VOLUME I RESEARCH COMPONENT

Literature Review: The impact of informal social support on symptoms of PTSD in female survivors of sexual assault

Empirical Paper: How do the police and women with learning disabilities co-construct sexual assault during police investigative interviews?

Lucy Hedges

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for the degree of
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Overview

This thesis is submitted as part of the requirements of the degree of Doctor of Clinical Psychology at the School of Psychology, University of Birmingham. It is comprised of a research and clinical volume.

Volume I: Research Component

Volume I contains a literature review paper and an empirical paper. The first paper is a review of the literature exploring the impact informal social support has on symptoms of Post-Traumatic Stress Disorder (PTSD) following a sexual assault. Two meta-analysis indicate that social support is a predictor of PTSD following a traumatic experience, and research suggests that survivors of sexual assault are more likely to disclose the abuse to informal sources of support. Therefore, this review builds on existing research to explore the role of social support from informal sources on symptoms of PTSD, when a formal measure of PTSD has been used.

The empirical paper explores how the police and people with a learning disability coconstruct sexual assault, during archived police investigative interviews, using qualitative
methodology. People with learning disabilities are vulnerable to abuse, however very few
cases actually reach the criminal justice system (CJS). Furthermore, there is very little
research on the experience of people with learning disabilities within the CJS, and none when
interviewing people about sexual assault. Using Foucauldian Discourse Analysis (FDA), this
paper explores the discourse patterns used to co-construct sexual assault, focusing mainly on
fault and blame as the most prominent pattern of discourse identified within the naturally
occurring data.

Volume II: Clinical Component

Volume II contains the clinical component, and is comprised of 5 clinical practice reports. First, a case formulation from both a behavioural and cognitive perspective is presented for a 37 year old man with learning disabilities, who presented to a psychology service for help managing his anger. Second, a service evaluation identifying how an adult learning disability psychology service is progressing in meeting the expectations of autism drivers, specifically identifying how many clients with a diagnosis of autism were referred to a psychology service, and the skillset of the workforce in relation to training received and provided. Third, an AB single-case experimental design is presented, evaluating the effectiveness of an intervention aimed to reduce the frequency and intensity of panic attacks experienced by a 41 year old woman who presented to a CMHT for support managing her anxiety. Fourth, a case study presents a systemic formulation and integrative intervention with a seven year old female, presenting to a CAMHS service with faecal incontinence. Finally, an abstract is included that outlines a presentation based on work completed during a placement with veterans experiencing mental health difficulties.

DEDICATION

This thesis is dedicated to the person who I could never thank enough for their time, support	rt
and laughs over the past three years. This is as much his achievement, as it is mine.	

To Bob.

I love you!

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"All shall be done, but it may be harder than you think"

C.S. Lewis: The Lion, the Witch and the Wardrobe

Writing this thesis, and my time on the clinical doctorate course has been an adventure. Like all great adventures, I have many to thank as I travelled its long and winding path.

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And lastly, but by no means least, my own little family –Bob and Dolly, who walked beside me every step of this journey. When one great adventure brings to a close, it is the time for the next one – this time it's our turn!

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CHAPTER ONE: LITERATURE REVIEW

The impact of informal social support on symptoms of PTSD in female survivors of sexual assault: A literature review

ABSTRACT

Introduction: Research suggests that social support is a predictor of PTSD following a traumatic event, however further research is required to explore the role of social support following a sexual assault. As PTSD is a common consequence of sexual assault, and female survivors are more likely to disclose to informal sources of support, this paper explores the role of social support from informal sources on symptoms of PTSD following a sexual assault.

Method: A systematic review of the literature was conducted on three electronic databases; PsycINFO (2000 – Present), Medline (2000 – Present), Applied Social Science Index and Abstracts (2000 – Present).

Results: Thirteen studies were identified which met the study criteria. Positive social support was unrelated to PTSD symptoms in six studies, with two further studies reporting positive social support was related to greater PTSD symptom severity. Negative social support was predictive of greater PTSD symptom severity in all of the studies.

Conclusion: Positive and negative social support differs as to its effects on PTSD following a sexual assault and therefore should be considered separately. Limitations of the studies and of this review are considered, however findings consistently report that negative social support has a more detrimental effect on survivors recovery than positive social support.

BACKGROUND

Sexual assault¹ not only violates the individual's human rights, but also has significant psychological and physical health implications. A global review of the prevalence of non-intimate partner sexual violence across 56 countries reported that approximately 7.2% of women are survivors² of sexual violence (World Health Organization, 2013). Within England and Wales, aggregated data from the 'Crime Survey for England and Wales' (Home Office. Ministry of Justice, 2013) suggests that 2.5% of females report being a survivor of sexual assault. These are conservative figures, as stigma and the perceived repercussions of disclosure have likely impacted upon the findings. Furthermore, the most vulnerable women, such as women who are homeless, in institutions, or who have learning disabilities are unlikely to have been included in these figures.

The effects of sexual assault have long been of interest, with the aim of detecting survivors who may experience difficulties, and to support survivors with appropriate and helpful treatment methods. Research suggests that the consequences of sexual assault are far reaching and have been documented in relation to substance misuse, mood, anxiety, post-traumatic stress-disorder (PTSD), as well as physical health consequences to name a few (Briere & Jordan, 2004; Campbell & Soeken, 1999; Koss, 1993; Plichta, 2004; Resick, 1993; Resnick, Acierno, & Kilpatrick, 1997).

PTSD is thought to be one of the most common consequences of sexual assault (Breslau, Chilcoat, Kessler, Peterson, & Lucia, 1999; Resnick, Kilpatrick, Dansky, Saunders,

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¹ Sexual assault covers any sort of sexual contact or behaviour that is unwanted. Rape occurs when someone has penetrative sex with another person against their will (includes vaginal, and or oral penetration). Throughout this study the term sexual assault will be used to refer to both sexual assault and rape.

² Survivor will be used to refer to the woman effected by sexual assault throughout. This term was used to reflect that the individual had 'survived' a traumatic experience, and hopes to honour and empower the strength of the individual to heal.

& Best, 1993), although differences have been reported between genders, with females showing higher rates of PTSD following a sexual assault than men (Breslau et al., 1999). Koss's (1993) review into the impact of rape also identified that most rape survivors met the criteria for PTSD immediately after the assault, with one study reporting 94% of rape survivors met the PTSD symptom criteria 12 days after the assault. (Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992). It is research such as this which led Foa and Riggs (1993) to make the claim that rape survivors are the largest group of people with PTSD.

Despite the link between sexual assault survivors and PTSD, research into PTSD in sexual assault survivors has largely been limited by the diagnostic criteria. The diagnosis of PTSD did not enter the American Psychiatric Association's third edition of the *Diagnostic and Statistical Manual of Mental Disorders* until 1980 (DSM-III: American Psychiatric Association, 1980). Resick (1993) states that prior to this, *symptoms* of PTSD tended to be researched, rather than whether the individual met the diagnostic criteria.

Since its inclusion into the DSM, the classification and categorisation of PTSD has gone through much debate and change, to its current inclusion in the *DSM-5* (DSM-5: American Psychiatric Association, 2013). A diagnosis, following an individual experiencing a stressor which involves actual or threatened death, injury or sexual violence experienced directly, indirectly or witnessed, is required to meet specific criteria for a diagnosis to be made. Criteria includes intrusion symptoms, avoidance, negative alternations in cognitions and mood, and alterations in arousal and reactivity. PTSD is now considered as part of the 'Trauma and Stressor Related Disorders'.

Since not all survivors of sexual assault experience PTSD, research has explored why some people experience PTSD following a traumatic event and others do not. Two meta-

analyses, one published in 2000 (Brewin, Andrews, & Valentine, 2000) and the other in 2003 (Ozer, Best, Lipsey, & Weiss, 2003), examined populations exposed to trauma in adulthood with the aim of detecting risk factors of PTSD. Both reviews looked at studies published within the same timeframe (1980 to 2000), although neither were limited to survivors of sexual assault. Brewin et al., (2000) characterised the type of trauma as either military or civilian trauma, with no clear description of what constituted each type of trauma (e.g., rape, interpersonal violence). Ozer et al., (2003) also included combat exposure within their trauma characteristics, and defined non-combat interpersonal violence to include either civilian assault, rape, and/or domestic violence.

Brewin et al., (2000) looked at 14 risk factors of PTSD which included demographic predictors, as well as variables relating to previous and current trauma, histories of psychiatric disorders, post-trauma life stresses and social support. Ozer et al., (2003) looked at seven non-demographic predictors of PTSD, other than the exposure to the trauma itself, which could be (a) realistically described as a predictor of PTSD, and (b) had been studied adequately to warrant inclusion in the review.

Both meta-analyses concluded that PTSD following a traumatic event is not purely random, and a number of consistencies in relation to predictors of PTSD were reported. Both studies found similar findings for the individual predictors of PTSD, and both reported variables which were closer in time to the traumatic event as stronger predictors of PTSD (e.g., perceived life threat, perceived support, peri-traumatic emotionality, peri-traumatic dissociation and inter-current life stresses), warranting further exploration (Brewin et al., 2000; Ozer et al., 2003). However, one variable in which they differed on related to social support. Whilst Brewin et al., (2000) reported social support to be the strongest predictor of

PTSD, Ozer et al., (2003) reported social support as having a small-to-medium effect in predicting PTSD.

Social support is considered a multi-dimensional construct which refers to the responses survivors receive from formal or informal contact. Responses can include comfort, assistance and/or information (Flannery, 1990). Considering it as a predictor for PTSD is not a new phenomenon: Ullman (1999) conducted a narrative review looking specifically at the role of social support in the recovery of survivors of sexual assault. Social support usually relates to positive reactions within the research literature, whilst less helpful reactions (e.g., survivor blame) are referred to as negative social reactions. The findings of Ullman's (1999) review were mixed in relation to social support's impact on recovery. Ullman (1999) identified twelve studies in total looking at social support, with some showing no effect on recovery and other studies highlighting the positive effect social support has on mental and physical health consequences of assault. It is important to note that despite the number of studies which included social support and its impact on recovery in their designs, few looked *specifically* at social support, used a valid and reliable tool of social support which captured the variety of potential responses, or used sample populations which reflected the general population (Ullman, 1999).

Whilst there were a number of papers identified within Ullman's (1999) review looking at social support in relation to recovery, negative social reactions were studied far less often, with only two quantitative studies being examined. Although the evidence on negative responses from social support is limited, the findings are consistent and strongly suggest that negative social reactions have a negative impact on survivor's recovery. Ullman's (1999) review identified one study which looked specifically at the responses from different support providers, finding that emotional support was received more frequently from friends and was

associated with better recovery than that received from other sources. Ullman (1999) concluded that further research is needed on "how specific social reactions from particular support providers affect recovery from sexual as assault" (p. 354), and that further research would enable the development of specific guidelines for educating different sources of support on how to respond to survivors disclosing sexual assault.

Although survivors seek support from a variety of sources, including both informal sources of support, such as friends and relatives, and formal sources of support, such as mental health centres, police, and rape crisis centres, a study carried out by Golding, Siege, Sorenson, Burnam and Stein (1989) reported that more women seek support from informal sources of support than formal sources. This finding has been replicated (Ahrens, Campbell, Ternier-Thames, Wasco, & Sefl, 2007; Orchowski & Gidycz, 2012), with some studies reporting that all women who sought support from formal sources also sought support from informal sources (Ullman & Filipas, 2001).

Given that research suggests most survivors of sexual assault disclose informally to sources of support, and social support in general is considered a predictor of PTSD following a sexual assault, it is important to understand the role of informal social support in relation to symptoms of PTSD. Research conducted by Herbert and Dunkel-Schetter (1992) reported that negative reactions are largely made unintentionally, or arise from ineffective support attempts. Understanding the role of informal social support on PTSD symptoms may inform education and training resources on how best to respond to survivors disclosing sexual assault.

Aim of the current study

The current review aims to build on the findings of Brewin et al., (2000), Ozer et al., (2003) and Ullman (1999) in relation to the impact informal social support has on PTSD following a

sexual assault. This study will focus on female survivors of sexual assault, as they have been found to have higher rates of PTSD (Breslau et al., 1999), and have been more widely studied within the research literature. A significant period of time has elapsed since the previous reviews (15 years), therefore this reviews aims to identify studies published after the previous reviews (i.e., from 2000 onwards) where a formal measure of PTSD has been undertaken, to ensure that symptoms of PTSD meet the diagnostic criteria.

The specific objectives of this study are to review the literature in relation to the impact social support from informal sources of support has on symptoms of PTSD in females who have experienced a sexual assault.

METHOD

Scoping Exercise

A scoping exercise identified previous reviews looking at the impact of social support on PTSD symptoms following a sexual assault. This included reviewing the Cochrane database of systematic reviews and the Centre for Reviews and Dissemination (DARE), where no reviews were identified. However, two meta-analyses which looked at predictors of post-traumatic stress following a trauma (Brewin et al., 2000; Ozer et al., 2003) and one narrative review (Ullman, 1999) had already been identified. Both meta-analyses identified social support as having an impact on the symptoms of PTSD, however, the type of trauma investigated was not specifically sexual assault. Furthermore, both studies carried out their searches prior to 2000. The narrative review conducted by Ullman (1999) did not include a specific search strategy, and recommended further research into the area of social support and its impact on mental health consequences, such as PTSD. A preliminary search identified a

number of studies published since 2000, and therefore, it was felt that there was a sufficient gap within the literature to warrant a systematic search.

Sources of Literature

A search was conducted on three electronic databases; PsycINFO (2000-present), Medline (2000-present), and Applied Social Sciences Index and Abstracts (2000-present). The searches were conducted on 23rd May 2014 and 19th June 2014. In addition, reference lists for all full text articles were screened for additional studies which met the research criteria.

Search Strategy

The research question was broken down into the PICO Structure (Patient, Intervention, Comparison, Outcomes) to help guide the development of search terms. Not all the concepts within PICO were felt to be useful in the final search (i.e., Comparison), but all search terms were further defined by reading relevant literature based on the terms identified. See Table 1 for a breakdown of the search terms used. The search terms were applied to all three electronic databases.

Table 1: Table of search terms used to identify studies

P – Patient/population		I - Intervention		O - Outcome
Construct:		Construct:		Construct
Survivors of rape and or sexual assault		Social support		Post-Traumatic Stress Disorder
Rape	AND		AN	D
OR		Social Support*		Post Traumatic Stress*
Acquaintance rape*		OR		OR
OR		Social interaction*		Post-Traumatic Stress*
Sex* Abuse*		OR		OR
OR		Social Network*		Posttraumatic Stress*
Sex* Offen*		OR		OR
OR		Support Network*		PTSD
Sex* Assault*				OR
OR				Emotional Trauma*
Sex* Aggress*				

NB: Use of * allows for any words beginning with the search term to be identified, e.g., Sex* Abuse* enables articles with Sex Abuse and Sexual Abuses to be identified.

Study Selection

All results from the electronic database searches were further refined according to the following criteria:

 Only studies published since year 2000 were included in this review to capture studies published since the previous reviews.

- Due to the fact that most survivors of sexual assault are females, and most research in this area has focused on female survivors of sexual assault, only papers regarding adult female survivors were included in this review.
- Peer-reviewed journal articles (removing conference papers, books, articles, and case summary, commentary or opinion papers).

This search identified 1168 records which were reviewed by title and/or abstract to eliminate any studies which were obviously irrelevant to the research question, eliminating 1096 studies, leaving 72 studies. A further 35 studies were identified through hand-searching reference lists of identified studies. Twenty duplicates were removed resulting in a total of 87 articles which were screened against the inclusion and exclusion criteria as detailed below.

Inclusion / Exclusion Criteria

In addition to the refined criteria identified above, all eighty-seven eligible studies were screened against inclusion/exclusion criteria in order to ensure the identified studies met the research question. See Table 2 for a breakdown of the inclusion and exclusion criteria.

The inclusion and exclusion criteria were applied to all eligible papers.

Table 2: Table of search terms used to identify studies

Inclusion Criteria	Exclusion Criteria
PTSD must be formally measured ³	Doctoral dissertations
Only adult female survivors of	Studies from military settings
sexual assault were included.	All incidents of trauma related to
Social support must relate to	sexual assault in combat
informal social support (e.g., from	Incidents of sexual assault within
family, friends, and religious	intimate partner violence / domestic
communities) ⁴ . Studies which	abuse as it was felt this would
looked at formal social support, in	introduce too many confounding
addition to informal social support,	factors
were included, but the analysis must	Where sexual assault occurred only in
include informal social support.	childhood - defined as below the age
The study must investigate the	of 14 ⁵
impact of social support on	Studies where social support looked
symptoms of PTSD.	at formal support systems only (e.g.,
	rape crisis centres, mental health
	services or police etc.).

Having refined the eligible articles based on the inclusion/exclusion criteria, a total of thirteen articles were considered for review and quality assessment. A flowchart of the study selection process is given in Figure 1.

³ Only formal measures of PTSD were included to ensure that a diagnosis of PTSD was based on a standardised process, which was reliable and valid.

 $[\]overline{}^4$ Informal social support relates to social support not from organised services (such as police, rape crisis centres), but which forms part of the survivors social support system – e.g., family, friends, work colleagues, for example.

⁵ The age of 14 years was used as a cut off because a prominent measure of sexual assault (Sexual Experiences Survey) in the literature uses this age as a cut-off to distinguish child abuse from adult abuse (Koss & Oros, 1982).

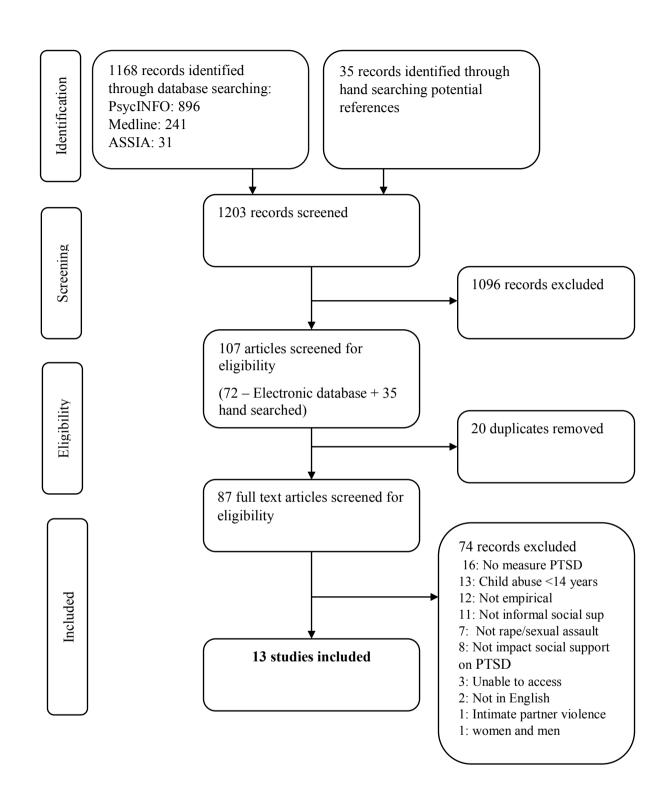


Figure 1: A flowchart of the study selection process

Data Extraction

A standardised data extraction form (see Appendix 1) was developed for all identified studies, in order to improve the consistency, validity and reliability of the systematic review and reduce bias (Centre for reviews & dissemination (CRD), 2009). The areas covered in the extraction form are briefly described in table 3.

Table 3: Table of areas covered in data extraction form

Areas covered by the data extraction form

- General study information (e.g., study title, journal, authors)
- Verification of study inclusion
- Study characteristics (e.g., aims, study design, inclusion criteria)
- Participant characteristics (e.g., number of participants consented, participant demographic information)
- Specific study information (e.g., target population, recruitment procedures, data collection methods, details of measures)
- Analysis
- Results
- Conclusions (e.g., summary of main findings, limitations and implications)

Quality Assessment

Research can vary in its methodological quality, and therefore an assessment of quality can indicate the strength of a study and the usefulness of the claims made (CRD, 2009). All thirteen identified studies were assessed against quality criteria appropriate to the study design. The design of the study was identified with reference to the NICE algorithm for classifying study design (National Institute for Clinical Excellence, 2005). Of the final

identified studies, twelve were purely cross-sectional studies, and one had both a cross-sectional and a longitudinal design.

An assessment tool was not found to assess the quality of cross-sectional studies and the questions being addressed by this review. Therefore, one was developed based on available quality assessment tools including those developed by the Critical Appraisal Skills Programme (CASP, 2013) and Downs and Black (1998) looking at both randomised and non-randomised studies. Furthermore, the STROBE statement (Von Elm et al., 2007) and the National Institute of Health (NIH, 2014) were referred to in the development of this quality assessment tool. See Appendix 2 for the cross-sectional quality assessment tool.

The studies were assessed as to whether they clearly reported the hypothesis, design, characteristics, findings and missing data. The external validity of the studies were assessed by looking at recruitment, and internal validity was assessed though evaluating the measures and statistical tests used and whether the sample size power was reported. To assess the quality of each study, a scoring system was devised based on previous quality tools (Kmet, Lee, & Cook, 2004); this included a 3-point scale for each question, 0 = no, 1 = partially met the criteria, 2 = met the criteria. For unknown responses no score was awarded, but was recorded as unknown. A total score was obtained by summing the total responses, and a percentage was calculated. The maximum possible score was 30 (100%), with higher scores reflecting a better quality paper.

All studies were quality assessed by one researcher. In order to measure the inter-rater reliability of the developed quality assessment tools, three randomly selected studies were assessed by a second rater. The quality assessment tool was found to have a kappa measure of

agreement of .56 with a significance of p < .0005, which, according to Peat, Mellis and Williams (2002) is a moderate to good agreement.

The results from the quality assessment provided a range of percentages from 60% to 90%. Only one study was assessed as having a quality score of below 70% (Campbell, Ahrens, Sefl, Wasco, & Barnes, 2001). Due to the small number of papers identified for this review and that the aim of this review was to identify studies which met the inclusion criteria since 2000, it was decided to include all studies. However, it is important to consider the quality of the studies when drawing any conclusions. See Table 4 for the quality assessment scores.

Table 4: Table of quality assessment scores, including strengths and limitations

Authors & Year & Location	Study Strengths (score of 2)	Study Limitations (score below 2)	Unknown	Quality score
1. Campbell, Ahrens, Sefl, Wasco, & Barnes. (2001)	 Easily identified hypothesis and aims Main findings are clearly described, including outcomes Population selection and recruitment was clearly described 	 Description of design did not include the point in time when cross-section was taken Eligibility criteria unclear Characteristics of participants only included percentages, not number of participant responses. Missing data is included for data analysed, but not for participant characteristics Discussion did not take into account possible biases such as loss of data and other possible limitations. Measures of social support and PTSD did not include description of validity and reliability No correlation analysis on covariates was reported/carried out 	No mention of how sexual assault was assessed No estimates of sample size or variance estimates provided	18/30
2. Ullman, & Filipas. (2001)	 Easily identified hypothesis and aims Clearly reported eligibility criteria Clearly described description and assessment of sexual assault Main findings are clearly described, including outcomes All results support the conclusions Measure of social support clearly described Clear and appropriate statistical tests Variance estimates are reported 	 Description of design did not include the point in time when cross section was taken Characteristics of participants only included percentages, not number of participant responses. Participants recruited as part of another study, with no clear description of previous study Measure of PTSD did not include description of reliability 	No mention of missing data	24/30 80%

3. Borja, Callahan, & Long (2006)	 Easily identified hypothesis and aims Clearly reported eligibility criteria Clear description and assessment of sexual assault Main findings are clearly described, including outcomes All results support the conclusions Measure of PTSD clearly described Variance estimates are reported 	 Description of design was not clear Characteristics did not include information on age, just 'college students' Missing data includes errors – numbers do not addup Identified participants as college students, but not clear description as to how students were identified Measure of social support open to subjective interpretation – i.e., did not clearly describe informal/formal support Statistical analysis inappropriate in relation to sample size, and did not report on test assumptions 	23/30
4. Schumm, Briggs-Phillips, & Hobfoll (2006)	 Easily identified hypothesis and aims Clear description of participant characteristics All results support the conclusions Measures of PTSD and Social Support clearly described Clear and appropriate statistical tests Variance estimates are reported 	 Description of design did not include the point in time when cross section was taken Eligibility criteria unclear Measure of sexual assault not clearly described with no example questions Results section unclear No justification as to why selected women from obstetric-gynaecological clinics 	23/30
5. Ullman, Filipas, Townsend, & Starzynski (2006)	 Easily identified hypothesis and aims Clearly reported eligibility criteria Clear description and assessment of sexual assault Missing data clearly described Main findings are clearly described, including outcomes All results support the conclusions Population selection and recruitment was clearly described 	 Description of design did not include the point in time when cross section was taken Characteristics of participants only included percentages, not number of participant responses. Variance estimates not provided within results section 	26/30 87%

6. Ullman, Filipas, Townsend, & Starzynski. (2007)	 Measures of PTSD and Social Support clearly described Clear and appropriate statistical tests Easily identified hypothesis and aims Clearly reported eligibility criteria Clear description and assessment of sexual assault Missing data clearly described Main findings are clearly described, including outcomes All results support the conclusions Population selection and recruitment was clearly described Clear and appropriate statistical tests Variance estimates are reported 	 Description of design did not include the point in time when cross section was taken Characteristics of participants only included percentages, not number of participant responses. Measure of social support did not include description of validity and reliability Measure of PTSD did not include description of reliability 		26/30
7. Ullman, Townsend, Filipas, & Starzynski.	 Easily identified hypothesis and aims Clearly reported eligibility criteria Clearly described description and assessment of sexual assault Missing data clearly described All results support the conclusions Population selection and recruitment was clearly described Measures of PTSD and Social Support clearly described Clear and appropriate statistical tests Variance estimates are reported 	 Description of design did not include the point in time when cross section was taken Characteristics of participants only included percentages, not number of participant responses. Results section does not include clear summary of main findings 		27/30 90%
8. Ahrens, Stansell, & Jennings.	 Easily identified hypothesis and aims Clearly reported eligibility criteria 	Description of design did not include the point in time when cross section was taken	 No mention of missing data 	26/30

(2010)	 Clearly described description and assessment of sexual assault Main findings are clearly described, including outcomes All results support the conclusions Population selection and recruitment was clearly described Measures of PTSD and Social Support clearly described Clear and appropriate statistical tests Variance estimates are reported 	 Characteristics of participants only included percentages, not number of participant responses. Measure of sexual assault not clearly described with no information on validity or reliability Characteristics didn't include age of participants, only included percentages (no numbers) 		87%
9. Jacques- Tiura, Tkatch, Abbey, & Wegner. (2010)	 Easily identified hypothesis and aims Clearly reported eligibility criteria All results support the conclusions Population selection and recruitment was clearly described Measure of PTSD clearly described Variance estimates are reported 	 Description of design did not include the point in time when cross section was taken Results of SES not described Measures of social support not always include description of validity or reliability Not include clear description of statistics used 	No mention of missing data	22/30
10. Littleton. (2010)	 Easily identified hypothesis and aims Clearly reported eligibility criteria Missing data clearly described Main findings clearly described All results support the conclusions Population selection and recruitment was clearly described Measures of PTSD and Social Support clearly described Clear and appropriate statistical tests Variance estimates are reported 	 Description of design did not include the point in time when cross section was taken Measure of sexual assault not clearly described with no information on validity or reliability Characteristics of participants only included percentages, not number of participant responses. 		27/30 90%

11. Bryant- Davis, Ullman, Tsong, & Gobin. (2011)	 Easily identified hypothesis and aims Clearly reported eligibility criteria Characteristics of participants clearly reported Main findings clearly described All results support the conclusions Population selection and recruitment was clearly described Measures of PTSD and Social Support clearly described Clear and appropriate statistical tests Variance estimates are reported 	 Description of design did not include the point in time when cross section was taken Measure Sexual Violence not clearly described Missing data discussed in relation to analysis but not in relation to demographic missing data 		23/30 87%
12. Orchowski, Untied, & Gidycz. (2013)	 Easily identified hypothesis and aims Clear description of design Clearly reported eligibility criteria Clearly described measure of sexual assault Main findings clearly described All results support the conclusions Main findings clearly described All results support the conclusions Measures of PTSD and Social Support clearly described Clear and appropriate statistical tests Variance estimates are reported 	 Participants characteristics only includes average responses, not range or percentages or numbers Missing data discussed in relation to analysis but not in relation to demographic missing data Participants recruited from existing study, procedure not clearly described 		27/30 90%
13. Ullman, & Peter-Hagene. (2014)	 Clearly reported eligibility criteria Clearly described measure of sexual assault Population selection and recruitment was clearly described 	 Overall aim unclearly reported Description of design did not include the point in time when cross section was taken Characteristics of participants only included percentages – no numbers 	No mention of missing data	23/30

Measures of PTSD and Social Support	Results of SES not described	77%
clearly described	Discussion did not take into account possible	
Clear and appropriate statistical tests	biases such as loss of data and other possible	
Variance estimates are reported	limitations.	

RESULTS

Methodological and Study Characteristics

All thirteen studies identified were cross-sectional designs conducted in the USA. One study was both a cross-sectional design and a longitudinal study (Littleton, 2010).

Recruitment and Participants

The total sample size for the thirteen studies was 5584 participants. Three of the studies recruited from the community only (341 participants), three studies recruited from college samples only (477 participants), and one study looked at service-seeking participants from obstetric-gynaecological clinics (39 participants). The remaining six studies recruited from a combination of community, college and service-seeking samples. Three of the studies had an overlap in samples as these were conducted by the same research group. Furthermore, Ullman was named first author on two studies and was second author on one study.

The ages of participants ranged from 18 to 71 years, with eight studies reporting that most women were in their 30's. Women of African American ethnicity made up the largest ethnic group across seven studies, with women of White ethnicity making up the largest group across five studies. One study reported that women mostly identified as being of Euro-American ethnicity. Of the studies, twelve reported on the relationship status of their participants, with the majority of participants being unmarried (eleven studies), and most women had children.

Of the nine studies which looked at participants' employment, six studies identified that the majority of women were employed. Yearly income tended to range from less than \$10,000 to \$30,000 annually per household. One study, recruiting from a university sample, identified that the largest group of participants reported family income within \$50,000 to \$100,000

annually. Five studies reported that the majority of the sample had completed college education; three studies stated that participants had completed high school, and one study reported that the majority of participants had not completed high school. Of the four studies that did not report on education, three recruited from university samples.

The recruitment of participants, in addition to the overall findings of each of the thirteen studies are presented in table 5.

Table 5: Summary of study characteristics and principal findings relating to social support and its impact on PTSD symptom severity

Authors, Year,	Aims	Study Design and Participants	Summary of findings in relation to Social Support and PTSD
Location			
1. Campbell Ahrens, Sefl, Wasco, & Barnes, 2001 USA	To examine how social reactions from family and friends affect rape survivors' psychological and physical health. Specifically, is there consistency in what is considered a 'positive' or 'negative' social reaction and is receiving negative social reactions/negative support worse than receiving no support at all?	Participants: Community sample with women 18 or over, sexually assaulted by stranger, acquaintance, dating partner or husband. 102 participants (91%) completed interviews.	On average survivor experienced 2.77 positive social reactions (of six possible), and 2.07 negative reactions (of six possible). The cumulative impact of positive social reactions was found to be unrelated to survivor recovery. However, univariate analyses indicated that being believed (<i>p</i> <.05) and being allowed to talk about the assault (<i>p</i> <.01) predicted lower distress. No significant relationship was found with the total number of negative social reactions predicting symptom severity of PTSD. Trend relationships were identified, however, with negative social reactions associated with greater PTSD symptomatology. The individual beta weights for the total number of negative social reactions experienced were significant. Women who had someone believe their account of what happened, and defined this behaviour as healing, had lower PTS scores than women who did not receive this reaction or who received this reaction but considered it hurtful. Similarly, survivors who had someone in their social network to talk about the assault, and found this healing had lower PTS scores than survivors who experienced this reaction but perceived it as hurtful, and lower scores than survivors who did not experience this reaction at all. Being called 'irresponsible', and being 'patronized' were associated with increased PTS when these reaction were perceived as negative, compared to when they were perceived as helpful, and compared to survivors who did not experience these social reactions at all. The cumulative impact of negative reactions appears to more strongly predict survivor adjustment, than positive reactions. As the number of negative reactions that survivor experience increases, emotional health deteriorates. Thus overall, positive support may not defray the psychological

			aftermath of sexual assault, but negative reactions may exacerbate symptoms.
2. Ullman, & Filipas 2001 USA	To examine demographics, event characteristics, post-assault social reactions from various sources, and PTSD in a diverse sample of female sexual assault survivors.	Cross sectional study Participants: Adult women sexually assaulted in Chicago area representing three different sample populations; (1) students, (2) community and (3) those service seeking.	Neither measures of current support, nor measures of assault-specific support were related to current PTSD symptom severity. However, negative social reactions received upon disclosure were strongly related to greater PTSD symptom severity. A range of negative social reactions – including survivor blame, treating the survivor differently, distraction, egocentric reactions and controlling responses - were found to be related to greater PTSD symptom severity. Being treated differently (e.g., stigmatizing responses) was most predictive of PTSD symptom severity in multivariate analysis.
		323 participants in total. College students – 98 Community – 202 Service seeking – 23	The effect of negative social reactions on PTSD symptom severity held up in a path model controlling for race, perceived life threat, education and extent of disclosure. Greater perceived life threat was related to more negative social reactions and predicted more PTSD symptoms. Ethnic minority race was related to more negative social reactions (e.g., more negative social reactions for Hispanics than for Whites), and predicted more PTSD symptoms.
3. Borja, Callahan, & Long 2006 USA	To explore both positive (growth) and negative (posttraumatic stress symptoms and general emotional distress) adjustment following an adult sexual victimisation, particularly in regard to how such adjustments are related to positive and negative reactions provided by formal and informal support services.	Cross sectional study Participants: Female college students who were adult sexual assault survivors 115 (22.7%) participants met criteria for inclusion (considered adult sexual assault survivor as considered on the Modified SES).	Within the SRQ, mean scores were calculated across all positive support items and all negative support items for formal support providers (and informal support providers, although not included within this analysis). Lower frequency of scores were reported for both positive ($M = 1.63$, $SD = 1.02$) and negative ($M = 0.60$, $SD = 0.55$) reactions than those in the normative female sample for both positive scores ($M = 2.02$, $SD = 0.83$) and negative scores ($M = 1.04$, $SD = 0.93$). Positive reactions from family/friends were associated with benefits in the aftermath of trauma. Informal negative reactions were associated with specific post traumatic distress ($p < .01$).

		63 completed the survey (nearly half discontinued survey).	
4. Schumm, Briggs-	To examine the combined impact of child sexual abuse and adult rape, and	Cross sectional study	Social support was examined as a categorical resiliency factor, therefore social support was dichotomized to high social support or low social
Phillips, &	explore the potential role that social	Participants:	support. Women experiencing adult rape (but not child abuse) were 0.52
Hobfoll 2006	support may have in lessening risk for depressive mood and PTSD.	Women recruited from two obstetric-gynaecological clinics	times likely to be in the high support group. Women reporting both adult rape and child abuse were 0.22 as likely to be in the high support group.
	Particular interest in the odds of experiencing risk for depression and	serving low-income women in a mid-sized, Midwestern city.	ANCOVA's showed that women in the high support group had lower PTSD scores ($M = 6.44$, $SD = 0.68$) than women in the low support group ($M =$
USA	PTSD among women abused during childhood or adulthood, and the extent current social support reduces	777 (80%) participants recruited from two clinics.	9.32, $SD = 0.75$). In a hierarchical logistic regression analysis predicting risk for estimated PTSD, women with high social support were 0.44 times as likely – or 2.72 less likely – than women with low social support to meet
	these risk odds.	5% reported adult rape but not	probably PTSD diagnostic estimates.
		child sexual abuse 18% reported both adult rape	Impact of social support on PTSD was not significant for women abused exclusively during adulthood (p <.1), but it was for women abused during
		and child sexual abuse. 47% child sexual abuse but not	childhood and adulthood (p < .001). The association between social support and PTSD suggested that social support might have a stress buffering effect.
		adult rape 30% neither child sexual abuse or adult rape	
5. Ullman, Filipas,	To build on previous study and analyse between and within survivor-	Cross sectional study	Women reported an average frequency of 1.04 negative social reactions, and 2.02 positive social reactions from people they told about the assault on the
Townsend, &	offender relationships groups and	Participants:	SRQ.
Starzynski	compare different types of known offenders.	Women, aged 18 or over, in	For all relationships, positive social reactions to disclosure were unrelated to
2006	officiacis.	Chicago metropolitan area with	PTSD symptoms and negative social reactions were related to greater PTSD
USA		unwanted sexual experiences since age of 14. Participants	symptoms in all survivor-offender relationship groups.
		recruited from college campuses, in the community and	No differences by the survivor-offender relationship in positive social reactions. Survivors of strangers received more negative social reactions
		at mental health agencies and	than survivors of acquaintances. Survivors of relatives received more
		rape crisis centres.	negative reactions than survivors of romantic partners and acquaintances and had more PTSD symptoms than all other survivor-offender relationship

6. Ullman, Filipas, Townsend, & Starzynski 2007a USA	To examine a broad set of psychosocial factors in relation to PTSD symptomatology. Four categories of variables were examined; demographic variables (race, marital status, age, and education); Pre-assault variables (trauma history, child sexual abuse); Assault characteristic variables (level of offender violence, Survivor-offender relationship, degree of survivor distress, post-assault and assault severity, and perceived life threat); Post-assault variables (delayed assault disclosure, avoidance coping, characterlogical and behavioural self-blame, less perceived control over one's current recovery, current social support, negative and positive social reactions).	20% women did not disclose sexual assault and 7.4% did not endorse items on SES – reduced sample size to 793 cases. Cross sectional study Participants: Women, aged 18 or over, in Chicago metropolitan area with unwanted sexual experiences since age of 14. Participants recruited from college campuses, in the community and at mental health agencies and rape crisis centres. 1084 (90%) participated. 793 met inclusion criteria. Missing data reduced sample to 699 in final analysis	groups. Stranger survivors had more PTSD symptoms than acquaintances or romantic partner survivors. Women had an average of 4.82 confidants ($SD = 4.76$) and over half were getting along with others the same as usual (55.4%), whereas fewer were getting along better than usual (26.8%). Women reported receiving more positive reactions ($M = 2.02$, $SD = 0.83$) than negative reactions ($M = 1.04$, $SD = 0.93$) on disclosing the assault. Hierarchical blockwise regression showed negative social reactions to assault disclosures to be related to greater PTSD symptom severity. Positive social reactions to assault disclosure and greater current frequency of social contact with others were both related to more severe symptoms. Delayed disclosure was related to more severe PTSD symptoms. Both general and assault specific social support was related to more severe PTSD symptoms — making it appear that support is somehow implicated in PTSD symptoms.
7. Ullman, Townsend, Filipas, & Starzynski	To develop and test a model of individuals' assault related and contextual factors to better understand how all of these variables may interrelate in affecting PTSD	Cross sectional study Participants:	Women reported receiving the negative reaction of controlling responses ($M = 0.96$, $SD = 0.75$) as being the most frequently negative social reaction, followed by being treated differently ($M = 0.79$, $SD = 0.86$) and blame ($M = 0.76$, $SD = 0.92$).
2007b	symptoms following sexual assault. The initial model that was tested		Structural equation modelling found that a higher frequency of negative social reactions was associated with more PTSD symptoms. Higher degrees

USA	integrated several constructs: assault severity, global support, assault-specific social reactions, self-blame, avoidance coping and other traumatic life experiences.	Women aged 18 or over with unwanted sexual experiences who have disclosed abuse. 1084 (90%) completed survey. 761 met inclusion criteria	of assault severity were associated with more negative social reactions, and more symptoms of PTSD. Contrary to the hypothesized model, high degrees of global support were associated with more PTSD symptoms. Significance of the indirect and direct paths within the model were analysed, showing that negative social reactions and avoidance coping had the strongest total effects on PTSD symptoms.
		636 cases left when missing data or outliers were removed.	An alternative model, including several paths from global support to other constructs was tested to see whether lower global support may be related to receiving more negative social reactions when disclosing the assault. The results were similar to the previous model, showing a higher frequency of negative social reactions being related to more PTSD symptoms. Higher degree of assault severity was associated with more negative social reactions and more PTSD symptoms. As in model 1, higher degrees of global social support were associated with more PTSD symptoms. The new paths showed that global support was unrelated to negative social reactions. The strongest total effects on PTSD symptoms were found for negative social reactions and for global social support.
8. Ahrens, Stansell, & Jennings 2010 USA	To identify a variety of disclosure patterns, based both on if-and-when survivors start disclosing and if-and-when they stop disclosing. Sought to identify characteristics within each disclosure pattern and how these disclosure patterns were related to physical and mental health outcomes.	Cross sectional study Participants: Women sexual assault survivors from large West-Coast City. 103 participants, identified from a modified form of adaptive sampling	Women reported more positive social reactions ($M = 3.75$, $SD = 1.65$) than negative social reactions ($M = .58$, $SD = 0.52$) on the SRQ. A multivariate path model showed that more negative social reactions was associated with an increase in PTSD scores. The study identified 4 types of disclosure patterns; (1) nondisclosures, (2) slow starters, (3) crisis disclosures, and (4) on-going disclosures. Survivors who were slow starters to disclose received negative reactions ($M = 0.54$, $SD = .32$) with less frequency than crisis disclosers (disclosed immediately but then stopped disclosing) ($M = 0.85$, $SD = .58$), and Ongoing disclosures ($M = 0.75$, $SD = 0.40$). Survivors who were slow starters to disclose received more positive reactions ($M = 2.17$, $SD = 0.80$) than ongoing disclosures ($M = 2.14$, $SD = 0.74$) and crisis disclosures ($M = 2.06$, $SD = 0.97$).

9. Jacques- Tiura, Tkatch, Abbey, & Wegner 2010 USA	To examine the effects of disclosure on PTSD symptomatology among a community sample of African American and Caucasian survivors of adolescent and adult sexual assault. Specifically to (1) describe characteristics of disclosure experience, (2) examine relationships between disclosure characteristics and PTSD symptom severity, and (3) compare and contrast the disclosure experiences of African American and Caucasian survivors.	Cross sectional study Participants: Community sample of African American and Caucasian women with unwanted sexual experiences Representative Community Sample of 272 recruited for study on dating experiences. 232 met criteria of unwanted sexual experience since age 14 and had disclosed experience to at least one person Interviews completed with 81.7% of eligible women (n=136)	In general, participants received significantly more support than disregard from others ($p < .01$). Levels of social support were high and did not differ for African American and Caucasian survivors. Levels of distress was fairly low, however African American women ($M = 1.77$. $SD = 0.90$) received more negative responses than Caucasian participants ($M = 1.47$, $SD = 0.65$) ($p < .05$). Correlation and regression analysis found that the amount of disregard received from others was related to PTSD symptoms. Social support was unrelated to PTSD symptoms. Social support and disregard were inversely related. The relationship between disregard and PTSD symptom frequency was significantly stronger for African American ($r = .35$) than for Caucasian ($r = .05$).
10. Littleton 2010 USA	To examine the extent to which perceived social support and negative disclosure reactions predict several post-assault outcomes in college rape survivors. Specifically, the extent to which these two aspects of social support predicted PTSD symptomatology and the extent to which these aspects of social support predicted post-assault factors at a 6-month follow-up separate from initial standing on post-assault factors.	Cross sectional and cohort study Participants: College women who had experienced sexual assault and disclosed their experience. Cross Sectional 353 (20.2%) of the sample responded positively to a sexual assault screening question. 13 (3.7%) changed their responses	Participants reported fairly high levels of satisfaction with their social support on average ($M = 67.08$, $SD = 15.41$), whilst receiving negative reactions very rarely at initial assessment ($M = 23.42$, $SD = 15.66$). At the initial survey, distraction was the most frequently received negative reaction ($M = 6.63$, $SD = 4.35$), followed by reactions which take control ($M = 5.96$, $SD = 4.77$), egocentric reactions ($M = 4.53$, $SD = 3.70$), reactions which treated the individual differently ($M = 3.34$, $SD = 4.33$) and blame the survivor ($M = 2.96$, $SD = 2.87$). At the initial analysis, social support and disclosure reactions were modestly correlated ($r =20$, $p = <.005$). Linear regressions within the initial analysis showed both social support and negative disclosure reactions predicted post-assault factors in the expected direction (i.e., negative disclosure reactions predicted more PTSD symptoms, social support satisfaction predicted less PTSD symptoms).

		to the screening and were eliminated from analyses. 262 (77.1%) indicated that they had disclosed their experience and thus composed the current sample. Cohort study 189 (72%) provided email for follow-up study and 74 (39%) of these participants completed the follow-up.	Within the longitudinal analysis, linear regression evaluating predictors of PTSD at follow-up found negative disclosure reactions predicted PTSD, but social support did not. At follow-up, social support did not emerge as a significant predictor of receipt of negative reactions among those who disclosed over the follow-up period. At follow-up, participants reported a similar pattern of frequency of negative disclosure reactions with distraction being the most commonly received reaction ($M = 5.49$, $SD = 4.14$), followed by respondents taking control ($M = 3.63$, $SD = 4.08$), egocentric reactions ($M = 3.61$, $SD = 3.96$), treat survivors differently ($M = 2.16$, $SD = 3.55$), and blaming the survivor ($M = 1.75$, $SD = 2.55$).
11. Bryant- Davis, Ullman, Tsong, & Gobin 2011 USA	To explore the role of religious coping and social support in the recovery of African American sexual assault survivors.	Cross sectional study Participants: African American women 18 and over with an unwanted sexual experiences since age of 14 413 participants recruited via convenience sample	The mean average rating of women's social support was 3.96 (<i>SD</i> = 1.28), which corresponds to participants socialising about 2 or 3 times per month with those in their network. Structural equation modelling (SEM) was used, along with confirmatory factor analyses (CFA) to test the measurement model before the full model was estimated. The CFA found social support to be related to being with friends/relatives, have friends over to the home, visiting friends at their homes, calling friends or relatives and attending religious services. The SEM suggested that less social support predicted higher levels of PTSD. African American women who indicated having more access to and utilization of a social support network report less PTSD than women with less support.
12. Orchowski, Untied & Gidycz 2013	To examine the association between various social reactions to disclosure of sexual victimization and levels of psychological distress, social support, coping behaviour and self-esteem among college women, which takes account of assault severity and the	Cross sectional study Participants: The data for this study were collected as part of larger study examining the effectiveness of	Multiple linear regression analysis, accounting for assault severity and social desirability, showed social reactions to be associated with symptoms of PTSD ($p < .001$), such that controlling social reactions were associated with increased PTSD ($p < .05$). Social reactions were associated with self-esteem, coping via seeking emotional support, avoidance coping and coping via problem solving.

USA	potential biasing effects of social desirability.	sexual assault risk reduction and prevention programming for college women and men within freshman residence halls during 2006 and 2007. 374 women met the inclusion criteria 35.8% (n=134) reported unwanted sexual experiences since age 14 and 74.6% (n=100) of these women discussed the experience with someone.	Accounting for assault severity, and social desirability, social reactions were associated with self-esteem ($p < .01$), such that blaming social reactions were associated with lower self-esteem ($p < .05$) and social reactions that treated survivors differently were associated with increased self-esteem ($p < .05$).
13. Ullman, & Peter-Hagene 2014 USA	To investigate maladaptive coping, individual and social adaptive coping strategies and perceived control over recovery as potential mechanisms through which negative and positive social reactions relate to PTSD symptomatology.	Cross sectional study Participants: Women from Chicago area via weekly advertisements in local newspapers, on Craiglist, and through uni mass mail. Posted fliers in community, other Chicago colleges and uni's, and agencies that cater to community members in general and survivors of violence against women in particular – community centres, cultural centres, substance abuse clinics, domestic violence and rape crisis centres.	On average, women reported rarely receiving negative reactions upon disclosure (<i>M</i> = .96, <i>SD</i> = .80), and 'sometimes' receiving positive reactions (<i>M</i> = 2.22, <i>SD</i> = .95). Bivariate correlations revealed that both negative and positive social reactions to assault disclosure were positively related to PTSD, but the relationship was stronger for negative reactions (<i>p</i> < .001). Path analysis model was used to test individual paths and direct and indirect effects of social reaction to assault disclosure on PTSD symptoms. Negative social reactions to assault disclosure were related to greater PTSD symptoms both directly and indirectly through maladaptive coping. Unexpectedly, negative social reactions also related to survivors' greater reliance on adaptive individual coping, but adaptive individual coping was only weakly related to PTSD symptoms and did not mediate the effect of negative social reactions to assault disclosure were weakly but positively related to PTSD symptoms. Positive social reactions were related to positive individual and social forms of adaptive coping, but neither mediated the relation between social reactions to assault disclosure and PTSD symptoms. Positive social reactions to assault were unrelated to maladaptive coping, but

1863 (response rate of 85%) of eligible women were sent and returned completed surveys.	were related to better perceived control over recovery, which in turn was associated with less PTSD symptoms. Bootstrapping techniques confirmed that the direct effects of positive reactions to assault disclosure ($p < .001$) and negative reactions to assault disclosure ($p < .001$) on PTSD symptoms were positive and significant, and were partially mediated by maladaptive coping and adaptive individual coping, and perceived control over recovery only mediated the relation between positive reactions to assault disclosure and PTSD symptoms.
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Study Measures

Sexual Assault

Specific measures and questions reporting on the sexual assault experienced were varied (see Table 6). A modified version of the Sexual Experiences Survey (SES: Koss & Oros, 1982) was used by ten studies, and measures sexual assault severity, including completed and attempted rape, sexual coercion and unwanted sexual contact. According to Koss and Gidycz (1985) this measure has good internal consistency, with a Cronbach alpha coefficient of .74, as reported by seven studies. The internal consistency of this measure was calculated in three studies and ranged from a Cronbach alpha's coefficient of .77 to .81.

According to Koss and Gidycz (1985), the test-retest reliability at one week apart was 93%.

No studies reported the test-retest reliability scores of the modified SES.

One study used four questions adapted from the National Women's Study to assess various forms of sexual experience, with reliability and validity being inappropriate to report due to distinct qualities of the items (Schumm, Briggs-Phillips, & Hobfoll, 2006). Ahrens, Stansell and Jennings (2010) developed a past assault variable, and obtained a detailed description of the most recent sexual assault via a verbal description; no validity or reliability measures were reported. Campbell et al., (2001) did not include a measure of sexual assault, other than questions used to assess the eligibility of participants. All thirteen of the studies asked additional questions to assess the characteristics of the sexual assault experienced. Ten studies asked survivors about their experiences of sexual assault since the age of 14, whereas for three studies, this was from the age of 16, 17 and 18.

Four of the studies reported high rates of completed rape $(71 - 86\%^6)$, including as a result of argument, pressure, threat or force. Orchowski, Untied, and Gidycz (2013) reported

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⁶ Throughout this report, all figures have been rounded up or down as appropriate

completed rape by 8% of the sample, with participants largely reporting "unwanted sexual experiences" (36%). Ahrens et al., (2010) separated the participants into three disclosure groups, and one non-disclosure group. Within the ongoing disclosure group, 78% reported completed rape, 64% within the crisis disclosure group, and 46% within the slow to disclose group. Within the non-disclosure group, 65% reported completed rape. Schumm et al., (2006) reported that 18% of their sample had experienced both child sexual abuse and adult rape, a further 5% reported adult rape only (no child sexual abuse). Five of the studies which used a modified measure of the SES (Koss & Oros, 1982) did not state the percentages in their report.

Of the seven studies which provided information on the perpetrator, all identified that perpetrators known to the survivor made up the largest group within the sample. The assault ranged in time from 17 months to 13 years prior to involvement in the study.

A description of the sexual assault measures, including all other measures used within the studies are presented in table 6.

Table 6: Table showing sexual assault, social support and PTSD measures used in identified studies

	Sexual Assault								Social Support				PTSD			
Authors & Year	No formal measure	SES ¹	LEQ ²	SLEQ 3	SAQ 4	SRQ ⁵	ISSB 6	SPS 7	Social support and	MSPSS 8	SCL-90- CR '	PDS 10	PSS-SR 11	Davidsons -Trauma	SCL-90 12	
1. Campbell et al., (2001).	√					✓					√					
2. Ullman & Filipas (2001).		√			√	√	√					✓				
3. Borja et al., (2006).		√	√			✓						√				
4. Schumm et al., (2006).	√							√					√			

	Sexual Assault							Social Support				PTSD			
5. Ullman et al., (2006).		✓		✓	~	✓						✓			
6. Ullman et al., (2007a).		✓		✓	✓	✓						✓			
7. Ullman, et al., (2007b).		~			√	✓						✓			
8. Ahrens, C. E., et al., (2010).	✓					✓						✓			
9. Jacques- Tiura et al., (2010).		√							√					√	
10. Littleton, H. L. (2010).		~				✓				✓		✓			

	Sexual Assault							Social Support				PTSD			
11. Bryant- Davis et al., (2011).		√			✓							✓			
12. Orchowski , et al., (2013).		√				✓		√							✓
13. Ullman & Peter-Hagene, (2014).		√				✓						√			

^{1.} Sexual Experience Survey; 2. Lifetime Events Questionnaire; 3. Stressful Life Events Screening Questionnaire; 4. Social Activities Questionnaire; 5. Social Reaction Questionnaire; 6. Inventory of Socially Supportive Behaviours; 7. Social Provisions Scale; 8. Multidimensional Scale of Perceived Social Support; 9. Symptoms Checklist – 90 – Crime Related PTS Scale; 10. Posttraumatic Stress Diagnostic Scale; 11. PTSD Symptom Scale-Self-Report; 12. Hopkins Symptom Checklist-90

Social Support

Five studies measured the amount of current social support using the Social Activities Questionnaire of the Rand Health Insurance Experiment (Donald & Ware, 1984). Participants in three studies had two to three social contacts per month on average, with the average number of confidants ranging from 4 to 5. Two studies reported that 55% of participants felt they were getting along with others "just as well" as usual, and 27% of participants reported that they were getting along with others "better than usual". One study reported that 18% of participants felt that they were "not getting on with others as well as usual".

A measure of perceived social support was used by four of the studies, with two studies adopting the Social Provisions Scale (SPS: Cutrona & Russell, 1987). Orchowski et al., (2013) reported adequate reliability on the six subscales of the SPS, ranging from .54 to .74. Schumm et al., (2006) used participants who reported 'no child sexual abuse/no rape' as a comparison group, reporting that women who had experienced adult rape and child sexual abuse were five times more likely to have below average social support. Furthermore, women reporting adult rape but no child abuse were twice as likely to have below average social support (MSPSS: Zimet, Dahlem, Zimet, & Farley, 1988), with scales assessing support from family, friends and significant others. The Cronbach alphas were reported to be good for both the initial stage of the study (α =.92) and the follow-up stage (α =.91), with participants reporting fairly high levels of satisfaction with their social support on average. Ullman and Filipas (2001) assessed how frequently participants felt they were recipients of helpful acts in

the past month, based on a modified version of the Inventory of Socially Supportive Behaviours (ISSB: Barrera, Sandler, & Ramsay, 1981).

The social reactions experienced by survivors following disclosure of sexual assault were assessed by ten studies. All ten studies used the Social Reactions Questionnaire (SRQ) which was originally developed by Ullman (2000), and is a selfreport measure of both positive and negative social reactions following a disclosure of sexual assault. All studies reporting on its psychometric properties stated that the SRQ had acceptable reliability and validity (alpha coefficients ranging from .73 to .98), and Borja, Callahan, and Long (2006) reported excellent internal consistency for the SRQ from informal support sources (α =.95). Three studies referred to the psychometric characteristics of the SRQ as analysed in Ullman's (2000) study, due to similar recruitment strategies. Littleton (2010) only assessed negative reactions to disclosure, with good reliability for both initial and follow-up stages (α = .91 and α = .90 respectively). In contrast, Ullman, Townsend, Filipas and Starzynski (2007b), reported acceptable reliability for three of the five subscales which made up the negative scores (alpha coefficient ranging from .79 to 85), but did not use two of the negative social reactions subscales in the final analysis due to low reliabilities. Across the studies that provided the descriptive statistics for the SRQ, participants generally reported receiving more positive social reactions following disclosure (mean responses ranging from 1.63 to 3.75), than negative social reactions to disclosure (mean responses ranging from 0.58 to 2.07). Littleton (2010), reported that within the initial analysis participants reported rarely to very rarely receiving negative reactions following disclosure of assault, with participants who disclosed between the initial measures and follow-up reporting to have very rarely received negative reactions.

Jacques-Tiura, Abbey, and Wegner (2010) used a measure of social support and disregard to assess supportive and unsupportive responses to disclosure, measuring both emotional support and disregard. Both scales had good reliability (Cronbach's alphas ranged from .92 to 8.4 respectively), with respondents scoring significantly higher levels of social support (M= .11), than disregard (M= .02) following disclosure of assault.

Post-Traumatic Stress Disorder

A requirement of the present review was that studies used a systematic measure of post-traumatic stress to be eligible for inclusion (see Table 5). For nine of these studies, this was done through the Post-traumatic Stress Diagnosis Scale (PDS: Foa, 1995). The PDS is a self-report measure which assesses 17 items representing symptoms of PTSD in line with the American Psychiatric Association's fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (4th ed, DSM-IV: American Psychiatric Association, 2000). The PDS (Foa, 1995) was designed to assess PTSD symptoms experienced by participants over the past 30 days; most of the studies utilised this timeframe, however Littleton (2010) measured symptoms of PTSD over the past week, and Ullman and Peter-Hagene (2014) measured symptoms over the past 12 months. The PDS has been validated with sexual assault survivors (Foa, Cashman, Jaycox, & Perry, 1997), with many of the studies reporting excellent internal reliability (Cronbach alpha's ranging from .91 to .93). Ullman et al., (2007b) reported internal reliability for the individual subscales which make up the PDS (Foa, 1995) (avoidance, physical arousal and re-experiencing/intrusion), ranging from $\alpha = .84$ to $\alpha = .86$. In accordance with the PDS, the clinical cut-offs for symptoms severity are 1–10 mild, 11–20 moderate, 21–35 moderate to severe and >36 severe (Foa, 1995). Responses where the

scores on the criteria of avoidance, physical arousal and re-experiencing/intrusion have been weighted and summed ranged from an average symptom score of 11 to 21. Bryant-Davis, Ullman, Tsong, and Gobin (2011) reported that 74% of their sample met the criteria for a diagnosis of PTSD, with only 4% of the sample reporting no symptoms of PTSD, 21% reporting mild symptoms of PTSD, 27% reporting moderate symptoms of PTSD, 37% reporting moderate to severe symptoms of PTSD, and 12% reporting severe symptoms of PTSD. Ullman, Filipas, Townsend and Starzynski (2007a) reported that 70% of participants qualified for a diagnosis of PTSD. At follow-up, Littleton (2010) reported participants averaged 10 symptoms of PTSD, which was below their cut-off score of 14, in accordance with research carried out by Coffey and colleagues (Coffey, Gudmundsdottir, Beck, Palyo, & Miller, 2006).

Jacques-Tiura et al., (2010) measured PTSD with Davidson's 17-item Trauma Scale (Davidson et al., 1997) with good reliability and validity (Cronbach alpha of .95). Orchowski et al. (2013) used the Hopkins Symptom Checklist-90 of PTSD, (SCL-90: Derogatis, Lipman, & Covi, 1973) reporting excellent internal consistency for the posttraumatic index (α = .93). Schumm et al., (2006) used the PTSD symptom scale self-report (PSS-SR:Foa, Riggs, Dancu, & Rothbaum, 1993), which assessed symptoms of PTSD over the past two weeks. The internal reliability was excellent (α = .96), with most participants generally reporting less than moderate symptoms of PTSD (M = 7.02, SD = 11.06). Schumm et al., (2006) reported that 22% of the participants met the criteria for probable PTSD. Campbell et al., (2001) measured PTSD using the Symptom Checklist-90 Revised Crime Related PTSD Scale (Saunders, Arata, & Kilpatrick, 1990), measuring PTSD symptoms over the past seven days. Campbell et al., (2001) reported

excellent internal reliability (α = .96), with the mean severity of symptoms being 1.24 (SD = 1.00) out a range of one to four.

Disclosure

All studies included in this review had disclosed abuse to informal support sources. Three studies looked at length of time since disclosure which ranged from 30% to 33% for participants who disclosed immediately after the assault, 29% to 32% for participants who waited days or weeks before disclosing the assault, and 37% who waited over a year to disclose their assault. Ahrens et al., (2010) identified four disclosure patterns which included non-disclosures, slow starters (disclosed on average four years after the assault and disclosed to four people), crisis disclosures (disclosed on average 84 days following the assault and told three people), and on-going disclosures (disclosed on average the following day and disclosed to six people). Two studies identified the survivors' friends as being the most frequent recipient of a disclosure (83% to 85%), followed by a romantic partner (55% to 65%) and relatives (32% to 47%). Ullman et al., (2007a) reported that 39% of participants disclosed to their parents.

Jacques-Tiura et al., (2010) identified a significant difference between the number of Caucasian survivors who disclosed (67%) and the number of African American survivors who disclosed (52%). Furthermore, Caucasian survivors (93%) were marginally more likely to disclose to informal support sources than African American survivors (92%). For both Caucasian and African American survivors of sexual assault, friends and family were the most common recipients of a disclosure (Jacques-Tiura et al., 2010). Littleton (2010) reported that during the initial assessment, most survivors averagely disclosed to three people from their informal social support

network. At six month follow up, 58% of participants had disclosed to an additional three people from their social support network.

What are the effects of positive social support on PTSD symptoms?

Positive social support was reported to be unrelated to PTSD symptom severity across six studies, including across survivor-offender relationships and ethnicity.

Although Campbell et al., (2001) reported that the total number of positive reactions were unrelated to PTSD symptom severity, two of the positive reactions which make up the total positive score were reported to predict lower PTSD symptom scores, namely 'being believed by someone' and 'having someone to talk too'. Campbell's et al., (2001) study looked at whether the participants identified the social reaction as either hurtful or healing, rather than pre-allocating labels to the responses (i.e., positive or negative). When responses were classified in this way, survivors who had experienced 'being believed' or 'having someone to talk too', and found this helpful, reported lower PTSD symptoms than if survivors perceived this response as harmful, or had not experienced this reaction at all. Campbell et al's (2001) results should be considered in light of its poor scoring on the quality assessment tool (60%), limiting the strength of the findings.

Shumm et al., (2006) and Bryant-Davis et al., (2011) both identified that women who reported having high support had lower PTSD scores. Specifically, Bryant-Davis et al., (2011) reported that if survivors had more access to, and utilised a social support network, they showed less PTSD symptoms than women with less social support. However, Schumm et al., (2006) reported that for women who had experienced adult rape but not child sexual abuse, social support did not predict PTSD.

In contrast to the above, two papers identified that positive social reactions to disclosure, and greater current frequency of social contacts, were related to more PTSD symptom severity. Ullman and Peter-Hagene (2014) conducted further path analysis looking at the direct and indirect effects of positive social reactions following disclosure and found that positive social reactions were directly, but weakly, related to greater PTSD symptomatology. Furthermore, positive social reactions were reported to be indirectly related to PTSD symptoms through greater perceived control over recovery, which was significantly associated with less symptoms of PTSD.

Littleton's et al., (2010) initial analysis revealed higher social support to be predictive of fewer PTSD symptoms, however in longitudinal analysis social support was not predictive of PTSD symptom severity.

Influences on Positive Social Support

Three papers explored influences on positive social support following a disclosure of assault. Ullman and Filipas (2001) reported that lower sexual victimisation severity, greater external disclosure, which included discussing the assault in greater length and in more detail, as well as telling more people about the assault, were related to more positive social reactions. Ahrens et al., (2010) reported no significant differences across different disclosure patterns.

What are the effects of negative social support on PTSD symptoms?

All but one of the identified papers found negative social reactions to be predictive of greater PTSD symptom severity. Campbell et al., (2001) did not report a significant association between negative social reactions and PTSD symptom severity, but did report a non-significant trend. When participants identified specific social reactions to

disclosure as hurtful, namely 'called you irresponsible', and/or 'patronised you', a significant relationship was found with greater PTSD symptoms compared to when survivors did not experience this reaction, or found this helpful. Similarly, when participants found the social reaction of 'revenge seeking', 'being told to get on with your life', and attempts to 'control decisions' as hurtful, they showed greater PTSD symptoms than women who did not have this reaction. Campbell's et al., (2001) results should be considered in light of its poor scoring on the quality assessment tool (60%), limiting the strength of the findings.

Orchowski et al., (2013) did not find overall negative social reactions to be predictive of greater PTSD symptoms, but did find that negative responses of 'controlling social reactions' was significantly related to greater PTSD symptoms. Ullman and Filipas (2001) identified 'being treated differently', 'stigmatising responses' and 'distraction responses' as being most strongly related to greater PTSD symptoms. Ullman et al., (2006) reported that negative social reactions were predictive of greater PTSD across all of the survivor-offender relationships. Ullman and Peter-Hagene (2014) identified both a direct relationship from negative social reactions to PTSD symptom severity, and an indirect relationship through maladaptive coping. Ullman et al., (2007b) reported that having a high frequency of negative social reactions following disclosure had the strongest total effect on PTSD symptom severity.

Jacques-Tiura et al., (2010) investigated the differences between African American and Caucasian female survivors of sexual assault. They reported that whilst negative social reactions increased symptoms of PTSD for both ethnicity groups, this was significantly stronger for African American participants when their levels of disregard following disclosure of assault were high.

Influences on Negative Social Support

Influences on the receipt of negative social support were explored by six studies. Ullman and Filipas (2001) identified that ethnic minority survivors, greater sexual victimisation severity, less extent of disclosure and telling more persons about the assault, were all related to receiving greater negative social reactions from others. Further exploration of racial differences identified that Hispanics received more negative social reactions, specifically more egocentric responses than White survivors. Ullman et al., (2006) reported survivors of relatives received significantly more negative reactions than survivors of romantic partners or acquaintances. In a further study, Ullman et al., (2007b) performed structural equation modelling, reporting that negative social reactions were associated with more self-blame and more avoidance coping. Furthermore, having a higher degree of assault severity correlated with more negative social reactions. Ahren's et al., (2010) looked at different disclosure patterns, reporting that women who were in the crisis disclosure group received greater negative social reactions than the group of women who were 'slow to disclose'.

Jacques-Tiura's et al., (2010) reported that African American women received more negative social reactions than Caucasian women. Furthermore, participants who wished they had not told someone about the sexual assault reported receiving less social support and more disregard. Within Littleton's (2010) longitudinal study, the strength of relationships within the survivors support network was reported to be a poor predictor of negative social reactions.

DISCUSSION

Aim of the study

The purpose of this review was to identify what impact social support from informal sources has on symptoms of PTSD in female survivors of sexual assault. Given the evidence found within previous reviews that social support, in general, is a significant predictor of PTSD following a trauma (Brewin et al., 2000; Ozer et al., 2003; Ullman, 1999), it is surprising that few studies have addressed this issue when looking at *informal* sources of support for female survivors of sexual assault (*N*=13). This study identified research published since 2000, to provide an update on the available literature since the previous two meta-analyses and one narrative review (Brewin et al., 2000; Ozer et al., 2003; Ullman, 1999).

Summary of findings

This review found that positive and negative social support appears to differ regarding its effect on symptoms of PTSD, and may be considered separately. Campbell et al., (2001) employed a novel and useful approach which identified inconsistencies in survivor's perception of social responses, specifically whether survivors perceive a particular response as 'negative' and 'hurtful', or 'positive' and 'healing'. No further studies identified within this review requested the participants to report whether they found specific responses as helpful or healing, but applied a predefined label, which may impact on the results here discussed. It is important to further explore Campbell's et al., (2001) findings, in studies with more valid and reliable measures of sexual assault, social support and PTSD.

Positive Social Support

This review found variability in the role of positive social support in relation to PTSD symptom severity. Whilst over half of the studies reported that positive social support was unrelated to PTSD symptom severity, regardless of race or survivoroffender relationships, further studies reported that having high social support did have a 'buffering' effect on PTSD, with survivors reporting fewer PTSD symptoms than women who had lower social support networks. There was some evidence to suggest that whilst the cumulative impact of the positive scores were unrelated to PTSD, univariate analysis suggested that specific responses, including 'being believed' and 'having someone to talk too' does play a buffering role, and reduces PTSD symptom severity (Campbell et al., 2001). Furthermore, there is some evidence to suggest that greater disclosure of the abuse, and telling more people about the assault resulted in the individual receiving more positive responses (Ullman & Filipas, 2001), which may be more likely to happen if women have higher social support. This finding was supported by other studies when looking at disclosure patterns, specifically that people who did not disclose to others reported more symptoms of psychological distress and symptoms of PTSD (Ahrens et al., 2010).

In contrast to the above, Ullman and Peter-Hagene (2014) and Ullman et al., (2007a) reported on the unexpected impact of positive social support increasing PTSD symptoms. One reason for this finding, recognised by both studies, may be that more symptomatic women seek help and disclose abuse more frequently, and therefore accumulate more positive responses due to greater disclosure. A review conducted by Ehlers and Clark (2003) into early psychological interventions for adult survivors of trauma, although not specifically adult sexual assault, found that interventions focusing

on the trauma immediately after the event are not helpful in reducing symptoms of PTSD, and may actually impede long-term recovery. In fact, Ehlers and Clark (2003) state that psychological interventions should only be considered when PTSD continues to be present in the second month of the trauma. This is consistent with the NICE (2005) guidelines on PTSD, whereby psychological interventions are recommended with more severe PTSD, i.e., present for more than three months (NICE, 2005). Therefore, it would be useful to know how soon after the assault the women disclosed abuse, and the impacted upon these findings.

Only one study (Littleton, 2010) included a longitudinal design; reporting that positive social support played a buffering role during the initial stages of recovery, it was unrelated to PTSD symptoms at six month follow-up.

Negative social support

This review identified a consistent and strong relationship between specific negative social reactions and an increase in severity of PTSD symptoms. The findings continued to be significant when ethnicity, perceived life-threat, education and extent of disclosure were controlled for. This finding is consistent with the wider literature base, and serves to support and add weight to the findings of the review conducted by Ullman (1999).

Orchowski et al., (2013) reported that only *controlling* social reactions were related to PTSD. Feeling in control of your own recovery is considered an adaptive variable for survivors in recovery, with women who feel in control reporting lower levels of psychological distress (Frazier, 2003; Walsh & Bruce, 2011). Therefore, responses which survivors perceive as controlling may have significant, harmful effects.

Other specific responses which were found to be associated with more severe symptoms of PTSD related to 'blame' and 'treating individuals differently'. Orchowski et al., (2013) reported on the link between 'blaming' reactions and a reduction in problem-focused coping. Research has reported on the positive impact problem-focused coping has on recovery, particularly in relation to trauma resolution (Frazier & Burnett, 1994).

Other studies in the review identified an indirect link between negative social reactions and PTSD via avoidance coping, so that negative social reactions may lead to more avoidance coping, and more avoidance coping may lead to more negative social reactions (Ullman, Filipas, Townsend, & Starzynski, 2006).

Whilst Ullman et al., (2006) found that self-blame was a significant predictor of PTSD, in a further study, Ullman et al., (2007b) found that self-blame did not play a mediating role between negative social reactions and PTSD. This finding suggests that, although negative social reactions may increase self-blame in the survivor of sexual assault, negative social reactions should be considered as a method of intervention independently, and not just in relation to self-blame.

The response of being *treated differently* was found to be most predictive of greater PTSD symptom severity in one study (Ullman & Filipas, 2001), and the opposite in another (Orchowski et al., 2013), which reported that being treated differently resulted in *increased* levels of self-esteem. One possibility for this finding, recognised by Orchowski et al., (2013), is that being treated differently may increase self-esteem and may foster posttraumatic growth, a finding that has some evidence within the literature (Linley & Joseph, 2004).

Of the studies which looked at the characteristics of the individual as a factor influencing the receipt of negative social reactions, race was found in some studies, but not all. Results suggest that survivors from ethnic minority groups receive more negative social reactions than other groups. Ullman and Filipas (2001) stipulated that this finding is to be expected, based on available research on the traditional racist attitudes towards women from ethnic minority backgrounds in the United States. For example, in a study conducted by Wyatt (1992), women's reactions and adjustment to sexual assault, when taking into account ethnic and cultural factors, showed differences in public's reaction to rape, as well as survivors own perception of their assault and disclosure of their abuse (Wyatt, 1992).

The timing of disclosure by survivors showed some variability in relation to negative social reactions and symptoms off PTSD. Ahrens et al., (2010) found survivors who were slow to disclose received less negative social reactions than other disclosure groups. These findings may indicate that whom survivors' choose to disclose to is important. If a survivor is more selective about to whom they disclose, and thereby takes greater time over this choice, they may disclose to sources of support who are less likely to react negatively, However, Ullman's et al., (2007a) findings reported delayed disclosure was related to more PTSD symptoms, which suggests that women may benefit from disclosing assault sooner. The variability in these findings indicates the need for further research into the timing of disclosing.

Particularly worrisome is the finding that women with more severe sexual victimisation received more negative responses, consistent across the different offender relationships (Ullman et al., 2006). It is likely that women with more severe sexual victimisation experienced greater perceived life threat and greater physical injury,

which have been found to be predictors of PTSD (Brewin et al., 2000; Ozer et al., 2003). This finding is of considerable concern as it is women who are survivors of more severe and/or multiple traumas who are already at higher risk of psychological distress, including PTSD (Green et al., 2000).

Strength and Limitations

The inclusion of the criteria to formally measure PTSD may have introduced some publication bias, as papers with less formal measures of PTSD are less likely to have been published. However, it also likely to have strengthened the review in ensuring that symptoms of PTSD were rated in relation to the appropriate diagnostic criteria.

It was only possible to conduct a qualitative data synthesis which leaves room for potential author bias. A meta-analysis approach would have produced more robust and less biased findings, however this was not possible due to the different measures used within the studies here identified, and the overlap in sample participants within three of studies.

The quality of the reviews were rated against a quality assessment tool designed specifically for this study. This tool was validated against a second rater, and was considered a moderately good agreement, and is therefore a strength of this review. Despite this, it is accepted that some of the studies included are of poorer quality, and withdrawing them from the review may have resulted in stronger conclusions, however it was felt important to include these lesser quality studies as it was one of the aims of this review to identify all studies published since 2000 which met the inclusion criteria.

All the studies identified within this review were conducted in the USA. In-fact, a large portion of the studies recruited participants from the city of Chicago, which therefore limits the generalizability of the findings across other countries and locations globally. It is likely that the number of studies with the same author has influenced this.

A significant limitation of all of the identified studies was the retrospective nature of the design. The cross-sectional nature of these studies prevents reporting on whether social support impacts on symptoms of PTSD, or whether symptoms of PTSD impact on the received and/or perceived social support. For example, it may be that women with more symptoms of PTSD interpret social responses from informal sources more negatively than women with fewer symptoms of PTSD. The only study that included a longitudinal design did not show any significant results between social support and PTSD at follow-up. However, this study is limited by the low number of participants who participated in the second stage of the study, and also the use of a six month follow-up, where trauma could have lessened across this time period, highlighting the need for further longitudinal research.

Nearly all of the measures used within the identified studies were self-report measures. The vast majority of the studies utilised the SES (Koss & Oros, 1982) as a measure of sexual assault. Whilst this measure has good validity and reliability, it requests participants to report on an assault they may have experienced since the age of 14. For many, this timeframe includes adolescence, and is not therefore limited to assaults that have occurred in adulthood. Shumm et al., (2006) reported that females who were sexually abused in childhood were more likely to report further sexual assault in adulthood. Women who experience multiple sexual assaults tend to report more

severe sexual assault with, understandably, a greater traumatic experience, variables which were found to significantly relate to the receiving more negative social reactions.

CONCLUSIONS AND RECOMMENDATIONS

Despite the limitations of this review, and the studies identified within it, the findings are consistent in reporting that negative social reactions have more of a detrimental effect on survivor's recovery than positive social reactions. Whilst positive social reactions may play a buffering role for some survivors, positive responses do not appear to buffer against the impact negative social reactions has on a survivors' recovery. One question that this review has raised is whether receiving no support is better than receiving negative support. The review suggests that the more the individual discloses, and the greater the extent of their disclosure, the more positive social responses they receive, which in some cases is predictive of less severe PTSD symptomatology. However, this is not the case for more severely traumatised survivors of sexual assault, a finding which warrants further exploration.

Implications for service-users

The findings of this review highlight how important it is for survivors of sexual assault to consider to whom they disclose, and to assess the probability that friends and or family would react negatively. Survivors being more selective in who they disclose too may mean that they disclose to informal sources who are more supportive of their experience, and provide more positive and helpful responses.

Clinical Implications

The findings of this review highlights how important it is to teach people whom survivors of sexual assault disclose to how to respond positively, and discourage negative responses. Specific responses such as believing the survivor and listening to their story are likely to influence the control the survivors feel they have in their recovery, and indirectly reduce symptoms of PTSD. One suggestion for providing wider awareness to the general public is through media campaigns, such as television and/or radio adverts or through social media campaigns.

It is recommended that when clinicians work with survivors of adult sexual assault, they assess their social support network and who they have disclosed to in the past. In addition, it is important for clinicians to ascertain what the survivors' experience of disclosure has been. When negative reactions have been perceived, it may be helpful to educate the survivors, and help them to understand and cope with reactions that they perceive to be negative. Where low social support has been identified, the results suggest that supporting the survivor in developing a *supportive* network may be of benefit, such as support groups, who are educated in responding positively. Furthermore, training, education and support should be extended to the informal support sources of survivors of sexual assault, in supporting them to support their loved one, and to cope with their own reactions which could otherwise interfere with their best intentions of offering positive forms of support.

Although the findings of the review show some variability, they highlight the need for more community-based services, which are appropriately trained and accessible to survivors of sexual assault. It is likely that survivors of sexual assault will

benefit from discussions with others about who they would like to disclose too, whilst also providing support should they disclose to community-based services. One service that may be best placed to offer this advice is Specialist Assault Referral Centres (SARC) which are nationwide, and funded and run in partnership with the NHS, Police and some Voluntary centres.

Implications for Further Research

The findings in this review identify further areas for research to both extend and replicate the findings here identified. Research which incorporates a longitudinal design is required as described above. Research with a mixed-method design, including both qualitative and quantitative elements is also likely to provide more rich data. A key finding within this review is that responses cannot be universally defined as either negative or positive. Further investigation is warranted into what influences whether an individual interprets a response as either negative or positive and a mixed method design would be well placed to achieve this.

The findings within this review were limited to university students, community populations and those seeking mental health services. Therefore, they cannot be generalised to other samples. Furthermore, the results specifically looked at abuse occurred during adulthood, whilst recognising that some studies included adolescents in their findings. Further research that grouped participants according to whether they had experienced sexual assault only in adulthood, only in childhood, and in both child and adulthood is needed to extend and replicate the studies here identified. Research regarding sexual assault within other contexts not covered here, such as domestic

violence or within military settings, is required to further explore the impact of informal social support on recovery.

Whilst it is recognised that many survivors of sexual assault seek support from informal support sources, these sources of support can respond negatively, which can potentially have a detrimental effect in the survivor's recovery. None of the studies in the review sought information from the support sources themselves and how they perceived they had responded to the disclosure and their reasons for their chosen response. This is another area which warrants further investigation since research such as this can inform the development of appropriate education and training programs to support the families and friends of sexual assault survivors.

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CHAPTER TWO: EMPIRICAL PAPER

How do the police and people with learning disabilities co-construct sexual assault during police investigative interviews?

ABSTRACT

Introduction: People with learning disabilities have a higher risk of sexual assault, and despite having the same rights and freedoms as everyone else, often do not speak out about their abuse. Therefore, the number of victims pursuing alleged offenders through the criminal justice system may be a tiny fraction of those abused. It is the aim of this study to explore the co-construction of sexual assault during police investigative interviews.

Method: Data was collected from closed and archived investigative interviews where a survivor with a learning disability disclosed sexual assault. The six transcribed interviews were analysed using Foucauldian Discourse Analysis, paying particular attention to the action orientation, practice, position and subjectivity of the discursive patterns identified.

Analysis: The most prominent discursive pattern was around fault and blame, drawn on by both the officers and survivors in co-constructing sexual assault. Five discursive patterns, two from Officers ("You didn't do anything wrong", "Why did you...") and three from the survivors ("He had a good force on me", "I couldn't speak" and "like we normally would"), are explored in-depth.

Discussions: The prevalence of discursive patterns around fault and blame within investigative interviews highlights further police training requirements in identifying people with a learning disability and questioning survivors of a sexual assault.

INTRODUCTION

People with learning disabilities are frequently considered to be one of the most vulnerable groups in society (Department of Health, 2001). This is particularly evident in relation to sexual abuse, where people with learning disabilities have a higher risk of being sexually abused (McEachern, 2012; Niehaus, Krüger, & Schmitz, 2013). Despite having the same rights and freedom as everyone else, this group often do not speak out about their abuse (Niehaus et al., 2013), and therefore, the number of victims pursuing alleged offenders through the criminal justice system (CJS) is a tiny fraction of those abused (Brown, Stein, & Turk, 1995), and is often fraught with myths, stereotypes and negative attitudes towards both sexual abuse and people with learning disabilities (Niehaus et al., 2013). There is very little research on police interviewing people with learning disabilities, with no research on interviewing this group of people about sexual assault. The introduction will provide contextual information on the prevalence of assault within learning disability populations, and the research on learning disabilities within the CJS, before outlining the aims of this study.

People with learning disabilities are at higher risk of sexual abuse

Over the years society has largely turned a 'blind eye' to people with learning disabilities, and to the intentional abuse of people with learning disabilities, with Baladerian (1991) suggesting that the abuse was *perhaps too horrible to contemplate*', and Brown (1996) stating that 'no-one sees, and no-one wants to know" (Brown, 1996). Perhaps as a result, research into the prevalence of sexual assault against adults with

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⁷ For the purpose of simplicity, the term sexual assault will be used throughout this paper, to include any sort of sexual contact or behaviour that is unwanted, including rape and sexual abuse.

learning disabilities is fraught with difficulties including poor availability and quality of studies, varied methodologies leading to difficulties in the comparability of collected data, mixed definitions of abuse, as well as the high number of cases which remain unreported (Beail & Warden, 1995; Cooke & Sinason, 1998; Peckham, 2007; Turk & Brown, 1993). Despite the acknowledged difficulties, sexual assault against adults with learning disabilities is thought to be, at the very least, higher than the general population, (Plummer & Findley, 2012), with prevalence rates varying from 8% to 58% noted in one systematic review (Turk & Brown, 1993), and a further study stating that 90% of people with a learning disability will experience sexual assault at some point in their life (Valenti-Hein & Schwartz, 1995). A recent report, televised by BBC Derbyshire Programme on the "Sexual abuse of disabled adults" (2015), reported on data received from 106 councils in England with adult social services responsibilities. During the financial years 2013-2014, and 2014-2015 (up to February 2015), results show that 63% of reported cases of sexual assault were cases against those with learning disabilities. This was acknowledged as being only the "visible peak" of a much greater problem.

People with learning disabilities often do not speak out about the abuse

Despite people with learning disabilities having the same rights and freedom as everyone else, and despite changes in legislation (e.g., Valuing People, Department of Health, 2001), they often do not speak out about abuse (Buchanan & Wilkins, 1991). The number of victims pursuing alleged offenders through the CJS, therefore, is a tiny fraction of those abused (e.g., Brown et al., 1995, estimate 6%), with very few cases of abuse against people with learning disabilities being brought to court (Cooke & Sinason, 1998; Green, 2001; O'Callaghan & Murphy, 2007). The complexity of the

CJS has been acknowledged, particularly for people with learning disabilities who have additional needs (Niehaus et al., 2013). The acknowledged difficulties led to the improvement of legislation (Sexual Offences Act, 2003) offering more straightforward regulations and better protection of people with learning disabilities, both from abuse and in relation to exercising their rights (O'Callaghan & Murphy, 2007). Even with improvements to legislation, there are a number of barriers to people with learning disabilities speaking out about assault; for example communication difficulties may impact on their ability to report the assault or they may depend on others to speak out about assault for them (Petersilia, 2001). People with learning disabilities are more likely to be assaulted by people they know and who are in a position of trust (Peckham, 2007), which can be a significant barrier for speaking out about assault. Additionally, for people with learning disabilities to disclose assault to the CJS, they must first understand the law surrounding sexual assault. A study conducted by O'Callaghan and Murphy (2007) reported that people with learning disabilities showed little knowledge of the laws on sexuality, that many did not know that the laws of sexual assault applied to them, and less than half knew that there were laws to protect them from assault from staff (O'Callaghan & Murphy, 2007). Even if an individual overcomes these barriers and reports the assault to the police, the legal process could cause them additional emotional and psychological distress as they re-live the incident leading to possible retraumatisation, as well as trying to cope with the process of giving evidence and dealing with the criminal justice procedures (e.g., questioning and appearing in court) (Petersilia, 2001).

Perceptions of sexual assault and people with learning disabilities within CJS

Stereotypes, myths and perceptions of sexual assault are widespread throughout society, and thought to impact on professionals working with survivors of sexual assault, including the police (Feild, 1978; Krahé, 1991; Page, 2010; Sleath & Bull, 2012). Rape myth stereotypes are inaccurate assumptions about rape (Burrowes, 2013), which often shift the blame from the perpetrator to the survivor (Suarez & Gadalla, 2010), and tend to focus on the survivor and the act (Buddie & Miller, 2001). People with learning disabilities not only have to contend with rape myths and stereotypes when they report the assault to the police, but also to manage perceptions and negative attitudes towards people with learning disabilities (Niehaus et al., 2013). Stereotypes and negative attitudes towards people with learning disabilities tend to focus on the things they are unable to do, rather than what they are able to do. The use of stereotypes means that individuals with a learning disability are viewed as a homogenous group, and individual differences, personal characteristics and traits which make them individuals are ignored (Plummer & Findley, 2012; Scior, 2011). Police within the CJS, therefore, are likely to hold myths and stereotypes relating to both sexual assault, and people with learning disabilities, which will reduce the motivation of people with learning disabilities to report the assault to the police.

Research which has looked at police officers' perceptions and attitudes towards people with learning disabilities has shown variability in their understanding as to what counts as a learning disability and what the needs of a person with learning disability may be (Gendle & Woodhams, 2005; Hellenbach, 2012). A more recent study conducted in Switzerland, looked at how members of their CJS understood learning disabilities, and to what extent their understanding of learning disabilities impacted on

criminal proceedings. Additionally, this study aimed to identify the impact of rape myths on criminal proceedings where people with learning disabilities are survivors of sexual assault. Preliminary results suggest that myths of people with learning disabilities, and myths of sexual assault is prevalent within criminal law, having significant implications for justice (Niehaus et al., 2013). Research such as this, is supported by studies showing the limited training the police receive regarding people with learning disabilities, and even less when people with learning disabilities are victims of sexual assault (Gendle & Woodhams, 2005; Hellenbach, 2012; Niehaus et al., 2013).

Police interviewing people with learning disabilities

Historically, adults with a learning disability were considered unreliable witnesses, largely due to the focus on their perceived inabilities, leading to the assumption that they are unable to do anything (Milne & Bull, 2001). For example, people with learning disabilities may have memory deficits, including difficulties encoding information, which may have a direct impact on their ability to retrieve information at a later time (Sanders, Creaton, Bird, & Weber, 1996). Although research does not suggest that people with learning disabilities fabricate information, free recall is likely to be incomplete (Milne & Bull, 2001), and requires careful and appropriate questioning. Communication skills are often a difficulty for people with a learning disability, particularly in relation to understanding a question or responding to it. Many people with learning disabilities may recall pictures as opposed to words, and therefore, although they may be able to remember events, they struggle to verbalise their account (Sanders et al., 1996). Whilst there are a number of potential difficulties for people with learning disabilities when acting as a witness in court (Sanders et al., 1996), research

suggests that with appropriate interviewing techniques which aid communication and assist memory, people with learning disabilities are able to recall accurate, and reliable information (Cederborg & Lamb, 2008; Kebbell, Hatton, Johnson, & O'Kelly, 2001; Milne & Bull, 2001). What is missing, however, is the research and clear guidance on the most appropriate types of questions to use, and how to identify individuals who require additional support, including people with learning disabilities (Cooke & Davies, 2001).

Kebbell, Hatton and Johnson (2004) looked at questioning styles in court transcripts for sexual crimes where the witness has a learning disability, compared to similar court cases within the general population. Results states that the questioning of witnesses with learning disabilities was almost identical to questioning witnesses within the general population (Kebbell et al., 2004). If witnesses with learning disabilities are not interviewed appropriately, their ability to provide accurate information is reduced, and therefore the number of cases pursued through the CJS is reduced.

In order for appropriate questioning to be implemented, first the witness must be identified as having a learning disability. This is increasingly important following the Youth Justice and Criminal Evidence Act, which came into force in 2001 and provides details on special measures for use with vulnerable witnesses, and relates to adults with learning disabilities. Special measures include the use of screens, live TV links or giving evidence in private and the removal of wigs and gowns during court proceedings, with the overall aim of improving vulnerable witnesses' evidence in court. In addition, individuals who have been assessed as benefiting from special measures, may also communicate through intermediaries, and/or with the use of special communication aids (Ministry of Justice, 2011). Alongside the use of special measures, documentation such

as 'Achieving Best Practice' provides generic guidance on questioning all victims and witnesses who require special measures (ABE: Ministry of Justice, 2011). However, little research is available on the CJS use of this documentation, and none when police are interviewing people with learning disabilities who are survivors of sexual assault.

Offenders with a learning disability

Whilst offenders with a learning disability face similar difficulties in relation to the interview process as survivors with a learning disability, only a handful of studies have looked at their first-hand experience of the CJS. In a review of the limited research available, Hryn, Hahn and McConnell (2014) identified only four studies. Common themes across the studies were analysed, of particular relevance is that offenders with a learning disability did not appear to understand what was happening to them, with many describing difficulties during the police investigation in relation to understanding the questions used and what was being asked of them. One of the studies, identified within Hryn, Hahn and McConnell's review, was specifically interested in the experience of people with learning disabilities who were interviewed by the police regarding an alleged offence at pre-sentencing (prior to court appearance) (Leggett, Goodman, & Dinani, 2007). Qualitative analysis from this study indicated positive experiences, such as having their story heard, but also negative experiences, particularly in relation to concerns of fairness, and the behaviour and questioning tactics of the investigative police officer (Leggett et al., 2007).

People with learning disabilities are one of the groups most vulnerable to sexual assault, but proportionately fewer cases actually reach the CJS. Only a handful of research is available on the experience of people with learning disabilities being

interviewed by the police, and no research is available on people with learning disabilities who have reported a sexual crime, or how the police and people with a learning disability co-construct sexual assault.

AIM

It is the aim of this study to explore, using discursive techniques, the coconstruction of sexual assault during police investigative interviews. It is hoped that further understanding of how sexual assault is constructed during these interviews may inform both the training of professionals in the police service, and treatment of people with learning disabilities when they disclose an abuse.

METHOD

Design

The current study is interested in how the police, and people with learning disabilities co-construct sexual assault through the use of naturally occurring data. As there has been limited research conducted in this area to date, combined with the naturally occurring data used within this study, it was felt that Foucauldian Discourse Analysis, as an exploratory methodology, would provide an interesting insight into the discourses used by both the police, and people with learning disabilities. Furthermore, data used within this study came from people who may experience a power imbalance within their environment, as a result of their learning disability and sexual assault.

Foucauldian Discourse Analysis' (FDA), with its inherent interest in power relationships, as expressed through language, make this an ideal method of analysis.

Foucauldian Discourse Analysis

Foucauldian Discourse Analysis (FDA) is a type of qualitative analysis developed from the work of Michel Foucault and originates within a poststructuralist theory. In accordance with discursive techniques, language-in-use creates meaning and mediates our understanding of reality (Starks & Trinidad, 2007). FDA moves away from more traditional discursive methodologies in that not only is it interested in language-in-use, but it is also interested in the relationship between different discourses, the subject *positions* discourses open up or close down, how discourses impact on how people think and feel (*subjectivity*), and the implications of such discourse for *practice* (Hall, 2001; Ussher & Perz, 2014; Willig, 2008). Just as discourses can 'rule in' certain ways of talking about a topic, they can also 'rule out', limit and restrict ways of talking about a subject (Hall, 2001). Therefore, discourses are seen as "a product of social factors, of powers and processes, rather than an individual's set of ideas" (Holloway, 1983p 231). Since discourses make available ways of being, wider social processes of discourses and power are strongly implicated as they are seen to be produced and reproduced through the discourse (Willig, 2008).

Procedure

Ethical considerations

Full NHS Ethical approval was sought but not required for this study as no participants were recruited. However, Research and Development (see appendix three), and University of Birmingham (see appendix four) approval was granted.

Investigative Interviews

Data collected were from closed and archived investigative interviews where a survivor with a learning disability disclosed sexual assault. Investigative interviews are an essential piece of evidence for a successful investigation, and therefore the police strive to adhere to the police service framework for interviewing (PEACE), and guidance within Achieving Best Evidence (Ministry of Justice, 2011). See table 1 for an outline of PEACE and how it fits with Achieving Best Evidence guidance (College of Policing, 2013; National Policy Improvement Agency, 2009). Investigative interviews completed by the police can be submitted to the Crown Prosecution Service (CPS), who use the evidence to decide whether a case should go to court. The police can decide not to submit the case to the CPS, if for example there is not enough evidence, or if they decide to act upon it within the police and not the CPS.

Table 1; Comparison of PEACE frameworks and Achieving Best Evidence (College of Policing, 2013)

PEACE	Achieving Best Evidence (ABE)
P – Planning and preparation	Planning and preparation
E – Engaging and explaining	Establishing rapport
A – Account, clarification and	Initiating and supporting a free narrative
challenge	account
	Questioning
C – Closure	Closing the interview
E - Evaluation	Evaluation

Investigative interviews were obtained from one police constabulary in England.

A specific officer, identified by the police constabulary, searched and selected the interviews in order to limit research-led selection bias and protect the anonymity of the data. The police officer identified six of the most recent closed and archived investigative interviews which met the inclusion and exclusion criteria. All investigative

interviews were in DVD format, as per usual practice, and were anonymised using software to distort facial recognition (outline of protagonists remained), tone of voice and omitting identifiable information before being handed over to the research team to protect the anonymity of the survivors' and officers. Therefore no participant (officer interviewing or survivor being interviewed) would be identified at any point during this research.

Participants

Only female survivors who had been identified as having a learning disability were included in this study, as research suggests that women experience higher rates of sexual assault than men. The identification of whether the survivor has a learning disability is carried out by the police officer, as part of their normal practice when conducting an investigative interview. However, there is no clear guidance available on how to identify people with a learning disability, unless they (or their carers) have explicitly stated this. Therefore, participants were made up of six females who were identified by the police as having a learning disability, and six police officers who conducted the investigative interview. A total of six investigative interviews comprised the data for this research. Each investigative interview was allocated a number, which was also the number issued to the officers. Survivors⁸ included in the study were allocated pseudonyms (see table 2 for details of investigative interviews, including allocated numbers and pseudonyms).

⁸ The term 'Survivors' will be used throughout this report to refer to females, with a learning disability who have reported a sexual abuse. This term was used to reflect that the individual had 'survived' a traumatic experience, with the hope that it honours and empowers the strength of the individual to heal. No claims are made on the truthfulness, or otherwise, of the allegations made.

Table 2: Table of investigative interviews, including allocated numbers and pseudonyms

Investigative	Police Officer	Survivor	Allegation
Interview	(PO)		
I-I 1	PO1	Joanna	Sexual assault at a bus stop by a
	• Gender: Male	• Age: 18	stranger
I-I 2	PO2	Jane	Rape by a friend whilst staying
	• Gender: Female	• Age: 21	overnight at their house
I-I 3	PO3	Alice	Sexual assault by friend on number
	• Gender: Female	• Age: 19	of occasions
I-I 4	PO4	Mary	Sexual assault by survivor's father
	• Gender: Female	• Age: 21	when lived with parents
I-I 5	PO5	Beth	Rape by someone met on social
	• Gender:	• Age:	media during a first meeting in a
	Unknown	Unknown	park
I-I 6	PO6	Liz	Sexual assault by colleague at
	• Gender: Male	• Age:	college and on bus
		Unknown	

Inclusion and Exclusion Criteria

In order to promote the generalisability of the study, only investigative interviews of adult, female survivors were included. Furthermore, only one investigative interview per survivor and officer was used to encourage further understanding of the discourses in use amongst a number of survivors and officers. Survivors were included in the study if they were identified by the officer as having a learning disability. Some investigative interviews are carried out over a number of meetings, with the first meeting allowing the police to provide information, and establishing rapport. Therefore, where more than one investigative interview had been conducted, the most comprehensive disclosure of the incident given by the survivor was used. See table 3 for further details on the inclusion and exclusion criteria.

Table 3: Table showing the exclusion and inclusion criteria of the study

Inclusion Criteria	Exclusion Criteria
Adult survivors (over 18)	Survivors under the age of 18
 Female survivors 	Male survivors
 Identified as having a learning 	Not identified as having a learning
disability by the police	disability by the police
 Making an allegation of sexual 	Not making an allegation of sexual
assault	assault
One investigative interview per	Investigative interviews conducted
police officer	by the same police officer
 Main investigative interview 	
(in the case of more than one	
interview)	

Steps of analysis

The identified interviews were transcribed verbatim. Analysis was carried out over a number of stages, incorporating FDA stages as suggested by Willott and Griffin (1997) and Willig (2008).

- Interview transcripts were separated into chunks. Chunks were repeated words
 or phrases used in-vivo throughout the transcript.
- All the same in-vivo chunks were group together, and looked at in turn as to what the chunk was describing.
- Descriptions which were of the same theme were grouped together.
- Similarities and differences between how the themes were described were identified, this helped the transition from a descriptive / thematic analysis, to FDA.
- FDA patterns of discourse were identified within each theme, before moving on to the next theme to identify if the same patterns of discourse could be identified

or enriched, and if not what other patterns of discourse were identified. This was repeated with all the themes.

- Each pattern of discourse was taken in turn and was looked at in relation to:
 - Action orientation that is, what is the person getting from using this discourse.
 - Positions subject positions which were taken up as a result of the discourse.
 - Practice given the discourse and subject positions, what ways of acting are opened up (or closed down).
 - Subjectivity what can be felt/thought and experienced from within various subject positions. This stage is necessarily more speculative.

Reflexivity

In adopting a social constructionist epistemology, the researcher is no longer seen as a neutral data collection instrument. As Parker (2013) highlighted, the position of the researcher becomes a crucial step in the way that the questions and text is interpreted and can therefore, from a positivist epistemological standpoint, be seen as a threat to the validity of the study. Data were collected from closed and archived investigative interviews identified by the police constabulary, and therefore I had no influence on the sample or how data for analysis was selected. However, I did carry out data analysis and interpretation and therefore was open to subjective influence, as is arguably, all research. A reflexivity statement helps to put the researcher in context, and to consider the subjective impact on data analysis and interpretation.

As an able bodied woman, exploring sexual assault in females with learning disabilities, reading the transcripts was emotionally draining, and at times I found myself repulsed by what I was reading. I experienced shock, horror, anger, incredible sadness as well as admiration for the women as they described their experiences. It would be naïve to claim that these strong emotional reactions had not influenced my analysis and interpretation of the data in any way. Furthermore, as a clinician, I have worked therapeutically with both adults with learning disabilities and the general population who have experienced sexual assault. I was sensitive to the fact that my previous experience and relationships with my clients is likely to have influenced how I perceived and related to the survivors within this study, and therefore my own subject position towards the discourses identified. Additionally, through working on this project, and a separate study looking at the impact of social support on survivors of sexual assault my knowledge of the literature and research in this area has grown. I did work to minimise these influences where appropriate and reflect on them regularly in various forms of supervision (academic, clinical, research and peer). I was conscious to stay close to the data and not simply seek out pre-suppositions within the data. Throughout this report, quotations and excerpts are included to increase the credibility and transparency of the analysis.

ANALYSIS

Analysis identified several recurrent patterns in the discourse, although by far the most prominent are the discursive patterns around fault and blame. These central patterns

were drawn on to construct sexual assault by both the survivors and the CJS officers⁹, although often in diverse ways. Discourse patterns around fault and blame accounted for a large proportion of the analysable data, excluding more procedural and process information (such as introductions, clarification of location etc.). As the patterns of discourse around fault and blame accounted for a large proportion of the data, this analysis will focus on the different ways that these patterns were used, whilst being mindful that these are not the only discursive patterns in use. See appendix five for an overview of the discursive patterns of fault and blame in use, for each of the interviews (illustrated with examples from the data).

Officers' use discourse patterns around fault and blame

"Why did you...?"

This discursive pattern was used by five of the officers, and was particularly prominent in two of the interview transcripts. The purpose of the investigative interview is to gather accurate and reliable accounts of the crime being investigated. The interview also aims to assess whether the account given can withstand further scrutiny in court (College of Policing, 2013). Therefore, interviewers must act with professionalism and integrity, ensuring that they are fair at all times, do not act with prejudice, and do not use an unfair or oppressive interview style. Interviewers must also approach the interview with an investigative mind set (College of Policing, 2013; Ministry of Justice, 2011). Getting the balance between these aims is, understandably,

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⁹ Officer will be used to refer to the CJS Officer throughout the analysis for the purpose of simplification

difficult and sometimes the questioning style police officers drew upon, arguably served to imply that the survivor was in some way to blame for the assault.

In the following extract, Beth, (a survivor) had been explaining to the officer that she had 'told him to stop', and had tried to 'push' the perpetrator¹⁰ when he 'started moving', and had told him to 'stop' a final time. The officer responded with:

PO5: So that's not quite five times. So I just want to understand what – exactly what's happened there. I don't know if I've missed something or not. But you also mentioned that when you've pushed him off and said, "Stop," then he did stop anyway, so that's only three times. So – and earlier on when I asked you, before you'd said – that you told me that you'd said "Stop." I asked you at the beginning what did you say? And you said, "You didn't say anything through the whole thing."

Beth: Hmm.

PO5: And then you've said, "you said 'stop' twice," and then you said that you said, "Stop," five times and now it's about three or four times. So it's just really important for us that we understand that he knew that it wasn't okay to have sex with you. He needs to have understood that it wasn't okay for it to be rape.

Beth: Yes

(Extract 1: Interview 5; Lines 1874 to 1895)

By asking Beth how the alleged perpetrator knew it was not ok to rape her, the implication is (implicitly) that rape is ok unless someone actively (and clearly) states that it is not. This stands in opposition to the idea that having sex with someone (especially a vulnerable adult) is not ok unless they are able to provide consent. Furthermore, Beth talks about saying no. Her account is being called into question however, because she cannot remember the exact number of times she said no. Arguably, the use of this language implies that sex is acceptable, unless the other person

¹⁰ Perpetrator will be used throughout for simplicity, but without judgement or knowledge on whether the perpetrator was convicted or not.

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does not explicitly consent. An alternative to this, is that sex is not acceptable unless the other person explicitly consents beforehand. The officer perhaps positions herself in the role of an officer deciding whether the case should be passed to the CJS, and therefore, she is interrogating a witness with the aim of finding what actually happened, and whether the case would stand up in court.

There is an interesting use of the word 'us' in this extract ("it's really important for us to understand..."). Arguably, using 'us' juxtaposed with 'you' in this context positions the officer alongside the wider CJS against Beth as the survivor.

By positioning herself in this way, the officer is opening practices which focus on collecting evidence, such as asking more complex questions, re-wording and rephrasing to attribute blame, and highlight any gaps should the case go to court. As patterns of discourse open up a set of possible responses, they also close down certain actions. One such action, which may be closed down as a result of positioning herself as an officer interrogating a witness, is empathy with the survivor (and to consider the distress the survivor may be in) whilst recounting their experience. One of the benefits for the officer, in closing down this practice, is distancing themselves from potential personal reactions as a result of empathising with the survivor. This enables the officer to remain impartial during the interview, although arguably this partiality is compromised by the interrogative style adopted here.

Similar discourse patterns of attributing fault and blame to the survivor are evident during discussions around disclosing the abuse. One example of this can be seen in the extract below when the officer questions who the survivor disclosed to and when:

PO2: What was it about that, when Steph asked you go to that time, and you said no, and you told her what had been going on. Why was it that time, that you

decided to say no, but you'd been back three or four, what four or five times before?

Jane: Like, I didn't know what do to at first. Like I was scared 'cause he used to sort of promise you to come back and get you.

(Extract 2: Interview 2: Line 1581 to 1589)

In this extract, the officer highlights the number of times Jane has returned to the alleged perpetrator's house. The officer arguably implies that Jane carries some blame for the continuation of the assault by failing to disclose immediately and returning to the house. Specifically, stating the growing frequency 'what three or four, what four or five...' in this manner, could be read as the officer's incredulity that somebody would willingly return to a perpetrator's house following a sexual assault, and therefore questions Jane's believability. We can speculate how Jane might feel about being forced into this position, particularly fear about not being believed, or the assumption that she carries some blame. Positioning Jane in this manner arguably closes down disclosing practices, and potentially reduces further disclosure, particularly if Jane does not feel like she is being believed. As extract two shows, Jane described feeling scared and threatened and used this as a justification as to why she had not disclosed the assault; attempting to push the blame away from herself and towards the perpetrator.

You didn't do anything wrong...

A second discursive pattern drawn on by the police officers, in contrast to attributing fault and blame to the survivors, emphasised that the survivor *was not* at fault. This discursive pattern was used drawn on within five of the six interviews. In the following extract, the survivor (Joanna) becomes distressed when describing how she tried to prevent the assault. The Officer responds with:

Joanna: This man, he appeared straight after my mum dropped me off and he began talking and I tried to ignore him, but I couldn't. He just kept going on. (cries)

PO1: It's all right. Take your time. Are you okay?

Joanna: (Cries)

PO1: Is there anything I can do to make it easier for you? What do you want me to do?

Joanna: I don't know.

PO1: Do you want your dad to sit next to you? Take your time

Dad: Tell him slowly

PO1: Just take your time. There's no rush. No problem. You haven't done anything wrong; I just want to find out what's happened. All right?

(Extract 3: Interview 1: Lines 59 to 75)

By drawing on discursive patterns of fault and blame in this way, the officer arguably shifts the blame away from Joanna. This also enables the officer to reassure and calm Joanna in her distress which in turn, may well enable her to more fully disclose the narrative of the assault. In contrast to extract one above, the officer uses the more personable use of 'T' rather than 'us', possibly to encourage the building of the rapport, and to signify that the officer is also a person in the room ready to listen to Joanna, as opposed to an officer whose only identification is belonging to the CJS. By using the discourse pattern in this way, the officer is positioning himself alongside Joanna, and opening up practices of trying to 'find out what's happened' to her, as opposed to an officer of the CJS interrogating a potential witness on behalf of the CPS. Whilst not leading the witness, implying suggestions, or contravening ABE guidance, the officer is potentially opening up more disclosing practices; allowing the survivor to feel more comfortable to give her evidence. At the end of extract three, the officer finishes with asking a question "all right", which enables both the checking of Joanna's

understanding of what he is trying to do, but also as a way of checking on Joanna's distress, and whether she is ready to continue.

Survivor's discourses of fault and blame

"He had a good force on me"

The most pervasive use of the discourse pattern of fault and blame for the survivors, was by far the survivor's making use of discourses that serve to place blame with the perpetrator rather than themselves. This was primarily achieved through the survivor's talk around their attempts to prevent the assault from occurring. This pattern of discourse was used by all of the survivors a significant proportion of the time. Many of the survivors illustrated a number of different methods to try and prevent the assault from occurring. Physical attempts included kicking and slapping; illustrated in the following extract:

Joanna: I'm waiting for the bus and he appeared maybe five minutes after my mum's gone and he just began – he grabs me. Like I said he grabbed me and kissed me on the lips. I tried to pull back, but I couldn't. He had a good force on me.

(Extract 4: Interview 1: Lines 102 to 107)

Verbal rejections were also employed, illustrated in the following extract:

Beth: I said I don't want to do that no more. Then he said, "just a bit longer." I said, "I don't want to", and I started trying to push him off and he wouldn't stop.

(Extract 5: Interview 5 Lines 99 to 103)

The very nature of their refusal results in the action becoming an assault. Joanna in extract four, begins her account by stating that she was "waiting for the bus"; highlighting the normality of what she was doing. The use of everyday 'normality' to provide distance from patterns of fault and blame is unpicked further below. Here

however, Joanna follows this with the perpetrator 'appearing', which arguably highlights the unexpectedness of her situation; that she was given no warning and could, therefore, not be accused of inviting the perpetrator to approach her. It is interesting that Joanna's account states that she had been waiting for the bus for "five minutes" before the perpetrator appeared. This demonstrates not only the everyday normality of 'waiting for a bus', but also shows us that everything was fine until the perpetrator appeared- he was the cause of the problem. Joanna justifies why the perpetrator was able to 'kiss' her; despite trying to 'pull back', he was stronger than her and used physical 'force' to assault her. Joanna's account (consciously or not), fulfils all the societal assumptions that define blameless sexual assault; that the perpetrator was a stranger, that the assault was unexpected and that you should verbally and physically resist. Beth, similarly emphasises that she used both verbal and physical attempts to indicate non-consent. Both of these extracts are drawing on discourse patterns of fault and blame, and position the survivor as a victim of a crime; unable to prevent the assault despite their best efforts. Positioning themselves in this way opens up practices available to a 'victim' of a crime, such as disclosing the abuse, seeking support, and reporting the crime to the police, as these survivors are all attempting to do. Speculating how Joanna and Beth are left feeling by being put in this position is explored further, in the discursive pattern below.

I couldn't speak

The fear the survivors describe, and their reporting of the physiological consequence of fear preventing them from acting, is drawn on by all of the survivors. In the following extract, Beth was asked what happened once she had said no to the alleged perpetrator asking her for sex:

PO5: About him asking you for sex, tell me a bit more about the conversation you had.

Beth: I don't know

PO5: You've said that, he was, "can I ask you a question?" You've said, "Yeah, sure". He says, "Do you want sex?" You've said, "No." What's the next thing you've then said or done between you?

Beth: I didn't – I was stuttering and I couldn't speak to him. And he was saying, "He'll be quick."

PO5: Okay, did he say anything else?

Beth: He said, "Just come on," and that's it.

(Extract 6: Interview 5: Line 456 to 468)

As can be seen by this extract, Beth's physiological fear response is palpable.

Rendered speechless, she is prevented from verbalising her lack of consent. In the following extract, Beth's verbal paralysis extends to the physical:

PO5: What did you think was going to happen then, when he told you to lie down?

Beth: That he wanted sex

PO5: What made you lie down at that point?

Beth: Because – I don't know

PO5: Because obviously I'm just trying to – understanding exactly what's happened and it's really important for us to understand exactly what's happened to you really and sort of what was going through your mind at the time. So he's asked you to lie down and you've just – you lay down because he's asked you to, is that right?

Beth: Yes

Extract 7: Interview 5: Lines 681 to 699

Arguably, with no power to prevent the assault, Beth acquiesces to the perpetrator's demand and she struggles to say why she laid down on demand. The officer, with the use of 'just', could imply all or some of the following; a note of incredulity, that this was not a difficult action for Beth, and/ or that she agreed without thinking. Either way,

the officer is potentially questioning Beth's credibility. This in turn places her in the vulnerable position of not being believed in the telling and may have closed down avenues for further disclosure.

Similarly, survivors' spoke of their fear in disclosing their assault to others:

Jane: Like, I didn't know what to do at first. Like I was scared 'cause he used to sort of promise you to come back and get you. 'Cause he keeps going about he's all a hard man. He goes like, "Anyone who messes with me, my family and my kids, I'll be coming after them". So that's why I'm pretty scared in case he comes after me 'cause he knows I'm always at her house, 'cause she's literally my best friend.

(Extract 7: Interview 2, Lines 1587 to 1592)

Here Jane is highlighting how her fear has prevented her from disclosing the assault to her friends, further strengthening her position as a vulnerable victim. Threat of further abuse serves to explain why she did not disclose the assault immediately; as expected in the societal discourse around what blameless victims should do.

Like we normally would...

Not only did the survivors use discursive patterns of fault and blame in their description of the assault, and following the assault in disclosing the abuse, they also drew on these patterns when describing the interactions before the assault took place.

All of the survivors spoke about the normality of their interaction, such as in the following extract whereby the alleged perpetrator had entered the room where Jane slept to give her a cuddle:

PO2: Okay, so he's got into bed and he's said that he wanted to give you a cuddle. Okay. So what did you say when he said that?

Jane: I was like, "Okay," 'cause that's like what we normally used to be like all the time was to give friend cuddles. Like say if I was at (Steph's) like soon as

he'd walk through the door and walked out we used to give each other a hug and that.

Extract 8: Interview 2: Line 186 to 194

Here Jane is highlighting the normality of the situation, as she saw it; the acceptability of the interaction between friends. Jane is assuming that the boundary between what is acceptable as friends is understood by the perpetrator, and as it was not her who broke this understanding, she cannot be at fault. Jane appears to be drawing on her own script of what's appropriate between friends, whilst not being aware that the perpetrator is possibly drawing on another script, that of a sexual encounter. In a similar description Liz stated the following when asked why she had kissed the alleged perpetrator:

PO6: You kiss. Why did you kiss?

Liz: Because I thought it was friends, like friends kiss.

PO6: Where you did you kiss?

Liz: On the lips

PO6: Always on the lips

Liz: Sometimes on the lips and sometimes on the cheeks.

PO6: Did you kiss him?

Liz: He sometimes kissed me and I sometimes kissed him.

PO6: and was that as friends?

Liz: Yes

PO6: But not boyfriend and girlfriend?

Liz: No

(Extract 9: Interview 6: Lines 667 to 681)

Whilst Liz reports kissing the perpetrator, it was framed within her understanding of a friendship script. It is possible that the officer had one eye on how an adversarial CPS would view this account; possibly as an invitation to something more than friendship. While Liz is clear that she remained within the bounds of friendship

and was not therefore to blame for the sexual assault, she would probably be left feeling very confused as well as afraid about what ensued. Given this position, and the action of this discursive pattern, it is perhaps more easily understood why some of the survivors described not knowing what to do, and potentially being made unable to act.

PO1: And describe what he's done then

Joanna: He went straight for my lips and just kissed me straight there. I couldn't

move. I was – I was – I was in shock.

PO1: I'm not surprised

Joanna: And surprised about it. I couldn't believe what he did.

(Extract 10: Interview 1, Lines 165 to 172)

DISCUSSION

This paper analysed data from archived police investigative interviews to explore how officers of the CJS and female adults with learning disabilities co-construct sexual assault. Analysis observed that the discourses around fault and blame were drawn on by both the officer's and survivors. In-fact, the pattern of fault and blame could be seen as a kind of dance, being passed from officer to survivor and from survivor to perpetrator which opens up different practices, positioning and possible subjectivities at each stage of the dance.

The purpose of the investigative interview for the police (in accordance with ABE guidance), is to ascertain the details of a crime reported to the police and to consider whether the case is strong enough to go to court (College of Policing, 2013; Ministry of Justice, 2011). To the person reporting the crime however, the interview also serves as a forum to be heard and believed (or not), carrying possibilities of re-

traumatisation, inadequate accounts and strong negative messages about themselves, others and the world - depending on the style of interrogative questioning by the Police. Given that most crimes reported by people with learning disabilities do not proceed, this is often the only opportunity for victims to have their say.

With this in mind, it is perhaps understandable why the police often use a range of questioning styles, which may include a more intrusive style of questioning in order to build a 'good case'. The Police are motivated by one set of aims. Although those reporting sexual crimes might well share this aim, they will probably carry another set of hopes and expectations perhaps not fully appreciated by the police officer interviewing them.

ABE guidance has encouraged officers to move away from starting a question with 'why' as it has been recognised to promote feelings of blame with the survivors (Ministry of Justice, 2011). Analysis here identified the discursive pattern of 'why did you...', which arguably attributes blame to the survivor. It has been suggested that the officers pressure to build a 'good case' may override their sensitivity of dealing with a survivors distress, as was arguably identified within extract one, whereby positioning the survivor at fault potentially closed down more empathetic responses.

As previously acknowledged, rape myth stereotypes are prevalent in society, and largely centre on blaming the victim (Suarez & Gadalla, 2010). Arguably, there is the expectation from the survivors within this data that they will be blamed, as highlighted by their accounts positioning themselves as a victim of a crime, and therefore not to blame. It appears therefore, that the survivors' within this study had an understanding of

the discourses around sexual assault, and what you 'should' do in order to prevent the assault, i.e., verbally and physically show your non-consent.

Positioning the survivor at fault is largely consistent with other research where women (without a learning disability) report a sexual assault (Campbell, Wasco, Ahrens, Sefl, & Barnes, 2001; Maier, 2008; Ullman, 1996). Arguably, positioning women with a learning disability as blame-worthy has additional implications. There is an argument that many people find the idea of learning disability so distasteful that it is preferable to not speak about it (Baladerian, 1991; Sinason, 1992). People with learning disabilities may adopt this message, possibly believing that they have less right than others to speak out about sexual assault, to be heard and believed. If people with learning disability internalise the blame when they do disclose, they may internalise that they have less rights as a human being.

Clinical Implications

Positioning survivors at fault may have implications for secondary victimisation, which refers to negative societal reactions in the aftermath of a primary victimisation. Victim-blaming following a sexual assault has been identified as one of several behaviours associated with secondary victimisation (Orth, 2002). Arguably, one of the consequences of secondary victimisation, is the negative influence on the survivor's ability to cope, and the psychological distress caused (Orth, 2002). Not only may this have significant implications for a survivor's recovery from the abuse, and potential symptomatology as a result of the abuse, (such as post-traumatic stress), but may also negatively influence future disclosing practices (Ahrens, 2006). As women with

the CJS (Brown et al., 1995), reducing disclosing practices has significant implications for survivors of sexual assault with a learning disability having their rights acknowledged, and voices heard.

A second discursive pattern of fault and blame, used by the police, was that of 'You didn't do anything wrong...', which is in contrast to 'why did you...' and precludes the fault sitting with the survivor. The action of this discursive pattern arguably helped to minimise the distress felt by the survivor during the interview, which is in accordance with ABE guidelines where vulnerable witness may require support in order to give their best evidence, and officers conducting the interview should remain neutral, offering respect and sympathy to how the survivor feels (Ministry of Justice, 2011). Research with survivors of sexual assault (without a learning disability) have described non-blaming responses to be the most helpful response (Ullman, 1996). These responses minimise distress, decrease symptomatology (e.g., symptoms of Post-Traumatic Stress Disorder) and improve recovery from assault (Orchowski, Untied, & Gidycz, 2013; Peckham, 2007; Ullman & Filipas, 2001). Not blaming the survivor for the assault, is also likely to have potential benefits for disclosure practices, in that it allows survivors of assault to speak out about the abuse, without fear of being revictimised, and with their account being heard (Ahrens, 2006).

The learning disability influence

Analysis identified the survivor's vulnerability to abuse, specifically in the inability to pick up, and act upon warning signs. Survivors draw on the discursive pattern of normality (like we normally would), which arguably drew on fixed scripts of what they would expect to happen in a given situation. For example, one of the

survivors spoke about 'friend cuddles', which was acceptable within her script of friendship, but failed to pick up on warning signs that a man entering her bedroom at night to give a friend cuddle was inappropriate. Research has suggested that the prevalence of sexual assault within learning disabilities, is in part influenced by people with learning disabilities life environment. In addition to difficulties with comprehension and expression, Muccigrosso (1991) highlighted that many people with learning disabilities live a more 'protected' life than people without a learning disability. Decisions are more likely to be made for the individual, with less opportunity to develop decision making skills, or taught how to handle certain situations independently (Muccigrosso, 1991). Analysis identified that some of the survivors complied with the perpetrator, for example Beth described 'lying down' when asked too. The survivor may not understand they have the right *not to* comply with the demands placed upon them, having been taught not to challenge requests. Even where survivors knew the position they were being placed in was wrong, they described not knowing what do, showing difficulties in problem-solving and with little sense of power over what happens. An alternative consideration, is that as the survivor has not acknowledged the warning signs of danger, arguably their 'freeze' response, which signifies the beginning of the automatic nervous systems (ANS) response to danger, has not been activated and they are not an alert for potential threat (Schauer & Elbert, 2010), which potentially results in them finding themselves in vulnerable situations, such as Beth, who met a stranger on the internet and agreed to meet him.

The ANS response to threat is widely acknowledged within trauma literature (freeze, flight, fight response), whereby our bodies are evolutionally predisposed to respond to threat in order to promote survival. Research has suggested that in addition

to the freeze, fight and flight responses, there are also fright, flag and faint responses. When responses of fleeing or fighting are rendered unavailable, our parasympathetic branch of the ANS is activated. This produces 'shut down' type responses, such as fright. During the fright stage, the individual experiences a state of 'paralysis', they are full of fear and are emotionally aroused, but are unresponsive, both physically and verbally (Schauer & Elbert, 2010). Analysis of the data here collated, identified responses consistent with a 'fright' response, particularly highlighted by discourses of fear ('I couldn't speak'). Responses of 'fright' have been associated with increased levels of self-blame and shame, as the survivor feels they should have done more (Rizvi, Kaysen, Gutner, Griffin, & Resick, 2008). Within the analysis, discursive patterns of fear were arguably attempts to justify why the survivor didn't act, or indeed did act in a particular way, which may strengthen their position as a victim and in need of protection from the police.

Strengths and Limitations

A significant strength of this study is the use of naturally occurring data.

Accessing archived police investigative interviews enables exploration of the discursive patterns within actual investigative interviews, allowing for much richer data than if collected through research led interviews. As this an area which has not been explored before, the use of FDA provides a deeper level analysis than that offered by other qualitative methods, and is considered a strength of this study.

A significant limitation of this study, relates to the identification of the survivors as having a learning disability. Identification of appropriate investigative interviews was carried out by an officer within the CJS in order to protect the anonymity of the

participants. However, no clear guidance is available on how to identify people who have a learning disability, unless they (or their carers) have explicitly stated this. It would have strengthened the research to have further knowledge on the types of learning disabilities the women had, for example mild, moderate, autism, which would have brought to light potential differences in the discursive patterns used by the survivors.

In order to protect the anonymity of the participants, all identifiable information was removed, included digitally fuzzying out faces, altering pitches and tones of voice. Although recognising the importance of this in protecting the participants, this limits the ability of the researcher to identify changes in pitch, and nuances which may become important in understanding the discourse to a greater depth.

Implications and further research

The findings of this study suggests that discursive patterns around fault and blame are prevalent within investigative interviews with adult survivors of sexual abuse who have a learning disability. Recognition of different discursive patterns used by the police, and the positioning of the survivor as a result, suggests that further training on questioning survivors in order to obtain accurate information, whilst minimising distress, would be beneficial. In-particular training which aims to elicit further information, which does not draw on discursive patterns of fault and blame would be beneficial. Furthermore, ensuring the police have access to adequate training in order to identify survivors with a learning disability, to ensure that appropriate special measures are in place and to facilitate people with learning disabilities access to the CJS is a significant need.

Clinical Psychologists, have considerable skills in communicating, specifically in relation to adapting the style of communication to a range of abilities, sensory acuity and modes of communication. Coupled with their skills in training, teaching and working collaboratively with other professionals, as well as core skills in assessment and working with distress, Clinical Psychologists are in a good position to offer training to the police. This training could include training on identifying adults with learning disabilities, so that appropriate special measures are in place, as well as training on a range of communication styles with adults with learning disabilities and distress. It is felt that such training would strengthen the evidence gathered within the investigative interview, in accordance with ABE guidance. Clinical Psychologists, working with the police may help to meet the needs of both the survivor with learning disabilities in having the voices heard, and the police in achieving their aim of ascertaining enough details of a crime, in order that the case can go to court.

Despite the limitations, this study is the first to explore discursive patterns used by women with a learning disabilities during investigative interviews of a sexual assault. Results suggest that using FDA to explore the discourse drawn on provides important information, which has both implications for the survivors, Police and for further research. In particular, simply educating the survivor with the learning disability is unlikely to have significant impact on the prevalence of abuse against vulnerable adults. Instead, it is society's views and attitudes towards both survivors of sexual abuse and people with learning disabilities which are required to be educated. In the meantime, work which focuses on educating people with learning disabilities to notice warning signs of potential threat, and to practice reacting to warning signs would be beneficial in improving people with learning disabilities self-esteem and confidence.

Whilst it is acknowledged that educating people with learning disabilities may be helpful, sexual assault is *never* the survivors fault, and rape is rape whatever the disability.

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CHAPTER THREE: PUBLIC DOMAIN BRIEFING

This briefing details a summary of two research papers, firstly a systematic literature review exploring the role of informal social support on symptoms of Post-Traumatic Stress Disorder (PTSD) in female survivors of sexual assault. Secondly, this briefing also outlines an empirical paper exploring the co-construction of sexual assault during archived investigative interviews where women with learning disabilities report sexual abuse to the police.

Literature Review: The impact of informal social support on symptoms of PTSD in female survivors of sexual assault

Sexual assault not only violates the individual's human rights, but also has significant psychological and physical health implications. PTSD is thought to be one of the more common consequences of sexual assault (Breslau, Chilcoat, Kessler, Peterson, & Lucia, 1999; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993), with females showing higher rates of PTSD following a sexual assault than men (Breslau et al., 1999). Since not all females of sexual assault experience PTSD following the traumatic event, it is important to understand the factors that may influence the recovery of survivors following an assault in order to implement interventions which improve recovery. Two papers which reviewed the literature on predictors of PTSD following a traumatic event (not limited to trauma caused by sexual assault) identified social support as having an impact on recovery to varying degrees (Brewin, Andrews, & Valentine, 2000; Ozer, Best, Lipsey, & Weiss, 2003). One study identified social support to have a small-to medium effect on recovery (Ozer et al., 2003) and the other identified social support to be the strongest predictor of recovery (Brewin et al., 2000). A narrative review, conducted by Ullman (1999), reported mixed findings when looking specifically at the impact of social support on recovery following a sexual abuse. Approximately half of the identified studies showed no impact on recovery, and the other half showed a positive effect on recovery.

Social support is a multi-dimensional construct and refers to the responses survivors receive from informal and formal contact (Flannery, 1990). Informal sources

of support include friends and relatives, for example, and formal social support includes organised support such as police and mental health centres. Research suggests that survivors of sexual assault are more likely to seek support from informal sources than formal following a sexual assault (Ahrens, Campbell, Ternier-Thames, Wasco, & Sefl, 2007).

Given that research suggests that sexual assault survivors disclose to informal sources of support, and social support may have a role in recovery from a traumatic event, it is the aim of this study to build on previous research and to systematically review the role of informal social support on symptoms of PTSD in female survivors of sexual assault. A systematic review of the literature identified thirteen studies which met the study inclusion criteria, including having a formal measure of PTSD. The results from this review suggests that negative and positive social support from informal sources of support differs as to its effect on PTSD symptom severity. Specifically, negative social support was found to increase PTSD severity, whilst positive social support may play a buffering role for some survivors. However, positive support did not appear to buffer against the more detrimental impact of negative social support on symptoms of PTSD.

The implications of the literature highlights the importance of who the survivor chooses to disclose too, and the importance of wider training to supporting informal sources on how to respond positively, whilst discouraging negative reactions. One suggestion for providing wider awareness to the general population is through media and social network campaigns.

Empirical Paper: How do the police and people with learning disabilities co-construct rape and/or sexual abuse during police investigative interviews?

People with learning disabilities are considered to be one of the most vulnerable groups in society (Department of Health, 2001), particularly in relation to sexual assault (McEachern, 2012). Despite having the same rights and freedom as everyone else, this group often do not speak out about their assault (Niehaus, Krüger, & Schmitz, 2013), and therefore the number of survivors pursuing alleged offenders through the Criminal Justice System (CJS), is a tiny fraction of those abused (Brown, Stein, & Turk, 1995).

Within the CJS, people with learning disabilities have historically been considered an unreliable witness due to their inherent difficulties (Milne & Bull, 2001; Sanders, Creaton, Bird, & Weber, 1996). More recent research suggests that with the appropriate support and interview techniques, people with learning disabilities can provide accurate and reliable information. Recognising this, the CJS has issued guidance on interviewing vulnerable witnesses (which includes people with learning disabilities), and has developed special measures to support them through the legal process. However, to date there is little research on the use of the special measures and interviewing techniques, and no research where women with learning disabilities report sexual assault.

Therefore, it is the aim of this study to explore how the police and adult females with learning disabilities co-construct sexual assault during closed and archived police investigative interview. As there is a lack of previous research, exploratory methods of analysis are thought to be preferable in developing a richer and deeper understanding. Foucauldian Discourse Analysis (FDA) is one type of exploratory analysis which has an interest power relations as expressed through language. It was felt this would be an ideal analysis for people who may experience power imbalances within their environment as a result of their learning disability and/or sexual assault.

The results of this analysis observed a central pattern of discourse around 'Fault and Blame', which was drawn on by both the officers and survivors, although often in contrasting ways. This paper explores the action of drawing on different discursive patterns around fault and blame, and different subject positions and practices which are closed down, or opened up because of its use.

The findings of this study point to the need to further support the police in both identifying people with learning disabilities who may require special measures and support, as well as interview techniques which enable accurate and reliable accounts. This is alongside the requirements to show empathy and remain neutral throughout the investigative interview. Whilst the study highlights areas where people with learning disabilities could be supported, such as noticing and responding to warning signs of assault, it is acknowledged that sexual assault is never the survivors' fault, and further research should expand upon this research to ensure that women with learning

disabilities have their human rights met, and alleged offenders are pursued through the CJS.

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APPENDICES

APPENDIX 1: Data Extraction Form

General Information			
Record/Identifying Number			
Date of data extraction:			
Author (s)			
Article Title			
Citation			
Country of Origin			
Source of Funding:			
Verifiability of study inclusion f	or System	natic Review:	
Inclusion criteria:		Exclusion Criteria	
Social Support – informal		Child sex abuse (less 14)	
PTSD:		Domestic violence/battered women	
Adult		Combat trauma / rape	
Females		Dissertations / conference papers	
Sexual assault			
Published since 2000			
Peer Reviewed			
Study Characteristics			
Aims and objectives of the study	:		
Study Design:			
Cohort		Cross-Sectional	

Study Inclusion criteria:
Study exclusion criteria:
Participant Characteristics
NB: In each group include number, mean, median values
Number of participants invited
Number of participants consented
Age:
Gender
Socio-economic status:
Marital Status:
Ethnicity
How was missing data handled?
How was the sample selected?
Specific Information
Target population
Recruitment procedure
Brief outline of study
Quality Assessment score:
How was the data collected?
Measure sexual assault
Validity:
Reliability:

Measure of social support:
Validity:
Reliability:
Type of social support:
Measure of PTSD:
Validity
Reliability:
Other Variables:
Analysis
Description of analysis employed:
Results
Dichotomous (e.g., odds ratio, risk ratio, confidence intervals, p-value)
Continuous (mean difference, confidence intervals)
Other Information:
Conclusions
Summary of main findings:
Limitations of the research:
Implications for clinical and research practice:
Additional comments:

APPENDIX TWO: Quality Assessment Tool

Date completed:

Initial Screening

	Question	Yes	Partially	No	Unknown
		2	1	0	0
1.	Did the study address a clearly focused issue?				
	To think about:				
	The population studied				
	The outcomes considered				
2.	Is the study looking at social support and its relationship to PTSD symptom severity in adult female rape and/or sexual assault survivors?				

Reporting

	Question		ially		nknown
		Yes	Parti	N_0	Unkı
		2	1	0	0
3.	Are the hypothesis/aims/objectives of the study clearly defined?				
	To think about:				
	Yes : Easily identifiable information in the introduction or start of the method section.				
	Should specify: purpose, target population and specific variables and outcomes under investigation				
	May be in the form of hypothesis or specific question(s)				

	Partial: Vague / incomplete information reported.		
	Or – you have to gather information from other parts of paper		
	No: Question or objectives not reported		
4.	Was the study design clearly defined?		
	To think about:		
	Yes: Clear elements of study design described in introduction or early in method section. For cross-sectional study the point in time for which cross-section was taken should be described.		
	The study design was appropriate for the research question.		
	Partial: Unclear description of design, or only mentioned in discussion section.		
	Where only used prospective / retrospective - no clear definition of what this means.		
	Or study design clearly evidenced, but only partially answers the research question.		
	No: Design does not answer study question or is not described.		
5.	Is the eligibility criteria for participant recruitment clearly defined, and applied to all participants?		
	To think about:		
	Doesn't have to be a specific inclusion/exclusion criteria – although it can be.		
6.	Is the type of sexual violence clearly defined/assessed (e.g., rape, sexual assault)?		
	To think about:		
	Yes: Defined and measured in a reproducible criteria		
	Minimal potential for measurement miscalculation or error		
	Any survey/questionnaires clearly described – including interview, questions and possible responses		

	Where appropriate, validity and reliability of measures reported		
	Partial: Definition or measures leaves room for subjectivity i.e., not reported, reported in part, definition of measure not clearly reported, description of questionnaires/survey incomplete, response options unclear		
	No : measures not defined, inconsistent throughout paper, no description of survey/questionnaire or response options.		
7.	Are the characteristics of the participants to be included clearly described (e.g., gender, age, ethnicity)?		
	To think about:		
	Yes : Sufficient and relevant demographic information to describe the participants clearly provded.		
	Replicable criteria used, descriptions of categories clearly described		
	Reporting the number and percentage where applicable		
	Partial : Poorly described demographics, not sufficient information to describe characteristics		
	No : No demographic information was reported.		
8.	Have characteristics with missing data been described?		
	To think about:		
	Yes : All missing data is clearly described, including characteristics. Include number and %. Can be in table – doesn't have to be.		
	Missing data to be available for each variable of interest and each step of analysis		
	Partial: Part or incomplete missing data is reported.		
	No: No mention of missing data.		
9.	Are the main findings clearly described?		
	To think about:		
	Yes : All results clearly described, including main outcomes and secondary outcomes as applicable.		

	In addition, a short summary of main findings in the discussion section.		
	Partial : Only part of the results discussed, or difficult to assess as not clear results section.		
	No: Only quantitative results reported for some outcomes only, or the number changes across the results section e.g., not reported for entire participant sample, but only those with complete data. Or results only described qualitatively when could be described quantitatively.		
10.	Do the results support the conclusions?		
	To think about:		
	Yes: All conclusions are supported by the data (even if data was inappropriate).		
	Conclusions are relevant to the study question.		
	Consideration given to possible bias, loss of data.		
	Partial: Some of the conclusions made are supported by the data – but not all.		
	Conclusions drawn are not considered in line with possible bias, loss of data for example.		
	No. None or very small amount of conclusions drawn are supported by the study data. Or conclusions are missing.		

External Validity

	Question	Yes	Partially	No	Unknown
		2	1	0	0
11.	Is the population studied and recruited acceptable and representative?				
	To think about:				
	Yes : Identify the population for recruitment, and clearly describe how participants are selected.				

Selection strategy designed (e.g., consider sampling method, and strategy) to produce unbiased sample of target population.		
Where applicable – inclusion/exclusion criteria included		
Discussion of attempts made to reduce selection bias		
Partial : Selection method not clearly described, or not ideal – is likely to include some bias – but not significant enough to distort the results.		
No : No information provided, or obviously inappropriate for target population. Selection design has introduced selection bias which distort the results		

Internal Validity

	Question		lly		wn
		Yes	Partia	N_0	Unknown
		2	1	0	0
12.	Were the main outcome measures used accurate (valid and reliable)?	-	-	-	-
a	Social Support				
	To think about:				
	Yes: Defined and measured in a reproducible criteria				
	Minimal potential for measurement miscalculation or error				
	Any survey/questionnaires clearly described – including interview, questions and possible responses				
	Where appropriate, validity and reliability of measures reported				
	Partial : Definition or measures leaves room for subjectivity i.e., not reported, reported in part, definition of measure not clearly reported, description of questionnaires/survey incomplete, response options unclear				

	No: measures not defined, inconsistent throughout paper, no description of survey/questionnaire or response options.		
b	PTSD		
	To think about:		
	Yes : Defined and measured in a reproducible criteria		
	Minimal potential for measurement miscalculation or error		
	Any survey/questionnaires clearly described – including interview, questions and possible responses		
	Where appropriate, validity and reliability of measures reported		
	Partial: Definition or measures leaves room for subjectivity i.e., not reported, reported in part, definition of measure not clearly reported, description of questionnaires/survey incomplete, response options unclear		
	No : measures not defined, inconsistent throughout paper, no description of survey/questionnaire or response options.		
13.	Was the statistical tests used to analyse data clearly described and appropriate?		
	To think about:		
	Yes: Analytic methods are described and appropriate		
	Partial : Analytic methods not clearly described, have to be guessed at but are appropriate.		
	Or minor flaws, or only some of the tests are appropriate		
	No : No description of analytic method provided, and can't be determined. Or, inappropriate analysis methods used.		
14.	Was the sample size power or variance and effect estimates provided?		
	To think about:		

Yes: Appropriate variance estimates (e.g., confidence estimates, intervals, standard errors, range, and standard deviations) are described.		
Partial : All variance estimates not reported for all ma outcomes, or inappropriate variance estimates reporte		
No : No information relating to variance estimates reported.		

TOTAL SCORE = /30

Percentage =

APPENDIX 3: Approval from R&D

APPENDIX 4: University of Birmingham Approval

APPENDIX 5: Overview of discursive patterns around fault and blame

	I-I1 (Joanna)	I-I2 (Jane	I-I3 Alice	I-I4 Mary	I-I5 Beth	I-I6 Liz
"You didn't do anything wrong"	Yeah, and that's the right thing to do (L363)	I've been trying to avoid him since then. PO: Fair enough (L1453)		You know what your dad did to you on that day was wrong? (L875)	I'm just a little bit confused. It's my fault. (L1287)	Liz: So I was scared to go and – PO: It's not on (L420)
"Why did you"		So when you went back those four or five times, why was it that one time that you decided to tell Steph that you're not going anymore? (L1597)	What sort of sparked that off for you to tell somebody after three years have gone by? (L178)	So what made you change your mind and tell somebody after all this time? (L1356)	I'm just trying to understand why you didn't walk away from him at that stage, before anything had happened? (L1809)	Do you think he may have been under the impression that you were going out together? (L410)
"Like we normally would"	I was just waiting for the bus	It was all right like, just a friendly mood (L1056)	I went and go my pyjamas on, because I wanted my pyjamas on (L88)	I always go to bed after school to have a bit of a sleep (L1064)	Just being friendly and just talk as a normal friend does (L175)	Because I thought it was friends, like friends kiss (L668)
"He had a good force on me"	I tried to ignore him but I couldn't (L59)	I was telling him to stop (L380)	I've asked him twice before (to stop) (L406)	I told him to go away (L503)	I said 'can you stop' (L1004)	So I tried to kick him as I had to defend myself (L113)
"I couldn't speak"	I went into the canteen and I just stopped and froze (L311)	And what do I do, as soon as he comes I just be quiet (L1398)	I felt scared of him (L336)	PO: When he's told you not to tell anybody, how did you feel? Mary: Scared (L759)	Nervous what he was going to do L913	I was frightened to go and tell someone (L82)

APPENDIX 6: Instruction to authors for literature review paper

APPENDIX 7: Instruction to authors for empirical paper				