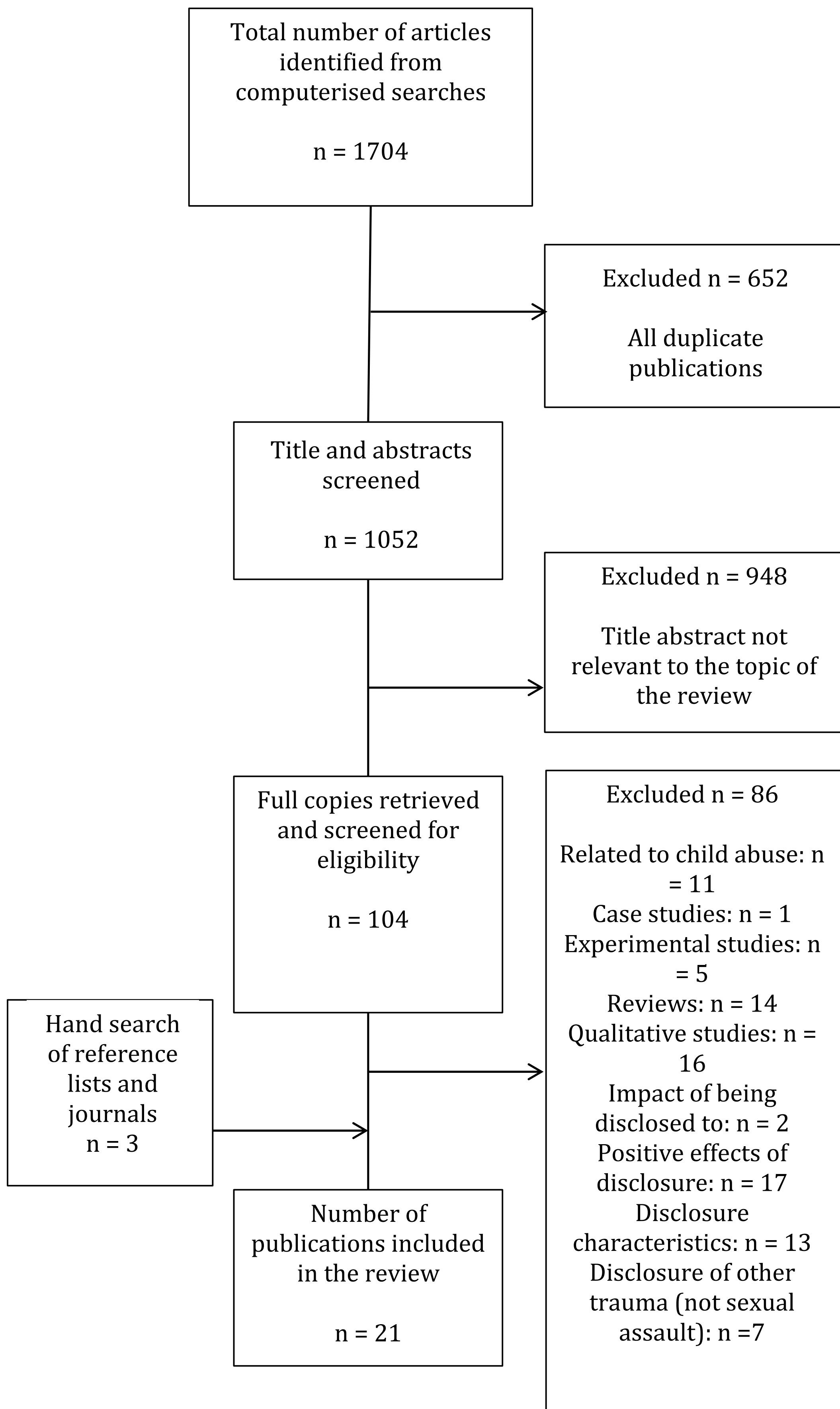
Initially all returned article titles and abstracts were screened. Following that, the full text of relevant articles was read and a hand search of key journals and reference lists was conducted. Figure 1. outlines the number of papers that were included and excluded at each stage.

Quality Assessment

The development and use of critical appraisal checklists has occurred in order to aid the process of systematic review and the evaluation of the quality of individual research studies. There is no accepted 'gold standard' version, however, and there are a number of potential checklists to use. Katrak, Bialocerkowski, Massy-Westropp, Kumar, & Grimmer (2004) suggest that researchers should choose an appropriate checklist according to type of study design they are appraising.

For this review, the Standard Quality Assessment Criteria for Evaluating Primary Research Papers (Kmet, Lee & Cook, 2004) was used (see Appendix 1). This measure consisted of 14 items, however it contained three items which focused on randomisation and blinding and were therefore not relevant for the papers included within this review. There was a "not applicable" option available for these items and this was selected for all of the included studies. As a result the maximum possible score for each paper was 22.

Figure 1. Flowchart of study selection



Results

The search resulted in 1704 potential papers. Of these, 18 publications, arising from 15 studies, met criteria for inclusion. Further hand searching identified three additional articles, two of which shared data with studies already included and one, which had a completely unique sample. In total 21 publications from 16 studies met criteria for inclusion. Figure 1. outlines the study selection procedure. The publications which drew on the same sample as each other have been considered separately within this review as the reported outcomes for each are suitably different from each other. It has been indicated when papers share the same sample.

Table 1 outlines the 21 papers which considered the impact of negative social reactions to disclosure of sexual assault on psychological and physical wellbeing. This included consideration of both diagnosable psychological disorders, namely PTSD and depression, as well established features of psychological difficulties, for example thoughts, feelings and coping styles. All of the studies were rated as high or moderately high quality as all of them had large sample sizes and described the aims of their research clearly. The main reason for losing points in the quality checklist was studies not controlling for the length of time since the assault and whom the individual disclosed to, both of which are likely to impact on the experience of disclosure and how clearly it can be recalled.

Table 1. Study characteristics for included publications

Study & country	Sample/population	Design and methodology	Disclosure impact measured	Key findings	Quality score
Ahrens, Stansell & Jennings (2010) USA	N = 103 All female sample Mean age: 38 years Age range: 18-66 Assault disclosed to formal and informal support providers	Cross-sectional Face-to-face interview	*Social reactions:* SRQ[5] *PTSD:* PDS[2] *Depression:* CES-D *Physical health:* Cohen-Hoberman Inventory of Physical Symptoms (CHIPS) (Cohen & Hoberman, 1983)	Negative social reactions were associated with higher levels of PTSD, depression and physical health outcomes	20
Borja, Callahan & Long (2006) USA	N = 63 All female sample Age not reported Assault disclosed to formal and informal support providers	Cross-sectional Online survey	*Social reactions:* SRQ[5] *PTSD:* PDS[2] *Psychological distress:* SCL-90-R[4]	Negative reactions from informal support providers were associated with PTSD, whereas negative reactions from formal support providers had no association Only informal negative support was predictive of PTSD symptom severity No significant correlation was found between general psychological distress and negative social reactions	20
Campbell , Ahrens, Sefl, Wasco & Barnes (2001)[a] USA	N = 102 All female sample Mean age: 34 years Age range: 18-64 years Who was disclosed to not reported	Cross-sectional Face-to-face interview	*Social reactions:* Modified version of SRQ[5] *Measure of formal social system contact:* Type of formal support received (legal, medical or mental health), which procedures happened	Negative social reactions (as labelled by the researchers) were not significant predictors of PTSD, depression or physical health symptoms. However, the number of negative reactions was, e.g. more negative reactions was a significant predictor of all three health outcomes	21

			during that contact and an assessment of the secondary victimization that occurred *PTSD:* SCL-90-R Crime-related PDS scale[4] *Depression:* CES-D[1] *Psychological distress:* SCL-90-R[4] *Physical health:* Cohen-Hoberman Inventory of Physical Symptoms (CHIPS) (Cohen & Hoberman, 1983)	Specific negative reactions of being called irresponsible or being patronised were associated with increased PTSD, depression and physical health difficulties The negative reaction of being encouraged to keep the rape a secret did not have a significant relationships to PTSD, depression of physical health Revenge reactions, telling the victim to get on with their life and controlling reactions were perceived by some victims to be hurtful and some to be healing. Hurtful perceptions were associated with increased PTSD, depression and physical health symptoms compared to those who viewed them as a healing reaction and those who received no reaction at all	
Campbell, Sefl, Barnes, Ahrens, Wasco & Zaragoza-Diesfeld (1999)[a] USA	N = 102 All female sample Mean age: 34 years Age range: 18-64 Assault disclosed to formal support providers	Cross-sectional Face-to-face interview	*Measure of formal social system contact:* Type of formal support received (legal, medical or mental health), which procedures happened during that contact and an assessment of the secondary victimization that occurred *PTSD:* SCL-90-R Crime-related PDS scale[4]	Negative experiences with the legal and medical systems were associated with increased levels of PTSD symptoms The most distressing revictimisation experiences from formal support providers were associated with higher levels of PTSD symptoms Acquaintance rape victims who received minimal assistance from services but who also reported that that contact was negative were more likely experience PTSD	19

				symptoms Some discrepancy between participants between what was considered a positive or negative reaction	
Davis, Brickman & Baker (1991) USA	N = 106 All female sample Median age: 27 Age range: 18-81 Who was disclosed to not reported	Cross-sectional Face-to-face interview	*Social reactions:* Crime Impact Social Support Inventory (CISSI) (Barrera, Sandier & Ramsey, 1981) *Psychological symptom status:* SCL-90-R[4]	Greater amounts of unsupportive behaviour were associated with poorer psychological adjustment	19
Filipas & Ullman, (2001)[b] USA	N = 323 All female sample Mean age: 30 years Assault disclosed to formal and informal support providers	Cross-sectional Postal survey	*Social reactions:* SRQ[5] *Support providers:* Participants indicated which support providers they had told about the assault, whether they were helpful or not and how satisfied they were with the support *Open-ended social reaction questions:* Four questions about the positive and negative reactions received, as well as what type of reaction they did not have but would have liked *PTSD:* PDS[2] *Self-esteem:* Self-Esteem Scale	Women who felt blamed were more likely to report lower self-esteem. Negative reactions had no impact on positive affect Receiving a rape myth response was associated with less PTSD symptoms.	17

			Affect: Affect Balance Scale		
Hassija & Gray (2012) USA	N = 68 61 female, 7 male participants. Mean age: 21 years Who was disclosed to not reported	Cross-sectional Online survey	*Social reactions:* SRQ[5] *PTSD:* Posttraumatic Stress Disorder Checklist (PCL) (Weathers, Litz, Huska, & Keane, 1994) *Attributes for interpersonal violence:* Attributional Style Questionnaire (ASQ) (Peterson, Semmel, Baeyer, Abramson, Metalsky & Seligman (1982)	Higher self-blame and negative social reactions were associated with greater PTSD symptoms There was a positive association between self-blame and receiving negative social reactions Hierarchical multiple regression analysis showed that negative social reactions mediate the relationship between self-blame and PTSD symptom severity	18
Jacques-Tiura, Tkatch, Abbey & Wegner (2010) USA	N = 136 All female sample. Age range: 18-49 Assault disclosed to formal and informal support providers	Cross-sectional Face-to-face interview	*Social support and disregard:* Scaled responses about supportive and unsupportive response from others *Reasons for seeking support:* Researcher developed checklist for possible reasons for telling someone about the sexual assault *PTSD:* Davidson's 17-item Trauma Scale (Davidson et al., 1997)	PTSD symptoms were positively related to experiencing disregard at disclosure of their experience This correlation was stronger for African American participants compared to their Caucasian counterparts Feeling embarrassed or at fault was related to an increased likelihood to regret disclosure PTSD symptoms were positively related to regret at having told someone PTSD symptoms were more likely when disclosing to a formal support provider or when there were a higher number of reasons for seeking support	19

Littleton & Breitkopf (2006) USA	N = 216 All female sample Age range: 18-22 Who was disclosed to not reported	Cross-sectional Online survey	*Social Reactions:* SRQ[5] *Quantity and quality of current relationships:* The People in Your Life scale *Coping:* Coping Strategies Inventory (only disengagement scores analysed) (Tobin, Holroyd, Reynolds, & Wigal, 1989) *Self-blame cognitions:* Meyer and Taylor Scale (Meyer & Taylor, 1986) *World view cognitions:* World Assumptions Scale (Janoff-Bulman, 1989)	All types of negative reactions (stigmatising, blaming, controlling, minimising and egocentric reactions) were weakly correlated with avoidant coping Moderate negative correlation between benevolence beliefs (e.g. "There is more good than evil in this world") and negative reactions to disclosure (though not including egocentric reactions) Weak negative correlation between self-worth beliefs and negative reactions to disclosure (thought not including egocentric reactions) An egocentric negative reaction predicted avoidant coping, though other types of negative reactions were not significant predictors	18
Littleton (2010) USA	N = 262 All female sample Mean age: 22 years Age range: 18-50 years Assault disclosed to formal and informal support providers	Cross-sectional & longitudinal Online survey	*Social Reactions:* SRQ[5] *PTSD:* PTSD Symptom Scale (PTS) *Coping:* Coping Strategies Inventory (Tobin, et al., 1989) *Post-trauma thoughts:* Posttraumatic Cognitions Inventory (Foa, Riggs, Dancu & Rothbaum, 1993) *Depression:* CES-D[1]	Negative disclosure reactions predicted maladaptive coping in both cross-sectional and longitudinal analyses Negative reactions were also associated with greater adaptive coping Negative reactions related to all types of post-trauma thoughts (world, self and self-blame for the trauma) Negative reactions related to negative self and blame cognitions in the longitudinal	19

				analyses. Negative reactions predicted PTSD and depression symptoms in the cross-sectional analyses, with negative reactions also predicting PTSD symptoms in the longitudinal analysis	
Mason, Ullman, Long, Long & Starzynski (2009) USA	N = 625 All female sample Mean age: 33 years Age range: 18-68 years Assault disclosed to formal and informal support providers	Longitudinal Postal survey	*Social reactions:* SRQ[5] *PTSD:* PDS[2] *Depression:* CES-D[1] *Lifetime history of traumatic events:* Stressful Life Events Screening Questionnaire (SLESQ) (Goodman, Corcoran, Turner, Yuan, & Green, 1998)	Receiving a blaming response to disclosure was correlated with later sexual assault revictimisation Other negative social reactions were not associated with revictimisation	19
Orchowski, Untied & Gidycz (2013) USA	N = 100 All female sample Age information not reported Who was disclosed to not reported	Cross-sectional Face-to-face interview	*Social reactions:* SRQ[5] *Coping strategies:* Coping Strategy Indicator (Amirkhan, 1990) *Psychological distress:* SCL-90-R - depression, anxiety and PTSD indexes[4]	Controlling social reactions only were associated with higher symptoms of posttraumatic stress, depression and anxiety Blaming social reactions were associated with lower levels of self-esteem and less engagement in problem-solving coping. Being treated differently was associated with increased levels of self-esteem No association was found between egocentric reactions or distracting the survivor on victim psychological distress (anxiety, depression or PTSD), self-esteem or victim coping strategies	20

Relyea & Ullman (2013)[c] USA	N = 1863 All female sample Mean age: 31 years Age range: 10-71 years Who was disclosed to not reported	Cross-sectional Postal survey	*Social reactions:* SRQ[5] *Perceived Social Support:* Social Support Questionnaire Short Form Revised (Sarason, Sarason, Shearin, & Pierce, 1987) *PTSD*: PDS[2] *Coping strategies:* Brief COPE (Carver, 1997) *Characterological self-blame:* RAQ[3] *Depression:* CES-D[1] *Sexual refusal assertiveness:* Sexual Assertiveness scale (Morokoff, Quina, Harlow, Whitmire Grimley, Gibsin & Burkholder, 1997)	Unsupportive acknowledgement reactions were the strongest predictor of depression and PTSD Turned against reactions were predictive of increased characterological self-blame, with unsupportive acknowledgement only being marginally predictive Turned against reactions were related to less sexual refusal assertiveness. Unsupportive acknowledgement reactions were twice as predictive of maladaptive coping compared to turned against reactions	20
Ullman (1996) USA	N = 155 All female sample Mean age: 29 years Assault disclosed to formal and informal support providers	Cross-sectional Postal survey	*Social reactions:* Participant responses to 40 possible social reactions along the 4 positive and 4 negative social reaction dimensions *Coping:* Participant responses to twelve coping strategies *Self-blame:* Two self blame questions, one relating to behavioural self-blame and	Negative reactions of being treated differently, distraction and taking control were weakly correlated with poorer self-rated recovery and more psychological symptoms Self-blame was not associated with self-rated recovery or psychological symptoms in people who disclosed early but was significantly associated in late disclosers Negative social reactions were associated	19

			one relating to characterological self-blame *Thought about recovery:* Self-rated recovery –assessed with the questions “how recovered do you feel overall from this experience?” *Psychological distress:* Los Angeles ECA survey (LA-ECA) (Sorenson, Stein, Siegel, & Burnam, 1987)	with more use of avoidant coping strategies The use of avoidant coping appeared to mediate the relationship between negative reactions and an increase in psychological symptoms	
Ullman & Filipas (2001)[b] USA	N = 323 All female sample Mean age: 30 years Assault disclosed to formal and informal support providers	Cross-sectional Postal survey	*Social Reactions:* SRQ[5] *Assault-specific social support:* Rating of timing of disclosure, amount of support providers told and satisfaction with support *Current social support:* Social Activities Questionnaire and Inventory of Socially Supportive Behaviors (ISSB) (Barrera, Sandler & Ramsey, 1981) *PTSD:* PDS[2]	Negative social reactions are related to greater PTSD symptom severity Being treated differently was most predictive of PTSD symptom severity, though all five negative social reactions were significantly correlated to PTSD symptom severity	21
Ullman, Filipas, Townsend &	N = 505 All female sample Age range: 18-68	Cross-sectional	*Social reactions:* SRQ[5] *PTSD:* PDS[2] *Effects of alcohol:* Alcohol	Negative social reactions were associated with having co-morbid PTSD and drinking problems	22

Starzynski (2006) USA	Who was disclosed to not reported	Data collection method not reported	Effects Questionnaire – Tension Reduction Subscale (Rohsenow, 1983) *Drinking to cope:* Negative affect 5-item scale (Cooper, Frone, Russell, & Mudar, 1995), *Past year drinking problems:* Michigan Alcohol Screening Test (MAST) (Selzer, 1971) *Coping:* Brief COPE (Carver, 1997) *Self-blame:* RAQ[3] *Lifetime traumatic events:* Stressful Life Events Screening Questionnaire (SLESQ)	Greater self-blame was also associated with co-morbid PTSD and drinking problems	
Ullman & Najdowski (2009)[d] USA	N = 969 All female sample. Mean age: 32 years Age range: 18-71 years Assault disclosed to formal and informal support providers	Longitudinal Postal survey	*Social reactions:* SRQ[5] *PTSD:* PDS[2] *Problem drinking:* Michigan Alcohol Screening Test (MAST) (Selzer, 1971) *Coping:* Brief COPE (Carver, 1997) *Blame:* RAQ[3] *Suicidal ideation and attempts:* Yes/no questions about each of these respectively. *Control over recovery:* 5-item	Negative social reactions were not associated with suicidal ideation or suicide attempts PTSD and depression symptoms were not associated with suicide attempts. Depression symptoms were marginally associated with suicidal ideation, although PTSD symptoms were not Coping was not associated with either suicidal ideation or attempts	19

			scale. Name of measure not given. *Depression:* CES-D[1]		
Ullman & Najdowski (2011) USA	N = 555 All female sample Mean age: 32 years Who was disclosed to not reported	Longitudinal Postal survey	*Social reactions:* SRQ[5] *PTSD:* PDS[2] *Coping:* Brief COPE (Carver, 1997) *Attributions of self-blame:* RAQ[3]	Negative reactions to disclosure lead to more characterological self-blame but not behavioural self-blame PTSD symptom severity was positively correlated with revictimisation	19
Ullman & Peter-Hagene (2014)[c] USA	N = 1863 All female sample Mean age: 31 years Age range: 10-71 years Who was disclosed to not reported	Cross-sectional Postal survey	*Social reactions:* SRQ[5] *PTSD:* PDS[2] *Coping:* Brief COPE (Carver, 1997) *Thoughts about recovery:* RAQ[3]	Negative reactions to disclosure were directly positively correlated to PTSD symptoms, and maladaptive coping mediated this effect Negative reactions related to victim reliance on maladaptive individual and social coping strategies, as well as adaptive individual coping strategies Negative social responses were associated with less perceived control over recovery	20
Ullman, Starzynski, Long, Mason & Long, 2008[d] USA	N = 857 All female sample Mean age: 32 years Age range: 18-71 Assault disclosed to formal and informal support providers	Cross-sectional Postal survey	*Social reactions:* SRQ[5] *PTSD:* PDS[2] *Coping:* Brief COPE (Carver, 1997) *Problem drinking:* Michigan Alcohol Screening Test (MAST) (Selzer, 1971)	Women who received negative social reactions showed more problem drinking if they had less frequent social contact Problem drinkers received more negative social reactions than “normal” drinkers	19

Ullman, Townsend, Filipas & Starzynski, 2007[d] USA	N = 636 All female sample Mean age: 32 years Age range: 18-71 years Assault disclosed to formal and informal support providers	Cross-sectional Postal survey	*Social reactions:* SRQ[5] *PTSD:* PDS[2] *Coping:* Brief COPE (Carver, 1997) *Blame:* RAQ[3] *Traumatic life experiences:* Stressful Life Events Screening Questionnaire (SLESQ) (Goodman, Corcoran, Turner, Yuan, and Green, 1998)	Negative social reactions, were associated with avoidant coping, self blame and PTSD symptoms Use of avoidance coping strategies was associated with increased PTSD symptoms, suggesting that avoidant coping may mediate the link between negative social reactions and PTSD There was no significant relationship between PTSD and self-blame	20

[a, b, c, d] Papers drawing from the same sample

[1]CES-D: Center for Epidemiological studies – depressions scale (Radloff, 1977)
[2]PDS: Posttraumatic Stress Diagnostic Scale (Foa, Cashman, Jaycox, & Perry, 1997)
[3]RAQ: Rape Attribution Questionnaire (Frazier, 2003)
[4]SCL-90-R: Symptom checklist -90 (Derogatis, 1997)
[5]SRQ: Social Reactions Questionnaire (Ullman, 2000)

PTSD

The most commonly investigated consequence of negative disclosure was the impact on PTSD symptoms. In total, 15 papers explored the impact of negative reactions to disclosure on symptoms (Ahrens, Stansell & Jennings, 2010; Borja, Callahan & Long, 2006; Campbell, Ahrens, Sefl, Wasco & Barnes, 2001; Filipas & Ullman, 2001, Hassija & Gray 2012, Littleton, 2010; Jacques-Tiura, Tkatch, Abbey & Wegner, 2010; Orchowski, Untied & Gidycz, 2013; Relyea & Ullman, 2013; Ullman & Filipas, 2001; Ullman & Peter-Hagene 2014, Ullman, Filipas, Townsend & Starzynski, 2006; Ullman, Townsend, Filipas & Starzynski, 2007; Ullman, Starzynski, Long, Mason & Long, 2008; Ullman & Najdowski, 2009) and all of them found that negative social reactions were associated with an increase in PTSD symptoms. The majority of studies investigated this relationship using cross-sectional data. However, Littleton (2010) collected additional longitudinal data and found that this correlation remained at six-month follow-up, although, participants were below the clinical cut-off point for PTSD at this time point. This indicates that victims still experience symptoms even if they do not reach criteria for clinical diagnosis. Ullman and Peter-Hagene (2014) and Ullman et al. (2007) used structural equation modelling to investigate the nature of the link between negative reactions and PTSD symptoms and both found that negative reactions were directly linked to PTSD symptoms, and that there was an additional indirect link which was mediated by maladaptive coping.

Specific negative reactions.

Six studies (Campbell et al., 2010; Filipas and Ullman, 2001; Jacques-Tiura et al., 2010; Orchowski et al., 2013; Relyea and Ullman, 2013; Ullman & Filipas, 2001) considered the specific types of negative reactions that a victim can receive, rather than considering them all under the umbrella concept of 'negative reactions'. For the majority of the studies, the Social Reactions Questionnaire (SRQ) (Ullman, 2000) was used to assess social response to disclosure. Within this measure, there are five subscales related to the types of possible negative social reaction that can be given: blaming the victim, controlling them, distracting them, treating them differently/stigmatising them or giving an egocentric reaction (e.g. the person being disclosed to becoming very upset themselves).

Ullman and Filipas (2001) investigated all five types of negative social reaction included in the SRQ (Ullman, 2000) and found that whilst all of these were significantly related to PTSD symptoms, being treated differently was the most predictive of PTSD symptom severity. Ullman (1996), however, found that being treated differently, distraction and taking control were associated with more psychological symptoms.

In contrast to both of the above studies, Orchowski et al. (2013) found that reactions which attempt to control the victim were strongly associated with PTSD symptoms, but that none of the other four types of negative social reactions were correlated.

Relyea and Ullman (2013) divided the negative reactions outlined in the SRQ (Ullman, 2000) into two distinct constructs: 'turned against' reactions and 'unsupportive acknowledgement' reactions. 'Turned against' reactions included

all items from the blame and stigmatising subscales and half on the control scale whereas 'unsupportive acknowledgement' reactions included all items from the egocentric and distract subscales, as well as the other half of the control subscale. Authors suggested that these were conceptually different and postulated that 'turned against' reactions represented those which are considered to be more negative, whereas 'unsupportive acknowledgement' reactions were considered to be more mixed in terms of whether victims perceived them as positive or negative. They found that both types of negative reaction were predictive of PTSD, however 'unsupportive acknowledgement' was slightly more predictive of symptoms, a surprising finding given that 'turned against' reactions are the more intuitively negative responses.

Campbell et al. (2001) did not use the SRQ (Ullman, 2000) however did base their measure of reactions on this measure. They found that being called irresponsible, patronising the victim, revenge reactions, telling the victim to get on with their life and controlling reactions were associated with more PTSD symptoms only if the victim perceived them as hurtful. Those victims who viewed these reactions as either helpful or those who did not receive these reactions experienced significantly less distress in comparison. Additionally, there was a cumulative effect of the detrimental impact of negative reactions, with more negative reactions being associated with higher levels of symptoms of post traumatic stress symptoms.

One study (Jacques-Tiura et al., 2010) used researcher-developed scales to assess the reactions of others and examined the impact of the specific negative response of disregard in both Caucasian and African American participants. They found that disregard was positively related to all victims'

experience of PTSD symptoms, although the correlation was stronger for African American participants. These findings indicate that African American disclosers experience more negative reactions, and that the impact of these negative reactions is more profound.

Filipas and Ullman (2001) also investigated a negative reaction not featured within the SRQ (Ullman, 2000): rape myth acceptance (e.g. that stranger rape is more typical and what could be considered "real rape", as opposed to acquaintance rape) within the person who is disclosed to. They found that this was not related to PTSD symptoms, and authors suggested that this may be due to a general trend of reduced PTSD with those who are victims of acquaintance rape compared with stranger rape.

PTSD and negative reactions according to support provider.

Three studies (Borja et al., 2006; Campbell et al., 1999; Jacques-Tiura et al., 2010) considered the relationship between negative reactions to disclosure and PTSD according to the type of support provider (formal or informal). Campbell et al. (1999) looked only at formal support providers and found that negative reactions from legal, medical and mental health settings were predictive of increased symptoms of trauma, and that demographic factors, time since the assault and the assault severity were not. They also found that those victims who received fewer services from both medical and legal systems, but had experienced these as negative, were more likely to experience higher levels of PTSD. This was not the case for mental health services, however, and authors found that mental health services have a potential to 'undo' the negative experiences that can occur within the other systems.

Jacques-Tiura et al. (2010) compared victims' experiences of disclosing to both formal and informal support providers and found disclosure to formal support providers, the most common being counsellors, therapists and religious leaders, being associated with increased posttraumatic stress symptoms. Borja et al. (2006), however, found the opposite trend, that only negative reactions from informal support providers were associated with increased posttraumatic stress symptoms. Given the correlational design of these papers, it is not possible to establish causality. It could be that those people who seek support from others, particularly formal support providers like therapists, may be experiencing increased levels of PTSD prior to their disclosure.

Problem Drinking

Two studies (Ullman et al., 2006; Ullman et al., 2008) considered the impact of negative reactions to disclosure and problem drinking. Ullman et al. (2008) found that women who received a negative reaction to disclosure demonstrated more problem drinking, only if they had less frequent social contact. This makes sense when considering that the potential impact a negative experience can have if there are limited opportunities to have more positive one, and thus "correct" the negative effects.

Ullman et al. (2006) compared sexual assault victims who had PTSD only with those that had PTSD and co-morbid drinking problems. The consideration of alcohol use within sexual assault victims is important as problem drinking may represent maladaptive coping in the wake of an assault, and previous research has found that sexual assault victims who have drinking problems are more likely to experience PTSD symptoms (Najavits, Weiss & Shaw, 1997).

Ullman et al. (2006) found that receiving more negative social reactions was associated with co-morbid PTSD and drinking problems.

Coping

Within the coping literature there are two broad strategies which individuals can utilise in order to manage stressful events: approach coping or avoidance coping. Approach coping involves the victims engaging in active strategies to manage the problem or the emotional consequences of the problem. Avoidance coping, on the other hand, involves attempts to move away from the problem, for example by using strategies to avoid thinking about the event e.g. substance use, social withdrawal or denial (Snyder & Pulver, 2001). Authors suggest that approach coping is synonymous with what we might consider adaptive coping, whereas avoidance coping might be considered to be more maladaptive in that whilst it may offer short-term relief, there are potential long-term negative consequences.

Seven papers (Littleton, 2010; Littleton & Breitkopf, 2006; Orchowski et al., 2013; Ullman, 1996, Relyea & Ullman, 2013; Ullman et al., 2007, Ullman & Pere-Hagene, 2014) investigated the impact that negative experiences of disclosure have on coping styles. Five of those papers (Littleton & Breitkopf, 2006; Ullman, 1996, Relyea & Ullman, 2013; Ullman et al., 2007, Ullman & Peter-Hagene, 2014) considered exclusively maladaptive coping styles and all found that negative reactions were linked to an increased reliance of this type of coping.

Specific negative reactions.

Littleton and Breitkopf (2006) found that egocentric reactions, in which the person who is disclosed to becomes focused on their own distress, were most predictive of avoidant coping but that stigmatising or blaming reactions were not significant predictors. Although, all types of negative reactions identified by the SRQ (Ullman, 2000) (stigmatising, blaming, controlling, minimising and egocentric reactions) were weakly correlated with avoidant coping, even if they weren't predictive. Relyea and Ullman (2013) similarly found that, compared to 'turned against responses', 'unsupportive acknowledgement' responses, which include egocentric responses, were twice as predictive of maladaptive coping.

Coping as a mediator.

Ullman et al. (2007), Ullman (1996) and Ullman & Peter-Hagene (2014) found that the use of maladaptive coping appeared to mediate the relationship between negative reactions and psychological symptoms, including PTSD. That is, victims who receive more negative reactions may engage in more avoidant coping and consequently experience more PTSD symptoms.

Negative reactions and adaptive coping .

Three studies (Littleton, 2010; Orchowski et al., 2013; Ullman & Peter-Hagene, 2014) considered the impact that negative reactions had on adaptive as well as maladaptive coping.

Ullman and Peter-Hagene (2014), found that negative social reactions were associated with an increased reliance on adaptive individual coping, for

example “I thought hard about what steps to take”. The predictive nature of this relationship between negative reactions and both maladaptive and adaptive coping was echoed by Littleton (2010), and this finding was maintained in both cross-sectional and longitudinal data.

Orchowski et al. (2013), however, found no significant predictive relationship between negative social reactions and coping, other than finding that a blaming response was associated with reduced likelihood of engaging in adaptive problem-solving coping e.g. “forming a plan in my mind”.

Post-trauma Cognitions

Thoughts of self-blame.

Five studies (Hassija and Grey, 2012; Littleton and Breitkopf, 2006; Relyea and Ullman, 2013; Ullman and Najdowski, 2011; Ullman et al., 2007) considered the impact of negative reactions on victims’ experience of self-blame. Ullman and Najdowski (2011), Relyea and Ullman (2013) and Ullman et al. (2007) conceptualised self-blame as both characterological (e.g. “This happened to me because I am a bad person”) and behavioural (e.g. “This happened to me because I did something wrong”) and all of them found some relationship between negative reactions following an assault and an increased characterological self-blame within victims. Ullman et al. (2007) and Relyea and Ullman (2013) investigated the specific negative responses as defined by the SRQ (Ullman, 2000) and found that all of them were correlated with an increase in characterological self-blame. Relyea and Ullman (2013), however, found that ‘turned against’ reactions (blame, stigmatising and some elements of controlling

behaviour) were more predictive of self-blame, with 'unsupported acknowledgment' only being marginally predictive.

In terms of behavioural self-blame, Ullman and Najdowski (2011) found that negative reactions following an assault were not predictive of behavioural self-blame. This finding was somewhat supported by Ullman et al. (2007) who found that the negative reactions of being treated differently or denial were not correlated with behavioural self-blame. They did find, however, that blaming, controlling or distracting reactions correlated with behavioural self-blame, though these correlations were weak (.19, .11 and .10 respectively).

Littleton and Breitkopf (2006) also investigated the impact of characterological and behavioural self-blame, though they collapsed the concepts into one overall measure of self-blame. They found that general self-blame was positively correlated with the all of the potential negative reactions identified within the SRQ (Ullman, 2000), a finding which was echoed by Hassija and Grey (2012), Littleton (2010) and Ullman et al. (2007) on their measures of more general self-blame.

Effects of self-blame.

Five studies (Hassija & Gray, 2012; Ullman, 1996; Ullman et al., 2006; Ullman et al., 2007; Ullman & Najdowski, 2009) considered the potential effects of self-blame on victims.

Ullman et al. (2007) did not find a significant relationship between self-blame and PTSD. However, Hassija & Gray (2012) did find a significant relationship, with self-blame being associated with increased levels of PTSD symptoms. Hierarchical multiple regression analyses indicated that negative

social reactions mediate the relationship between self-blame and PTSD (rather than the other way round), and suggest that victims who have a lot of self-blame may be more likely to provide an account that highlights blame information, and thus makes a negative reaction more likely.

Ullman (1996) looked at the impact of self-blame on self-rated recovery and psychological symptoms depending on the time of disclosure. They found that there was no associated between self-blame and psychological symptoms for those who receive a negative reactions following an early disclosure (within days of the assault) but there was an association for those that disclosed late (between several weeks to over a year after the assault).

Ullman et al. (2006) considered the impact that self-blame had on comorbid drinking problems and compared victims of sexual assault with PTSD alone to those who have PTSD and drinking problems. They found that self-blame was related to having comorbid PTSD and problem drinking.

Ullman & Najdowski (2009) considered the impact of negative reactions on the likelihood of victims experiencing suicidal thoughts and found that self-blame was related to higher suicidal ideation.

Thoughts about others and the world.

One study (Littleton, 2010) considered the impact of a negative reaction to disclosure on post-trauma cognitions about the safety of world, such as "There is more good than evil in this world". They found that those victims who had received a negative reaction to disclosure were more likely to have negative thoughts about the safety of the world.

Thoughts about recovery.

Two studies (Ullman, 1996; Ullman & Peter-Hagene, 2014) considered how negative social reactions impact on victims' beliefs about their recovery. Ullman (1996) considered how well-recovered victims felt since the assault and found that for those who received the specific negative reactions of being treated differently, the supporter taking control or the supporter trying to distract the victim were less likely to perceive themselves as being well adjusted. Path analyses of the results suggested that negative reactions had a direct effect on self-rated recovery.

Ullman and Peter-Hagene (2014) found that receiving more negative social reactions was associated with less perceived control over recovery. This represents an important construct to investigate as research suggests that belief in control over recovery is associated with less PTSD symptoms in victims of sexual assault (Frazier, 2003; Ullman, Filipas et al., 2007). It is possible, therefore, that thoughts about recovery mediate the relationship between negative reactions and PTSD.

Thoughts about disclosure.

Jacques-Tiura et al. (2010) found that 18% of people wished they had not disclosed to anyone about their sexual assault, and cited that the person they told made them feel ashamed or that the assault was their fault or that they deserved it. Regret about disclosure was correlated with the experience of PTSD, though it is unclear whether this feeling of regret is directly linked to PTSD or if it mediates the relationship between negative reactions and PTSD.

Depression and Anxiety

Four studies (Ahrens et al., 2010; Littleton, 2010; Orchowski et al., 2013; Campbell et al., 2001) investigated the impact of negative social reactions on victims' experience of depression. All studies found a link between negative reactions and depressive symptoms, however two studies (Orchowshi et al. 2013; Campbell et al., 2001) considered the specific type of negative reaction and found that not all negative reactions were linked to depressive symptoms.

Orchowski et al. (2013) also found that only controlling reactions were associated with depressive symptoms and that blaming, treating differently, distracting or egocentric reactions were not. Campbell et al. (2001) found that controlling reactions or other negative reactions such as the victim being called irresponsible, patronising the victim, revenge reactions and telling the victim to get on with their life were associated with more symptoms of depression only if the victim perceived them as hurtful. When a victim received these reactions and considered them helpful, or if a victim did not receive these reactions at all, then the impact on depressive symptoms was significantly less in comparison.

Littleton (2010) considered whether the link between negative reactions and depressive symptoms was maintained over time, and assessed this by conducting a six-month follow-up. This longitudinal data revealed no significant result.

Suicidal Ideation or Attempts

One study (Ullman & Najdowski, 2009) investigated the effect of negative social reactions on individual's likelihood to experience either suicidal thoughts or suicide attempts. Findings from this indicated that there was no association

between the two factors. They also investigated whether PTSD and depression symptoms were related to suicidal ideation or attempts and found that depression was only marginally associated with suicidal thoughts. Other links were not significant. Further studies are needed.

Self-esteem

Two studies (Filipas & Ullman, 2001; Orchowski et al., 2013) investigated the impact of negative reactions on victims' self-esteem. Both found that the negative reaction of blaming the victim was strongly negatively correlated with victim self-esteem. Orchowski et al. (2013) reported on other potential negative reactions and whilst there was no correlation between distraction, controlling and egocentric reactions, a surprising finding was the moderate positive correlation between self-esteem and being treated differently. Authors queried whether being treated differently was considered by the women in this sample to be a positive experience, rather than a negative one, and certainly a weakness of this study is that they did not assess individuals' appraisals of the reactions they received; it may not be possible to uniformly decide which reactions are negative given that this may depend on the interpretation of the reaction by the victim themselves.

General Psychological Distress

In addition to specific investigations related to PTSD and depression, three studies (Borja et al., 2006; Davis Brickman & Baker, 1991; Ullman, 1996) considered the impact of negative reactions on more general psychological

wellbeing, as assessed by a non-specific measure of the prevalence of mental health difficulties.

Davis, Brickman & Baker (1991) and Borja et al. (2006) both used the Global Severity Index of the SCL-90 (Derogatis, 1997) as a measure of adjustment, which includes assessment of depression, anxiety, somatisation, hostility, paranoid ideation and psychoticism. Whilst Davis, Brickman and Baker (1991) found that negative reactions were associated with worse psychological outcomes in victims, this finding was not replicated by Borja et al. (2006) who found no significant relationship.

Ullman (1996) considered specific types of negative reactions and found that those victims who experienced being treated differently, being distracted or controlling reactions were more likely to experience increased psychological symptoms.

Physical Health

Two studies (Ahrens et al., 2010; Campbell et al., 2001) explored the relationship between negative social reactions and physical health symptoms.

Both studies found that negative social reactions were associated with increased physical health difficulties. Campbell et al. (2001) found a cumulative effect of the detrimental impact of negative reactions, with more negative reactions being associated with higher levels of physical health difficulties.

Campbell et al. (2001) also considered the type of negative reaction the victims received and the extent to which they viewed it as a helpful or hurtful response. They found responses that would typically be considered to be negative (e.g. calling the victim irresponsible, patronising them, telling the

victim to get on with their life and controlling reactions) were only associated with physical health problems if the victims perceived the response to be hurtful. In comparison, those victims who appraised those reactions to be helpful, or those victims who did not receive those reactions at all were significantly less impacted in terms of their physical wellbeing.

Revictimisation

Three studies (Mason et al., 2009; Relyea & Ullman, 2013: Ullman & Najdowski, 2011) considered how negative social reactions might impact on revictimisation (i.e. the experience of another instance of sexual assault).

Mason et al. (2009) compared victims who had been revictimised over the course of a year with those who had not, and considered whether there was a significant difference in the social reactions they received at disclosure of the initial assault. They found that only blame was significantly different between the two groups, with revictimised individuals experiencing more blaming responses. Negative reactions of egocentric response, controlling responses, distraction and treating the victim differently/stigmatising them were not significantly different between the groups.

Ullman and Najdowski (2011) did not investigate the direct link between social reactions and revictimisation, but did consider the role that PTSD might have in mediating this relationship. Similarly to Mason et al. (2009) they considered revictimisation over a one year study period and found a positive correlation between PTSD symptoms at the initial data collection period and revictimisation at the second time point.

Relyea and Ullman (2013) also did not consider the direct link between negative reactions and revictimisation, but did measure the effect of negative reactions on sexual refusal assertiveness, which has been identified as a predictor of revictimisation (Livingston, Testa & VanZile-Tamsen, 2007). They found that 'turned against' reactions were associated with less sexual refusal assertiveness, indicating that those who receive these types of negative reactions are more likely to experience revictimisation.

Discussion

The results of this literature review indicate that negative social reactions to disclosure of sexual assault are detrimental and have the potential to profoundly impact victims' subsequent psychological wellbeing. Negative reactions consistently correlated with and predicted later difficulties including diagnosable mental health disorders, namely PTSD and depression, as well as other important features of psychological difficulties, including coping styles, post-trauma cognitions and self-esteem. Additionally, negative reactions were associated with other deleterious consequences including impacts on physical health and future risk of revictimisation.

The wide reaching impact of negative reactions highlights the number of ways in which disclosure has the potential to compound and exacerbate post-assault difficulties, beyond only diagnosable psychological difficulties. The prevalence of these difficulties is concerning because they are distressing experiences in their own right, but also because they are potential signs and symptoms of psychological difficulties, for example, negative thoughts about the self are known to be linked to depression. Additionally, experiencing negative

effects beyond diagnosable problems may actually exacerbate victims' experience of diagnosed difficulties like depression and PTSD. For example, avoidant coping styles have been linked to an increase in severity of PTSD symptoms within rape victims (Valentiner, Riggs, Foa & Gershuny, 1996) and, indeed, results from Ullman et al. (2007), Ullman (1996) and Ullman & Peter-Hagene, (2014) suggest that avoidant coping may act as a mediator between negative reactions and PTSD.

The finding that some negative reactions were predictive of revictimisation both directly and indirectly, through the mediating role of PTSD and sexual refusal assertiveness, is particularly concerning. Revictimisation is worrying in and of itself, but also when considering some of longer-term impacts that can arise as a result of being a victim of multiple assaults. For example, police officers identified that they might be less likely to believe an account of rape if the person had been assaulted more than once in their lifetime (Maddox, Lee & Barker, 2012), which has the potential to start another unhelpful cycle of negative social reactions to disclosure.

One area in which there was not a universal negative consequence to harmful disclosure was within the coping findings, with the result that negative social reactions were associated with an increased likelihood of engaging in adaptive individual coping (Littleton, 2010; Ullman & Peter-Hagene, 2014). Authors suggested that this surprising result may be due to victims feeling that that they cannot utilise adaptive social coping following the receipt of a negative reaction. That is, they are forced to develop more individual coping strategies as a result of receiving a negative reaction from another person. It would be

interesting to explore which characteristics predict whether a victim engages in adaptive over maladaptive coping if they receive a negative reaction.

Whilst there seems to be clear evidence about the detrimental effects of negative reactions to disclosure, there are inconsistent findings about which specific types of negative reactions may be more or less harmful, as well as the pathways through which negative reactions impact on victims. For example, the link between negative reactions and PTSD appears to be both a direct one and one which is mediated by avoidant coping.

As Campbell et al. (2001) highlighted by asking participants to rate how helpful or hurtful the reactions they received were, to a certain extent, the experience of a reaction as negative or positive is related to the perception of the person receiving that response. In the case of PTSD, depression and physical health complaints, those people that rated a response as helpful experience less symptoms, even if that response was objectively negative. Therefore studies which assess what might be typically considered a negative reaction, but do not additionally measure whether this was the way it was experienced by the victim, may not be considering the whole picture in relation to negative reactions.

The impact of support provider was also found to have an effect on the way in which negative reactions impact victims. Findings from Borja et al. (2006) Campbell et al. (1999) and Jacques-Tiura et al. (2010) showed inconsistent results regarding whether negative reactions from formal or informal support providers had more detrimental effects, however, again, this may be influenced by subjective victim perception, for example the type and amount of support they expected to receive, and how much their experience

matched that. Ahrens and Aldana (2012) also found that the quality of the relationship between the victim and the person they disclose to was an important factor in whether the victim interpreted reactions as negative, and also the extent to which the negative reaction was seen as harmful.

Importantly, caution needs to be given when considering these results given that the research design used in the studies do not allow conclusions to be drawn about causality. Whilst it might be possible that negative reactions result in increased difficulties in psychological and physical adjustment, it is also possible that victims who experience these difficulties present in such a way to other people that they inadvertently elicit a negative reaction when disclosing. Equally, it may be that both of these processes are at work and that the relationship is, in fact, bidirectional.

Limitations

The majority of the data gathered from the studies reviewed were based on victim self-report. Although the subjective experience of the victims are of primary interest, the lack of data from those who were disclosed to means that we are unable to establish a richer picture about disclosure through investigation of the experience and intentions of the person who was disclosed to. Similarly, studies frequently did not assess the type of support provider disclosed to. Given research which suggests there is a difference in the prevalence of negative reactions and the effects of negative reactions according to support provider, it seems that this could be an important confounding variable not always controlled for within the above studies.

Finally, there were variable time periods between the assault disclosure and the study data collection period. It may be that those victims who participated in research close to the time of the assault differ significantly from those who had a longer period of time before becoming involved in research. The time difference could have a practical impact on the recall of memory, as well the possibility of time impacting on the potential for subsequent post trauma events to alter appraisals of reactions to disclosure. For example, a reaction which was considered negative at the time it was given might be considered more favourably if in the subsequent years the victims felt supported by others.

Implications

The findings from this review highlight the importance of victims not receiving a negative reaction to their disclosure of sexual assault. Given that informal support providers are unlikely to know that they are going to be disclosed to before it happens it is unlikely that intervention could feasibly be targeted at them. However, work with formal support providers to draw their attention to the effects of victims receiving a negative reaction to disclosure, as well as the types of reactions that might be considered negative according to research, could be helpful. Indeed, the empirical study within this thesis is the development and evaluation of a training package designed to help police officers recognise signs and symptoms of PTSD in people who have been sexually assaulted, and to not confuse those with indicators of lying. Given that not being believed is one negative reaction discussed above, this type of

intervention may go some way to help the experience of negative reactions to disclosure.

On a wider level, awareness campaigns may have to carefully consider the way in which their messages could be interpreted. For example, in 2014 an NHS poster with the information 'One in three reported rapes happen when the victim has been drinking' was widely criticised for encouraging victim blaming. It is possible that campaigns like this impact on both the victim's sense of responsibility but also the sense of blame that the person they disclosure to has about rape. Given the significant impact that negative reactions can have on victims, it is vitally important that a blame culture is not perpetuated.

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Part 2: Empirical Paper

The impact of training police officers in identifying PTSD and shame-based behaviours in victims of sexual assault

Abstract

Aims: Specialist rape and sexual assault police officers often work with people who are experiencing trauma reactions, however these officers only have basic training in this area. The aim of this research was to provide additional training sessions about PTSD and shame in people who have been sexually assaulted and to evaluate the impact this had on officers.

Method: Training was conducted with 142 police officers. Changes in their knowledge of PTSD as well as their attitudes towards victims were assessed before training, immediately following and at two-month follow-up. Feedback from the officers about the usefulness of training was also collected.

Results: There were immediate changes in knowledge and attitudes towards victims following the training. However, the only change which remained at follow-up was officers' knowledge of the key symptoms of PTSD. Officer feedback indicated that the training was well-received and they were enthusiastic to learn more about psychological factors that may influence their work.

Conclusions: The training had an immediate effect on officers' knowledge and attitudes but this was not maintained in the long-term data. It may be that one training session is not sufficient in order to make a lasting impact, and consideration of ways in which this could be achieved is discussed, for example 'top-up' training or case supervision forums.

Introduction

Post traumatic stress disorder (PTSD) and associated psychological processes such as shame and self-blame are common consequences of rape or sexual assault (Kilpatrick, Saunders, Veronen, Best, & Von, 1987). Within the first 12 weeks following a sexual assault approximately 94% of people experience some symptoms of PTSD, even if they do not reach the threshold for a clinical diagnosis (Rothbaum, Foa, Riggs, Murdock & Walsh, 1992).

One predictor associated with the development of PTSD following sexual assault is the process of disclosure of the event to another person. As discussed in the literature review in Part One of this thesis, those victims who experience a negative response from others following a disclosure of rape are more likely to experience symptoms of PTSD, as well as other psychological and physical difficulties (see lit review). Additionally, negative social reactions reduce victims' willingness to talk about the event again, an effect known as silencing (Ahrens, 2006). Examples of negative reactions include blaming or criticising the victim (Holmstrom & Burgess, 1979), making them feel responsible (White & Rollins, 1981), withdrawing from them, being over-protective or controlling, treating the victim differently, or the other person becoming absorbed in their own rage and desire for retribution (Holmstrom & Burgess, 1979; Silverman, 1978).

There are a number of informal and formal support providers that a victim may choose to disclose to. Given that rape is a criminal offence, one of these formal support providers may be the police. There are well-publicised statistics regarding the low numbers of convictions that are achieved for those victims that do go to court (CPS: Violence Against Women and Girls Crime

Report, 2013-2014), and the biggest drop out in the judicial process occurs following victims' initial report to the police. Although there is a complex interplay of factors which may influence this, the largest contributing factor is victim choice to no longer continue with the prosecution (Office for Criminal Justice Reform, 2006).

Maddox, Lee and Barker (2011) interviewed victims about their experiences of disclosing a sexual assault to the police and found that those victims who rated their specialist officer as being empathic were more willing to consider taking the case forward in the court process, suggesting that police empathy was a key factor in preventing rape case attrition. Although it should be noted that the sample size for this study was small, Maddox et al. (2011) also found that those victims who experienced more PTSD symptoms or increased levels of shame felt that they were treated less empathically. As mentioned previously, PTSD is highly prevalent in victims of rape, and an important aspect of their presentation is shame (Lee, Scragg, & Turner, 2001). Therefore it is concerning that behaviours consistent with these common psychological processes are associated with reduced empathy.

One potential reason for this finding is the impact that PTSD and shame may have on the victims' presentation within interview, and this in turn can impact on the perceived credibility of their story. Frequently with rape cases the legal dispute is not about whether sexual intercourse has occurred, but whether the act was consensual or not. Additionally, due to the nature of the crime, it is rare that there are witnesses and therefore the evidence is predominantly two conflicting accounts of the events, one from the victim and one from the alleged

perpetrator. Given this, the perceived credibility of testimony is a vitally important factor in the outcome of rape cases (Ask & Landstrom, 2010).

Nonverbal cues are often used by lay people to assess credibility, though there is little evidence that these are an accurate way to detect lying (DePaulo, et al., 2003). Emotional expression that is congruent with lay beliefs about how victims should respond is one of the nonverbal cues used to assess the truthfulness of victims' accounts. Burgess and Holmstrom (1974) identified two different communication styles within rape victims: emotional and numbed. Evidence suggests that those who present in a more emotional fashion are considered to have more credible stories than those who present in a numbed way (Kaufmann, Drevland, Wessel, Overskeid & Magnussen, 2003; Winkel & Koppelaar, 1991). Many rape victims who experience PTSD present as 'numbed' or emotionally 'cut off' (Foa, Riggs, & Gershuny, 1995). The presence of a numbed or withdrawn account of the events may, therefore, be indicative of PTSD within the individual yet may be incorrectly judged by police as a sign of lying.

The ability to provide a coherent narrative of events is also associated with credibility of victims' report. The inherently traumatic nature of rape may, however, impact on both the encoding and retrieval of memories relating to the event (Brewin, 2001; Brewin, Dalgleish, & Joseph, 1996; Ehlers & Clark, 2000), thus reducing the ability of victims to recall specific information. Additionally, shame-based drives to avoid thinking and talking about what happened may serve to block recall. As a result victims experiencing shame and PTSD may appear to be lying due to difficulties associated with memory retrieval.

The potential manifestations of PTSD and shame within victims during police interviews are at odds with cultural stereotypes of normal reactions to rape. Some research suggests that the police rely as much as lay people on rape myths regarding the way a victim should present (e.g. overt signs of despair, such as crying) in order to assess victim credibility (Bollingmo, Wessel, Eilertsen, & Magnussen, 2008). Despite this, qualitative interviews with the police (Maddox, Lee, & Barker, 2012) suggest that they believe that they are good at assessing victim credibility and that they can make quick decisions about this during interviews. Maddox et al. (2012) also found that police officers relied on a number of nonverbal cues to identify lying, for example, vagueness, numbness, difficulty recollecting the events of the trauma, lack of eye contact and an unwillingness to discuss what happened. As mentioned previously, there is little evidence that nonverbal cues do in fact reliably indicate lying (DePaulo et al., 2003). Additionally, many nonverbal cues identified as being indicative of lying are also similar to behaviours one may observe in someone who is experiencing PTSD or shame. Although it might be presumed that the police's professional role would reduce their reliance on rape stereotypes, this does not appear to be the case.

Given the importance of the interview experience for both victims' psychological wellbeing and the likelihood of them taking the case forward, Maddox et al. (2011, 2012) recommended that further research consider the value of specific psychological training for the police in the recognition of PTSD symptom and shame-based behaviours, and how they may affect the presentation of rape victims. Ask (2010) found that officers who had received specialist training were less likely to make assessments of victim credibility

based on nonverbal communication. This increased recognition ability may, in turn, increase the empathy expressed by the police and improve attrition rates and the overall experience victims have during interview.

Currently, Sexual Offences Investigative Techniques officers, officers specialising in sexual assault, receive specialist training at the start of their careers, but this does not have a psychological focus. The aim of the current research was to design and deliver a training session for police officers specifically focused on psychological knowledge and understanding of PTSD and shame in rape victims, and to evaluate how this impacted on their presentational style during interview. The key study questions were:

1. Following training, was there a change in
    a. PTSD knowledge?
    b. Officers' attitudes to victims, including empathy, believability and assessed severity of the assault?
2. How did officers view the training?

Method

Setting and Sample

Participants were recruited from the Metropolitan Police Services' Sexual Offences, Exploitation and Child Abuse command, which specialises in work with rape and sexual assault cases. A total of 142 officers attended the training sessions, with 139 (88, 63%, women) providing demographic information. In terms of officer age, forty-seven (33%) were aged between 25-34, fifty-four (38%) were aged between 35-44, thirty-five (25%) were aged

between 45-54 and five (6%) were older than 54. The officers were predominantly White British (89%).

The mean length of employment within the Sexual Offences, Exploitation and Child Abuse command were 1.7 years and the mean years of total service within the police was 13 years. The rank of the majority of officers was either Police Constable or Detective Constable (42% and 38% respectively). The remaining officers were Detective Sergeants (16%), Detective Inspector (3%) or did not provide information about their rank (1%). Of the officers who attended the training, 120 (85%) completed both pre and post-training outcome measures. Only 33 (23%) completed two-month follow-up measures.

More PCs, DSs and DIs from the adult sexual assault team attended the training compared to the child abuse team ($p = .006$; Fishers Exact Test). The mean years of service within the Sexual Offences, Exploitation and Child Abuse command for those from the child abuse team was significantly lower than those from the adult sexual assault team (2-side) ($F(1, 8) = 11.70$, $p = .004$). There were no significant differences between any other demographic variables.

Procedure

Training content development.

The training content was developed by myself and my external supervisor (Dr Lucy Maddox). The training was formed of two sections and was three hours in length, including delivering both parts (one hour per section) and collecting pre and post-training questionnaires (30 minutes each for the pre- and post-training data collection). The initial section, the focus of this paper,

centred on the impact of sexual assault on victims, including the experience of PTSD and shame and how this may impact on their presentation to the police. The second section, which was conducted by the trainee I collaborated with (David Turgoose), focused on the impact that that working as a Sexual Offenses Investigative Techniques officer has on their wellbeing, including compassion fatigue, secondary traumatic stress and burnout (see Turgoose, 2015).

Following the development of the first iteration of the slides, they were then reviewed by our main contact within the police and by a psychologist from The Havens, specialist rape crisis centres, who had previously conducted some training for sexual offences officers. These advisors offered feedback about whether the content seemed suitable for the officers, particularly focusing on whether it was pitched at an appropriate level. Following their feedback, the slides were revised and finalised (see Appendix 2).

Recruitment and training delivery.

In total, ten separate training sessions were conducted. Five occurred as part of an induction course for the Sexual Offences, Exploitation and Child Abuse command and included officers who work in either adult sexual offenses or child abuse. Although training was designed specifically with police officers working with adults in mind, the structure of the Metropolitan Police departments' training is such that officers working in the child abuse team, as well as those working in adult sexual assault, are inducted together. Therefore, for those training sessions there were a mixture of both adult and child officers. This mixed population was considered by the training team, and it was decided that there was nothing within the training content which would have been

inappropriate for officers dealing with children and in addition some extra information was given in response to questions, which related to the manifestation of PTSD within children, for example that PTSD may present more behaviourally within children. The other five training sessions were run within one of three police stations in central and outer London and were conducted with Sexual Offenses Investigative Techniques officers only.

The initial three training sessions were delivered by myself, David Turgoose and our external supervisor, Dr Lucy Maddox, whereas the latter seven sessions were conducted by David and myself only. During these later trainings, the sessions were recorded and parts of these were reviewed by the external supervisor to provide supervision and feedback. This helped us to ensure that the content remained consistent across each training we ran.

For those officers who attended the training through the induction course, presence at our sessions was compulsory as it formed part of a wider week-long mandatory course, although participation in the research was voluntary. For those that were recruited via the local police stations, researchers made contact with key senior members of staff within each of those stations, who then encouraged staff to attend. Researchers also sent a short summary of the training content so that officers and managers would know what to expect when they attended the session. At the beginning of each training session, officers were invited to take part in the research and were informed of what that would involve. They were also told that taking part in the research element of the training was not compulsory and were reminded that they could withdraw at any point.

Officers of any rank were allowed to attend, including those who did not necessarily have direct contact with victims but who supervised those that do. In general, Police Constables (PC) have the most amount of contact with victims, whereas the Detective Constables (DC) and Detective Sergeants (DS) take a supervisory role and therefore have less contact.

Measures

Knowledge measure.

A five-item measure (see Appendix 3) was developed by the researchers to assess officers' knowledge of PTSD. Four of the questions asked officers to provide a free text response, and these questions focused on knowledge of key and associated symptoms of PTSD, the prevalence of PTSD within victims of sexual assault and the possible ways in which PTSD may impact on victim presentation in a police interview. The final question asked officers' to rate on a seven-point Likert scale how confident they were in recognising PTSD in someone reporting a rape. A scoring matrix (Appendix 4) was developed jointly by the researchers, and all participant data was scored independently, with a sample of 10% being cross-checked. Where there were differences in how an item had been rated, the researchers discussed their individual decisions and agreed a consensus. In some cases this resulted in the items being added into the scoring matrix.

Vignettes.

Video vignettes were developed in order to assess officers' reactions to different types of presentational style in victims reporting a sexual assault. One

of the aims of the training was to impact on officer attitudes towards victims, and the vignettes were designed in order to assess this. The content of the vignettes was in line with the presentational style stereotypes found by Maddox et al. (2012) and labelled by those authors as 'mad', 'bad' and 'real'. Mad presentations were people who presented in a vague or irrational way and there may be some other mental health difficulties or previous experience of sexual assault. Bad presentations were those people who appeared to be cold or unemotional in their account, they may also be overtly sexual or having an ulterior motive for reporting to the police. Real presentations were people who were intelligent, well-dressed, displayed being upset or vulnerability and explicitly wanted to go to court.

Two vignettes were developed for each other the stereotypes, meaning that a total of six vignettes were produced (Real A and B, Mad A and B, Bad A and B). Each vignette account was fictional and written by the researchers, though they were based on an amalgamation of accounts read on Internet forums and support groups. Across all vignettes the perpetrator was known to the victim but was not a close acquaintance, e.g. a work colleague or a friend of a friend, however there were some differences in the detail or clarity of the account depending on the particular presentational style. For example, in the bad presentation there is the possibility of the victim having an ulterior motive for reporting to the police, for example wanting to get an extension on coursework or getting help with unpaid leave (see Appendix 5).

Given that these accounts were written by the researchers, consultation with a psychologist with a significant experience in working in a trauma clinic was sought. He confirmed that all of the accounts had face validity and appeared

to be realistic. In addition, all transcripts of the vignettes were given to three colleagues who were asked to rate the accounts on a seven-point Likert scale along dimensions of believability, severity of the assault and empathy felt for the victim. Colleagues were blinded to the presentational style (real, mad or bad) and their responses indicated that they found the real accounts to be more believable, they felt more empathy for the victims and they rated the assault as more severe.

For the recording of the vignettes we used three actors, each performing both versions (A & B) of the particular presentational style they were allocated. We used the same actor across both versions in order to minimise the potential confounding effect of having different acting styles in the pre and post videos. Additionally, to the extent that it was possible, we used similar looking women so that physical appearance did not influence the officers' opinions of their account. All of the actors wore simple black tops and had blonde hair, which was tied up during the filming. Differences in nonverbal presentation e.g. the amount the actor looked away from the camera (simulating avoiding eye contact), or the amount of displayed affect was altered depending on whether the actor was depicting a 'mad', 'bad' or 'real' presentation.

Each actor was shot in a mid-close-up position with the intention being that the camera was the eye line of the interviewing officer. Each actor was behind a table where you could see the top half of their body and their hand movements. Each account lasted for two minutes each.

Officers were shown three video vignettes (one mad, one bad and one real) before the training and three different vignettes following the training. The order in which the vignettes were played (either before or after the training)

was alternated at every training session. Officers were asked to respond to each account by rating on a seven-point Likert scale the amount they believed the account, how much empathy they felt for the victim and how severe they thought the assault was. They were also provided some space to give a free text response about what had helped them to come to that conclusion (see Appendix 6).

Training feedback.

A feedback questionnaire was developed by the researchers in order to assess how acceptable the training had been for officers. Participants were asked to rate on a seven-point Likert scale, ranging from 1=Strongly agree to 7=Strongly disagree, how much they agreed with statements that they now knew more about PTSD and compassion fatigue. They were also given space to provide free text responses to questions about what they found helpful about the training, what was not helpful, what they would like to improve and any other comments they had. See Appendix 7 for a copy of the feedback form.

Design

The study was a pre-post mixed methods single group design. Knowledge measures and video vignettes were administered to officers before receiving the training and immediately afterwards. The feedback questionnaire was administered at post-intervention only. A two-month follow-up of the knowledge questionnaire was also conducted in order to gather more long-term data.

Power Analysis

The required sample size was calculated for the analysis comparing the knowledge and attitudes of police officers before and after PTSD training. G*Power 3.1.3 program (Faul, Erdfelder, Lang, & Buchner, 2007) was used to calculate power with an assumed alpha rate of 5% and a desired power of 80%. In order for a medium effect size to be detected, a sample of 34 participants would be required, based on a test of the difference between two dependent means (matched pairs).

Ethical Approval

The study was approved by University College London Research Ethics Committee of the Division of Psychology of Language Sciences (Project ID number: 5301/001, see Appendix 8). The information sheet and consent form explained the aims of the research, what participants would be asked to do and how the information gained from their responses would be used (see Appendix 9). Participants were not required to provide contact details but they could do so if they were willing to be contacted in order to complete two-month follow-up questionnaires. Forms with identifiable information included in them were removed from the rest of the questionnaire pack and this data was added to a separate, password protected file. All questionnaire data was stored anonymously.

Data Analysis

Quantitative data was analysed using SPSS version 22. A basic thematic analysis (Braun & Clarke, 2006) was conducted for the qualitative data: the free text response from the vignettes and training feedback form.

Joint Working

The production of this thesis was independent, though there was significant collaboration between myself and my colleague, David Turgoose (see Appendix 10)

Results

Knowledge of PTSD

A paired-samples t-test was conducted to compare officers' pre-training and post-training knowledge. Analyses were conducted for the total score on the knowledge measure, as well as for each individual item. Table 2. outlines the results of these analyses.

Table 2. Pre- and post-training PTSD knowledge scores

	Pre-training M (SD)	**Post-training M (SD)**	**t(df)**	**p**
Total PTSD knowledge*	5.29 (2.04)	6.19 (2.14)	-3.99 (118)	.000
*Key symptoms**	.66 (.67)	1.59 (1.04)	-9.15 (118)	.000
Associated symptoms	2.71 (1.43)	2.47 (1.38)	1.45 (118)	.148
Impact of PTSD on victim presentation	1.93 (1.01)	2.13 (1.08)	-1.71 (118)	.089
Confidence in recognising PTSD in victims*	3.38 (1.35)	5.28 (.91)	-17.79 (119)	.000

*significant at alpha level p<.0005

Results indicate that there was an improvement in some areas of knowledge of PTSD, though not in associated symptoms or the impact of PTSD on victim presentation, which showed no significant change. Additionally, officers' estimation of the prevalence of PTSD within people who had been sexually assaulted increased from 83% to 91%.

In order to assess whether this increase in knowledge was maintained over time, a one-way repeated measures ANOVA was conducted to compare officers' scores on the PTSD knowledge measure at pre-training, post-training and two-month follow-up. Of the 142 participants, only 33 (23.24%) completed follow-up questionnaires at two months. The means and standard deviations for each item of the questionnaire, as well as the total scores are presented in Table 3.

Table 3. Pre-training, post-training and follow-up PTSD knowledge scores (N=33)

	Pre-training M (SD)	**Post-training M (SD)**	**Follow-up M (SD)**	**F(df)**	**p**
Total PTSD knowledge	5.55 (2.11)	6.18 (2.65)	5.94 (2.65)	.865 (2,31)	.431
*Key symptoms**	.61 (4.96)	1.45 (1.09)	1.21 (.99)	12.89 (2,31)	.000
Associated symptoms	2.94 (1.49)	2.52 (1.71)	2.69 (1.38)	.709 (2,31)	.5
Presentation	2.00 (1.09)	2.21 (1.11)	2.03 (.95)	.468 (2,31)	.631
Confidence*	3.12 (1.29)	5.27 (.84)	4.27 (.97)	62.85 (2,31)	.000

*significant at p<.0005

There was a significant effect for time on the question related to knowledge of key symptoms, F (2, 31) = 12.89, p<.0005. Post hoc tests using a Bonferroni correction revealed that there was an increase in knowledge of the key symptoms of PTSD between pre-training and post-training (p <.001) and

that although there was a decrease in knowledge of key symptoms at two-month follow-up, this was not statistically significant ($p = .97$).

There was also a significant effect for time on the confidence officers felt in recognising PTSD symptoms in the victims they work with, $F(2, 31) = 62.85$, $p<.0005$. Post hoc tests using a Bonferroni correction revealed that there was a statistically significant increase in confidence in recognising the signs of PTSD in victims between pre-training and post-training ($p <.0005$), however there was a statistically significant decrease in confidence at two-month follow-up ($p<.0005$), though the difference between pre-training and follow-up confidence was also significant ($p<.0005$) indicating that confidence was still significantly higher than it had been before the officers received any training.

There was no significant effect for time on the question related to knowledge of associated symptoms, $F(2, 31) = .71$, $p = .5$, on the question related to knowledge victim presentation, $F(2, 31) = .47$, $p = .63$, or on overall knowledge of PTSD, $F(2, 31) = .87$, $p = .43$. Thus indicating that there was no maintenance of knowledge over time in these areas. Officers' estimation of PTSD prevalence in people who have been sexually assaulted also decreased to 74%, which was lower than it had been at baseline.

Attitudes to Rape Victims

Table 4. outlines the pre-training and post-training scores for the vignette responses given by officers. The scores for empathy, believability and severity are the amalgamated responses across the three presentation styles (real, mad and bad).

Table 4. Pre- and post-training vignette responses

	Pre (SD)	Post (SD)	t(df)	Significance	Effect size
Empathy*	4.74 (1.25)	4.97 (1.17)	-2.36 (65)	p=.021	0.19
Believability**	5.26 (1.23)	5.63 (1.10)	-4.11 (65)	p<.000	0.32
Severity*	5.32 (1.28)	5.56 (1.35)	-2.09 (62)	p=.040	0.18

*significant at alpha level <.05
**significant at alpha level <.0005

There was a statistically significant increase in mean levels of empathy at pre-training compared to post-training, believability at pre-training compared to post-training and assessment of severity at pre-training compared to post-training.

Consideration of the qualitative responses given in the free text sections of the questionnaire allowed for a richer understanding of what aspects of the victim presentation officers were using to make their assessment of the account. The importance of the detail was highlighted in the officers' answers, with those who rated believability, empathy and severity with a low score often citing limited detail as a reason for this.

"Poor rambling account, little detail, repeat victim"

"Short account, lack of detail"

"Seems insecure, lack of detail"

Similarly, those who felt empathic towards the victim, believed their account and assessed it as severe also focused on the importance of detail.

"Uninterupted account – was detailed"

For the bad and mad presentations in particular, there were a number of officers who focused on elements of the accounts which fitted with the stereotypes identified in Maddox et al. (2012), for example the presence of a possible ulterior motive or incongruous emotions displayed by the victims, and as a consequence rated them low on felt empathy, believability and assault severity.

"She doesn't seem to actually be upset"

"Not very emotional, blocked it out, rather 'matter of fact'"

"Lack of emotion and possible ulterior motive"

"She did not seem to realise the seriousness of what had happened, more interested in other areas of her lifestyle"

"Had ulterior motive, wanted paid leave, didn't seem bothered"

There was some sense from the post-training answers that officers were using their knowledge of trauma to assess the accounts of the victims.

"Still shows visible signs of trauma"

“It's unclear what happened as she doesn't tell us, possibly blocked out due to trauma”

“Seemed very upset, possible PTSD”

Training Feedback

Of the officers who completed the feedback questionnaire (N = 131, 92.3%), 77% of them agreed or strongly agreed with the statement ‘I know more about how PTSD and shame impacts on victims reporting sexual assault’. This corresponds to the findings from the knowledge measure indicating that there were improvements in knowledge at post-training, thus suggesting there was a subjective as well as objective change in knowledge immediately following the training.

Findings from the thematic analysis of the qualitative feedback was that officers found it useful to focus on the signs of PTSD and how to recognise these in the victims they work with. They particularly highlighted the helpfulness of becoming aware of potential crossover of PTSD and perceived lying behaviours.

“Realising that a victim may genuinely not be able to recall stuff or be vague because of PTSD, not lying. Will stop making assumptions.”

A number of officers mentioned that this type of training was not necessarily something they had received before, and that they found our training interesting and helpful. For some officers they thought that it was important for this type of training to be given to other people and professionals

involved with work with victims of rape and sexual assault. In response to the question 'How could training be improved?':

> *"Not improved, just more talks given to others – foot responders in police and court"*

> *"Give this presentation to senior officers"*

> *"It was great. More officers should receive the training".*

Although the majority of the officers found the training helpful, there were requests from some to make any future trainings even more interactive and potentially more specific to the cases they work with, rather than giving a general introduction to PTSD, which a few officers felt they already knew a lot about.

Discussion

Results indicated that training specialist police officers about the impact of PTSD and shame on individuals who have been sexually assaulted was somewhat effective in improving knowledge and attitudes, and was largely acceptable to the officers it was delivered to.

Findings from the knowledge questionnaire indicate that there was an improvement in officers' knowledge immediately after the training however, the only improvement that was maintained at follow-up was officers' knowledge of the key symptoms of PTSD. Although it is encouraging that there

was immediate change in knowledge of PTSD, an aim of the training was to have a longer-term impact on officers understanding of PTSD. It may be that a one-hour session is not sufficient enough for officers to maintain their knowledge. For many of them it was the first time they had been exposed to detailed information about PTSD, which may have made it difficult for them to remember all of the content. Additionally, given that the psychological impact of sexual assault is just one piece of knowledge that officers have to hold in mind when dealing with a victim, it may be that this information is not a priority for them to remember once they are outside of the context of training. It is possible that longer or more detailed sessions or further 'top-up' training or case supervision forums would have been helpful in order to sustain the knowledge they gained immediately after the sessions, and also help officers apply this knowledge to their real cases.

The training intervention aimed to impact officers' attitudes as well as their knowledge. Given that it was unfeasible to assess attitudinal change towards real victims of sexual assault, the vignette measures were developed to explore the ways in which the training impacted on attitudes towards victims, along the dimensions of empathy, believability and officers' assessment of assault severity. The findings indicate that there was a significant increase in officers' feelings of empathy towards the depicted victims, the amount they believed their accounts and their rating of severity of assault, which suggests an improvement in their attitudes to victims. This is encouraging given the importance that victims place on officer empathy when considering whether to take their case forward to court proceedings (Maddox et al., 2011) and also when thinking about the damaging psychological and physical consequences

that can occur when victims do not feel that they are believed (see lit review). However, despite the increase in empathy, believability and assessment of the severity of the assault, the qualitative responses indicated that officers may still hold onto stereotyped beliefs about how a victim “should” present when reporting, and use these to make decisions about the accounts given by victims. The view of these stereotyped presentations as markers of reliability are common within society at large, not solely within the police force, and therefore it may take more involvement with officers before they reconsider the validity of verbal and nonverbal indicators of lying, particularly when they cross over heavily with presentational styles associated with PTSD. Unfortunately, it was not possible to use the vignettes in the follow-up data and therefore there are no long-term results regarding the maintenance of these changes. Similarly to the findings regarding changes in officers’ knowledge, it may be that further collaboration with the police would yield more significant changes in attitudes, particularly challenging the use of stereotypes when listening to an account.

The above findings are echoed in research into more general mental health training with the police. Pinfold, Huxley, Thornicroft, Farmer, Toulmin and Graham (2003) conducted training for the police aimed at reducing stigma and discrimination and similarly to this study they found a small impact but concluded that this could have been more profound if more intensive training had been possible. The possibility of offering more training to the police is something that the officer feedback indicated would be acceptable to the majority of the officers. Many of them thought that the training which formed this research was pitched at the right level and a number of officers wanted a more detailed understanding of PTSD than was possible in the limited time that

we had with them. The enthusiasm for further training is encouraging as it highlights the possibility for future collaboration.

Strengths

Although it is disappointing that the improvements in knowledge were not maintained at follow-up, a strength of the research was that a measure of long-term change was built into the design of the project. If this had not been completed we may have assumed that this type of one-off training was enough to have a long-term impact on officers' knowledge. As mentioned previously, the lack of long-term maintenance of knowledge possibly indicates that more training is required with officers, something which would not have been highlighted so clearly if we had only assessed change immediately following the training.

Another strength of this research was that participation in the training was compulsory for those attending as part of the Sexual Offences, Explotiation and Child Abuse command induction course, and was strongly encouraged by management within the regional trainings. This meant that the groups were not necessarily made up of people who were interested in this subject and thus motivated to learn and take on board the messages. Indeed there were a number of people who expressed scepticism about what we were teaching them and although this meant that delivery of the material could be challenging, it is likely that the group were not simply a self-selecting and interested audience. The improvement in both knowledge and attitudes, therefore, are encouraging as it seems the training had some impact, even if there were participants wouldn't have identified this area as something they were keen to learn about.

The large sample size obtained for this research also represents a strength of the work as we are able to be more confident that the observed improvements in immediate post-training knowledge and attitudes are genuine.

Limitations

A key limitation of this study is that standardised outcome measures were not available and we therefore had to design our own. Although a number of steps were taken to ensure that the measures had face validity, it may be that the knowledge measure and the vignettes did not assess the constructs that they were intended to measure, or that changes occurred in officers' knowledge and attitudes but that these were not picked up by the current measures. Additionally, during the administration of the measures there was a sense that officers became frustrated with completing them, particularly at post-training, which may have resulted in them not completing them as fully as they could have done. There were a number of examples of questionnaires where officers appeared to have "lost" knowledge over the course of the training, for example writing 'flashbacks' as a key symptom of PTSD on the pre-training questionnaire but not writing it on the post-training questionnaire. It may be that the training caused officers to feel confused about what they did and did not know about PTSD, thus explaining why their knowledge of PTSD decreased over the course of the session. However, it may be that they were not as inclined to complete the post-training measures as they were to complete the pre-training questionnaires. It may be that there was a more profound change in officers' knowledge scores but that these were not picked up due to the design of the questionnaires. This could have been improved by having fewer free text

response boxes, however there is research to suggest that using a standardised checklist of PTSD symptoms might promote symptom guessing within naïve individuals completing them, thus making it an unreliable method for assessing PTSD knowledge (Burges & McMillan, 2001).

Additionally, although the follow-up measure was useful in assessing long-term change in knowledge, only a small proportion of officers completed this and therefore may not be representative of the wider group. It may be that other officers who chose not to take part in this element of the study differed in some way to their colleagues who did.

A further limitation of the study was that although there was an attempt to measure attitudinal change in officers through the use of the vignettes, we do not know whether this training had an effect on how officers are with real victims or whether any changes in officer attitudes are noticed by the victims they work with. It would have been beyond the scope of the project to measure this, however measures of victims experience of interview would be useful as the ultimate aim of improving officers' knowledge and attitudes is for this to have a positive impact on the individuals they work with.

Implications

This research has shown both the acceptability and usefulness of a PTSD training intervention for the police, both in terms of officer feedback, attitudinal change on the vignette measure and knowledge immediately following the training. Considering that officer knowledge was not maintained at follow-up it may be useful to think about ways in which more regular input from psychologists could be incorporated into the police service e.g. regular

facilitated case discussion groups or top-up training. Given the prevalence of PTSD and shame within individuals who have been sexually assaulted, it is important that knowledge of these psychological processes is prioritised for officers working in this area. The positive feedback regarding the training indicates that further involvement from psychologists may be well received by officers.

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Part 3: Critical appraisal

This critical appraisal considers the process of conducting the research presented in Part Two. Initially I will briefly outline why I was drawn to this project idea and will then go on to think about the challenges I faced during both the planning and delivery stages of the work. Finally, I will reflect on the process more generally, including consideration of the future directions that the findings could lead to and compromises that were made during the course of the research.

Background to the research

This project appealed to a number of ideals for me. On a professional level I have a strong interest in community psychology, particularly Miller's (1969) idea of "giving psychology away" and the value of promoting social justice. Throughout my training I have become aware of the privilege we have as clinical psychologists in terms of the mental health education we are afforded, as well as realising how many other professionals are not given this level of understanding, despite them having regular contact with people who may be experiencing psychological difficulties. Given that a psychological perspective and understanding can be so helpful, it appears to me that psychologists have a professional responsibility to share the knowledge they have, and therefore I was drawn to a project which gave me a chance to do this.

On a more personal level, I identify strongly with feminist principles and beliefs, and I oppose many of the societal discourses regarding women's sexuality. My experience from casual conversations with friends to reading newspapers stories and even national media campaigns, is that there is a tangible victim blaming culture when considering rape and I became interested

in working on a project that goes some way to redressing that dominant narrative.

The project's focus clearly aligns with these areas of interest for me and I have felt close to the subject matter through the length of the work. The experience of conducting the research, however, was complicated and I will now outline some of the difficulties I faced throughout its course.

Challenges of Police Collaboration

Collaborating with Others

The most significant challenge of this project was working alongside the Metropolitan police, both in terms of initial access and "way in" to the organisation, as well as our continued collaboration with them. Wise (2011) identified these two pathways as a top-down organisational gateway, in which researchers must first gain entry through contact with administrators, and a second gateway which is controlled by the officers who are asked to participate in the research. I will present three examples of the challenges relating the organisational gateway, and then consider how our collaboration was maintained throughout the course the work. Finally, I will consider the challenges of engaging and working with the officers who attended the training and took part in the research.

Top-down access.

The police service is widely considered to be a challenging organisation to work with, predominantly due to its 'closed' nature and suspicions regarding "outsiders". From a research perspective, Dawson and Williams (2009) suggest

that this is a consequence of research sometimes taking a critical view of police practices which can, understandably, feel threatening to them as an organisation. Additionally, the police service often receives extensive criticism within the press and social media, thus potentially heightening its concerns about opening up to a collaboration which could be damaging to them. In order to overcome this barrier we attended a number of crucial meetings with senior members of the Sexual Offences, Exploitation and Child Abuse Command to set up the collaboration and to convey the message that we wanted to offer their officers something that they would find useful.

Initial meetings.

Maddox et al. (2012) suggested that training police officers in better understanding the effects of PTSD on the presentational style of victims of sexual assault would be beneficial for their work. Many of the senior officers we met with during the initial phases of setting up this project, however, expressed concern that their staff were already well-trained in this area. They also did not necessarily share our view that further training might be beneficial, despite previous research indicating that officers often mislabel symptoms of PTSD as indicators of lying (Maddox et al., 2012) and the important link between police officers' empathy and victim PTSD and presentational style (Maddox et al., 2011).

Within our initial meetings, there appeared to be more enthusiasm for the section of the training run by my colleague, David Turgoose (Turgoose, 2015), which focused on officers' experience of compassion fatigue and burnout within their roles. This makes sense when considering that this is an area not

commonly thought about within the police force, potentially due to the organisational culture, and there was a strong sense from senior staff that officers were finding management of their own stress difficult. Compassion fatigue potentially represented a much-needed and highly pertinent topic for the training. The PTSD section, however, with its focus on victims, was possibly viewed as “more of the same” and there were explicit messages that the training needed to be suitably advanced in order to challenge them. This presented an interesting challenge in writing the content of the training, given the notion that the police having adequate knowledge of PTSD is in conflict with research findings. The idea of “knowing enough” also conflicts with my belief that learning and training is ongoing and lifelong, and that revisiting topics from the past can be useful, even if it is repetitious. As a research team we held a tentative hypothesis that the managers within the police were potentially overestimating the amount of knowledge their officers had, and underestimating the value that this training could have.

Although it was sometimes disheartening to feel that there was less enthusiasm for the PTSD element of the training, a helpful negotiating tool was their enthusiasm for work around compassion fatigue. By presenting the two sections as a package, rather than offering them as separate and distinct options, we ensured that the PTSD teaching would be delivered, something which may not have happened without the appeal of the teaching on compassion fatigue.

Training content.

During our development of the training content we had initially hoped for a full day, with the morning focussed on the PTSD session and the afternoon focussed on compassion fatigue. Within early meetings, however, we became aware that this length of time was unlikely to be approved and we ultimately agreed to complete both sessions and data collection within three hours. The consequence of this was that we removed a section about the unreliability of using nonverbal signals to detect lying, the explanation of brain functioning during and after trauma was simplified significantly, the interactive section on shame was reduced and there was a much stricter time limit on questions. Although it was frustrating to have our time pared down, and there was a noticeable time pressure when delivering the training, I thought that the final content was concise and conveyed the key messages. Within the feedback, some people let us know that three hours had been slightly too long given the high information content. Therefore, our plan for a day-long training may have been too dense and could have impacted on officers' engagement with us. Given my academic background and familiarity with attending lectures, it may be that I had not considered how difficult it can be to concentrate over that length of time.

That said, given that the findings within the empirical paper indicated that there was limited long-term maintenance of knowledge of PTSD, there is still further work to be done with officers around this psychological presentation. Although a day-long training may have been overwhelming, as discussed in Part Two, further sessions or other types of training format might

have been useful to supplement the presentations we gave as part of this research.

Measurement.

Another requested amendment to the training concerned the use of questionnaires and video vignettes as evaluation tools. One senior officer expressed concerns about the length of time that the questionnaires took and thought that the vignettes were not relevant enough for the officers in attendance. As a result she wanted the training to occur without any of the pre- or post-training measures.

From our perspective, whilst it was important to deliver an interesting and helpful training, the research relied on the measurement of change through the use of questionnaires. A key concern from the research team's perspective was, of course, the production of the theses, which meant data collection was imperative. Beyond that, however, the questionnaires and vignettes were important for establishing the effectiveness and usefulness of the training from the police's perspective and the findings were something we hoped they could use, rather than being solely for our benefit. We considered the use of questionnaires to be non-negotiable, and decided that we could not conduct the training without them. We did, however, agree to remove the video vignettes from the remaining three induction trainings and this was considered to be acceptable from the perspective of the police.

During this time, careful negotiations occurred between the research team and the police, with a particular focus on educating them about the importance of the use of outcome measures. It may have been that this had not

been enough of a focus for us during our initial negotiations with them, as these had been more predominantly focussed on the content and access we would have to the officers. Although the importance of research and measuring change is somewhat instinctive to clinical and trainee clinical psychologists, the police's resistance to this was a helpful reminder that we should not make assumptions about others' enthusiasm for research.

Maintaining our collaboration.

Throughout the project there were a number of occasions when there was considerable uncertainty about the feasibility of the work and, at times, serious concern that the police would withdraw their collaboration with us. This, of course, became more worrying the further we became involved with the research as it represented a threat to us regarding the completion of our theses. At these points the early relationships we had built within the administration structure of the police were vital, most notably with two key members of staff, who not only thought the research project would be valuable for the police but also understood the importance of the project for us in terms of completing our research. It was integral to have them on side and in many ways they allowed us to be represented within the organisation, sometimes attending meetings and speaking on our behalf. As mentioned previously, the police are a notoriously closed organisation who often view outsiders with suspicion, therefore, having members on the inside who were supportive of the project allowed us the best opportunity to get the project initially signed off, and to continue it running once it had been approved.

Police Officers During the Training

As Wise (2011) highlighted, there is a second important gateway to negotiate when working with the police, which is the involvement of officers who agreed to participate in the research. Prior to delivering training sessions, and throughout the preparatory stages of the work we were told on numerous occasions that police officers can be a "tough crowd" and that groups could be somewhat unpredictable, with some being well-engaged and others being more challenging and confrontational.

To a certain extent this was helpful information and encouraged us to be prepared for our work. For example, it was useful to consider that the people attending these sessions may not want to be there and may also be sceptical about the information we were presenting. Additionally, they may have also held onto the same belief as the senior staff within the organisation that they "knew enough" about trauma and shame. We were also aware that some of the previous research findings, particularly around the importance of impact of police empathy on victim drop-out, may appear to be a criticism of the work that officers do. As mentioned previously, the police as an institution receive wide spread criticism about their performance and we were therefore keen to avoid perpetuating a sense that we might be a threatening outside organisation. We faced a challenge of suggesting that there might be unhelpful ways in which they respond to victims, but we also needed to acknowledge that they do difficult jobs and that these unhelpful responses may occur because of lack of information about the impact of psychological processes on victims' presentational style.

We carefully thought through the stance we would take and decided that it would be helpful to adopt one of coming alongside officers by identifying and empathising with the challenges they face in their jobs, whilst being careful not to be too over familiar with their work given that we do not have personal experience of what it is like to be a police officer. For example, we might draw similarities between their role and the role of a psychologist in terms of the contact we could have with people who have been raped, whilst giving a clear acknowledgement that we have different remits of work, time constraints and level of support within our roles. This enabled us to present ourselves as professionals who have some expertise and aren't naïve to the experience of working with trauma, but also as people who were respectful of the challenges that officers face. On the whole this worked well, and feedback from the officers indicated that this approach was appreciated.

> *"Thank you for your passion about the subject and reminding us all that someone understands and appreciates what we do"*

> *"Very well presented, presenters had a good tone, pitched well and related to audience"*

Whilst being adequately prepared for our interactions with the officers was useful in many ways, the messages about the potential difficulties we might face also created significant anxiety for me when conducting the training, particularly during the earlier sessions when I was less confident in my ability to deliver the material. Having been used to learning or absorbing information

from others in the context of my clinical psychology training, it was quite a shift to take up the role of educator. I was not necessarily comfortable or familiar with this position and I often worried that my nervousness would come across in my presentation to officers.

When I reflected on this I found myself remembering my early experiences of delivering therapy, and recognised that I had experienced similar anxieties at that time and considered that these feelings are common within trainee therapists (Thériault, Gazzola & Richardson, 2009), particularly when doing something new. From a practical perspective, having our second supervisor present alongside us for the first three trainings, as well as having her ongoing supervision via feedback on audio recordings of the sessions was invaluable in increasing my confidence and reducing my anxiety. Finally, the constant exposure to the experience of teaching allowed me to challenge my beliefs about my own knowledge and abilities, as well as challenging the narrative of police officers as difficult to work with. Whilst they could often be challenging, the majority of the people were welcoming and enthusiastic about the information we were presenting, something which was reflected in the feedback they gave us. Interestingly, on occasions when there were objections from some officers, other group members often regulated this themselves. For example, in one session a group member did not agree that officers relied on any stereotyping when interviewing victims and suggested that it was not their role to assess believability, but instead simply to collect the account. Another officer, however, volunteered that although this was technically how they should be working, she acknowledged that the reality could be different and that often officers made judgements about the victims they worked with and

accepted that these judgements might influence the ways in which that victim was then treated.

This type of openness, which I witnessed in the vast majority of officers, was surprising and welcome. This may indicate that we had successfully gauged an appropriate stance with officers, one that allowed us to work alongside them rather than presenting ourselves as experts, and this may have helped in creating a safe space for them to share experiences such as this. However, I also reflected that this may demonstrate that the police are more open and collaborative than they were initially portrayed to us, and it is interesting to consider why the senior management would be keen to highlight the challenges associated with working with them, rather than the potential rewards.

Future Directions

As mentioned previously, there was a strong sense at the beginning of our collaboration with the police that we were viewed as outsiders, and were therefore somewhat threatening. At the conclusion of our work, however, I felt the organisation's concerns about our involvement with their staff had eased. For example, in our initial training sessions we were often observed by senior officers, however in our later sessions this was not the case. Additionally, at the beginning of our work there was noticeable reluctance to allow us access to officers, whereas during our final trainings there was regret expressed by the organising officers that we wouldn't be able to provide any more sessions.

Given the positive relationship we have been able to forge with the police I am hopeful that further collaborations might be possible either for myself as an individual, or for clinical psychology as a profession. Indeed, the findings

outlined in the empirical paper suggest that ongoing work might be necessary to solidify the knowledge initially gained from the training sessions, thus emphasising the exciting opportunities which may be available.

Practicalities of Research

Beyond the specific challenges of working with the police, the experience of developing my own project has helped me to understand and connect with the practicalities and compromises of research. One of the most significant weaknesses of the study is that there was no measure of the impact of the intervention on victims. During our initial thesis discussions, the research team had considered whether we could include a measure of this, however it became clear that this would be beyond the scope of the project in terms of gaining ethical approval and the acceptability of this to the police. Additionally, it would have been useful to have a control group, for example another command within the police or another professional group such as lawyers, though again this would have been difficult given the time constraints and resources available for completion of this project. I have a background in developing guidelines for the National Institute for Health and Clinical Excellence (NICE) and not being able to develop a more robust study was something I had to accept at an early stage. It was helpful for me to learn that research can be useful and valuable even if methodological compromises were made.

Some important feedback received from the officers was that it might have been helpful to have the training delivered alongside someone who had experienced PTSD following a sexual assault. I feel similarly about my own experience of attending lectures and have found that teaching from people with

lived experiences are hugely valuable and help to bring to life the more academic elements. With this in mind it would have been useful to have survivors of assault co-facilitate the sessions and this would be something I would include if I were to conduct this project again.

Finally, although we did collaborate with a psychologist from The Havens it is possible that more involved work with staff from specialist rape crisis centres would have been beneficial. Since the completion of the project I have been contacted by a psychologist working in a sexual assault service and have been requested to present my findings to her team. This indicates an interest in the project from outside agencies, and it may be that we did not utilise others' knowledge as well as we could have done.

Conclusions

Conducting research and providing training with the police was a complicated, challenging but ultimately rewarding experience. We approached this thesis with two key motivations: 1) the completion of our research and 2) the desire to produce something directly meaningful to the police and, in an indirect way, to the victims of sexual assault. These aims were shared, to a certain extent, by all the people involved in the project, though of course there were differing priorities for each of us. For my supervisor, the successful completion of our thesis was the primary aim, whereas for the managers within the police the primary goal was the learning objectives of their officers. From a personal perspective I often held the overarching purpose (goal two) more clearly in my mind, and it was only when there appeared to be threats to our

recruitment, and therefore our overall thesis that I became more focussed on goal one.

When two organisations collaborate it is expected that each will have different ideas of what they would like to gain from their joint working and therefore the ability to compromise and adapt to changing demands was essential. However it was also important hold onto the importance of research principles, including the value of what we were delivering in the training as well as the importance of measuring change, and not acquiesce too much to the requests of the police.

Establishing early connections with key administrators within the system was essential to the successful completion of this project and on a personal level, having a project which was something I was passionate about helped in maintaining my enthusiasm for the work despite the difficulties that we faced. This process has developed my skills in both organising and executing collaborative working in the context of a research project, including learning to accept necessary methodological compromises. Fundamentally this experience has solidified my enthusiasm and belief in the importance of psychologists sharing their knowledge with others.

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Appendix 1: Standard Quality Assessment Criteria for Evaluating Primary Research Papers

	Criteria	Yes (2)	Partial (1)	No (0)	N/A
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 intervention and random allocation was possible, was it describe?				
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?				

Appendix 3: PTSD Knowledge Questionnaire

Post-traumatic stress disorder (PTSD) questionnaire

During this training we will be thinking about post-traumatic stress disorder (PTSD). We are aware that you have already received training on this but hope that today's session will allow you to revisit the topic and refresh your knowledge. In order to ensure that today's training is useful we would like to understand what you already know.

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. What are the three key symptoms of PTSD?

2. What are the associated symptoms of PTSD?

3. What percentage of people reporting a rape will experience some trauma symptoms (even if they don't meet criteria for a diagnosis of PTSD)?

4. In what ways might PTSD affect how someone presents in a police interview?

5. How confident are you in your ability to recognise PTSD symptoms in people reporting a rape?

No confidence 1 2 3 4 5 6 7 Complete confidence

Appendix 4: PTSD Knowledge Questionnaire Scoring

<u>Post-traumatic stress disorder (PTSD) questionnaire</u>

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. What are the three key symptoms of PTSD?

Re-living/Re-experiencing/Flashbacks
Hyperarousal
Avoidance

2. What are the associated symptoms of PTSD?

Depression
Anxiety (including nervousness)
Fear
Anger
Shame
Guilt
Self-blame
Impact on memory
Alcohol use/drug use
Self-harm
Suicidal thoughts/behaviours
Sleep problems
Eating
Relationship/social difficulties/change in social attitude
Concentration

3. What percentage of people reporting a rape will experience <u>some trauma symptoms</u> (even if they don't meet criteria for a diagnosis of PTSD)?

Score entered into SPSS

4. In what ways might PTSD affect how someone presents in a police interview?

Impact on memory (all to be scored as 1 point each)
- Unable to recall
- Unable to say in a coherent order
- Inconsistant

Not able to talk about the event

Presentation (all to be scored as 1 point each)

- Vacant/withdrawn
- Angry
- Upset
- Nervous
- Incongruous display of some kind
- Dissociation

Non verbal displays

May look like they are lying

5. How confident are you in your ability to recognise PTSD symptoms in people reporting a rape?

No confidence 1 2 3 4 5 6 7 Complete confidence

Appendix 5: Real, Mad and Bad Vignettes

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.

<u>Bad 2</u>

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: Vignette responses

<u>Video 1</u>

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
ii) What factors did you take into account when giving the above rating?
………
………
……………………………………………………………………………..

b) How much empathy and compassion did you feel towards this person?
1 2 3 4 5 6 7
None A lot
vi) 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
vi) What factors did you take into account when giving the above rating?
………
………
……………………………………………………………………………..

Appendix 7: Training Feedback

Feedback from training

We would like to evaluate your experience of the training you received on the impact of PTSD on victims reporting sexual assault and the training you received on compassion fatigue. Please complete the following questions as they will help us to improve future training we deliver.

1. I know more about how PTSD and shame impacts on victims reporting sexual assault

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

2. I know more about compassion fatigue and how that may impact on my work

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

3. What elements of the training did you find helpful?

4. What elements of the training did you not find helpful?

5. How could the training be improved?

6. Any other comments:

Appendix 8: 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

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 9: Consent form and Information Sheet

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 police officers to better understand sexual assault victims and reduce compassion fatigue**

This study has been approved by the UCL Research Ethics Committee (Project ID Number): 5301/001

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.
- 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.
- Consent to the processing of my personal information for the purposes of this research study.
- 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.
- Agree that the research project named above has been explained to me to my satisfaction and I agree to take part in this study.

Signed: Date:

Information Sheet for participants in Research Studies

You will be given a copy of this information sheet.

Title of Project:

Training police officers to better understand sexual assault victims and reduce compassion fatigue

This study has been approved by the UCL Research Ethics Committee (Project ID Number): 5301/001

Name	David Turgoose and Naomi Glover
Work Address	Research Department of Clinical, Educational & Health Psychology University College London Gower Street WC1E 6BT
Contact Details	d.turgoose@ucl.ac.uk; naomi.glover@ucl.ac.uk

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 as a SOIT.

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 half a day, so one full day 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 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.

Who has reviewed the study? The research has been approved by the University College London ethics board. [Include details of any vetting or protocol which has been conducted by the Met].

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 and 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.

Appendix 10: Summary of Joint Project and Each Researcher's Contribution

Initial meetings with the London Metropolitan Police Service were attended by both researchers as well as their supervisors, Professor Chris Barker and Dr Lucy Maddox. Further liaising with the police was conducted jointly by both Naomi Glover and David Turgoose, as was the participant recruitment.

Both Naomi Glover's and David Turgoose's training was conducted within the same session, however each of them developed and delivered the content of their specific section independently. Naomi Glover designed the PTSD knowledge outcome measure, though both researchers collaborated to develop the model answers. Production of the video vignettes, the demographic questionnaire and the data entry were undertaken jointly.

Interim reports were produced by Naomi Glover, though these were checked and approved by the entire research team. The write up of this thesis was conducted entirely by Naomi Glover