

**A Study of the General Public's Understanding of Reactions to Rape, with  
Implications for the Judicial System**

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**D.Clin.Psy. Thesis (Volume 1), 2008.**

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## **OVERVIEW**

Part One is a literature review, investigating Posttraumatic Stress Disorder following rape and how symptoms might affect the perceived credibility of a rape witness's statement. Section 1 contextualises the review by referencing the proposed UK Government initiative of introducing expert information into rape trials, in an attempt to increase conviction rates. In section 2 the literature surrounding rape prevalence is cited and Section 3 surveys research on the psychological sequelae and investigates evidence of the general public's understanding of symptomology. Section 4 focuses on dissociation, exploring the cognitive, affective and behavioural manifestations which may impact a witness's statement and considers evidence of their influence on judgements of credibility. Section 5 comments on the conceptualisation of shame, its potential impact on statement content and style and investigates evidence of whether its presence influences others' perceptions. Finally, the findings are summarised with suggestions for further research made.

Part Two is an empirical study, designed to consider some of the issues raised in the literature review by systematically investigating whether certain emotional and behavioural reactions to rape, consistent with dissociation and shame, influence judgements of witness credibility and defendant guilt, as judged by members of the UK jury-eligible public. The study is contextualised by a discussion of the relevant literature and the resultant methodology explained. The results are presented, followed by a discussion of the findings in relation to the study's aims and research questions. Finally, the study's relative strengths and limitations are highlighted, with suggestions for further research made.

Part Three is a critical appraisal which begins with a discussion of difficulties arising during the study and how these may have influenced the findings and conclusions drawn. The relevance of the study's findings within a wider context is then considered and possibilities for further research discussed. Finally, the researcher's reflections on the process of the study are presented.

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Posttraumatic Stress Disorder Following Rape: How Might Symptoms  
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## **ACKNOWLEDGEMENTS**

Firstly I would like to express my immense gratitude to all of the participants who took part in this study and hence made the research possible.

I would like to thank my supervisors Lucy Serpell and Val Curran for their time, support, suggestions and helpful comments on early drafts. I also would like to thank Louise Payne for her invaluable help when designing the study and writing/ filming the vignettes. Thank you also to Kerry Young for reading a draft of the literature review.

The University of London Central Research Fund is gratefully acknowledged for funding the actor's fee.

I especially want to thank Louise Howells for her sterling portrayal of a rape victim and for Andy Glynne and Valeria at dfg for their generosity and time spent transferring the videos onto DVD.

I want to acknowledge the support offered from my friends and family over the last few years and especially for not taking it personally, or giving up on me, when I have disappeared from the radar, ignored emails and forgotten birthdays. I now have no excuse and owe you all a pint!

A big thank-you also to Rob for your encouragement, the laughs, helping me to keep things in perspective (through your teasing) and for making these last few months more enjoyable.

Finally, a very special thank-you to my mother Diana for her continuous support and encouragement, not just over the last few years, but throughout my entire academic career. Words can't adequately convey how much I appreciate all that you have done for me and I am eternally grateful. However, in true competitive 'Nicholson Women' style, I think you may find that I have now raised the stakes, game on!

## **PART 1: LITERATURE REVIEW**

### **Posttraumatic Stress Disorder Following Rape: How Might Symptoms Affect the Perceived Credibility of a Victim's Statement?**

## **ABSTRACT**

Contextualised by the proposed UK Government initiative to introduce expert information into rape trials, this review surveyed literature addressing the prevalence of rape, common psychological sequelae and how symptomology consistent with Posttraumatic Stress Disorder (PTSD) may impact rape narratives. It also explored research on the general public's understanding of these symptoms and their potential influence on judgements of witness credibility. A paucity of literature focussed the review on dissociation and shame, two common phenomena associated with PTSD and how cognitive, affective and behavioural markers may impact the content and style of a rape victim's statement. The literature suggested that some manifestations of both peritraumatic and posttraumatic dissociative experiences negatively influenced judgements. The review also found that many of the behavioural markers of shame were seen as indicative of deceit, thus further reducing perceived credibility. The findings are discussed in relation to the current legal system, with recommendations for further research made.

## **1. INTRODUCTION**

### **1.1 Background**

The literature regarding sexual assault consistently demonstrates that the prevalence of rape is high, although it is one of the least-reported acts of violent crime (Myhill & Allen, 2002; Williams, 1984). In the UK the prevalence of rape is not reflected in either the reporting to police or the number of successful convictions. For example, the British Crime Survey (BCS, 2001, cited in Office for Criminal Justice Reform, 2006) estimated that only 15% of all rape incidents occurring during the year preceding the survey were reported to the police.

Although the current percentage of reported rapes in the UK represents a small proportion of the total number of women raped, it is an improvement on previous years, with British Crime Surveys indicating that the number of rapes reported to the police each year is increasing. This increase has been partially attributed to the introduction of Sexual Assault Referral Teams, Witness Care Units and an increase in specialist rape workers within the police force, trained to work empathically with rape victims and support them through the legal process (Office for Criminal Justice Reform, 2006).

However, although the reporting of rape to police has increased, the number of rape convictions has remained relatively stable, suggesting that the proportion of rapes leading to a conviction is decreasing. For example, in 1997 the proportion of reported rapes resulting in conviction was 33% (1 in 3), whereas in 2004 this figure had significantly decreased to 5.3% (1 in 20; Office for Criminal Justice Reform, 2006).

These figures suggest that interventions to improve the support and care offered to rape victims required a shift in emphasis from pre-reporting to support once the rape had been reported and the legal process commenced. In response to this, the UK government introduced a National Action Plan on sexual violence. A Government Consultation Paper was produced (Office of Criminal Justice Reform, 2006), proposing four changes to current legal proceedings, specifically to address the low conviction rates, including:

- Consent – re-defining the legal definition of consent where substances (alcohol and drugs) may have impacted the victim's capacity to give consent.
- Expert Witness – informing juries on the psychological impact of rape on the victim to assist jurors' assessment of victim credibility.
- First Complaint – allowing relevant evidence of victim's complaint to be admissible in court, irrespective of the time period between the alleged rape and reporting.
- Special Measures – allowing the use of pre-recorded video evidence in court proceedings.

Each of these four areas requires empirical investigation, both alone and in combination, to assess their impact on legal proceedings. However, to cover all areas is beyond the scope of the current literature review. Additionally, it was felt important to focus on literature pertinent within the field of clinical psychology, rather than that based within social psychology and legal domains. Therefore, this literature review focuses solely on the psychological sequelae of rape and

implications for the proposed introduction of information from expert witnesses into court proceedings.

Currently in rape trials in England and Wales, the jury hears the witness's statement and it is the role of the Defence to cross-examine this statement, highlighting any omissions, discrepancies or victim behaviours before, during or after the rape, which might discredit it. Moreover, the Prosecution is not able to inform/educate the jury on common psychological effects of rape which may have impacted upon the witness's statement, nor dispel some of the common 'rape myths' or stereotypes of how rape victims should behave, which may impact on jury decision making processes (Office for Criminal Justice Reform, 2006; Petrak, 2002a; Rogers, 2002). It is argued that allowing the jury to make decisions of witness credibility without this information could contribute towards the low conviction rates (Office for Criminal Justice Reform, 2006).

## **1.2 Current Literature Review**

There is considerable literature on the epidemiology of rape and a growing literature on the subsequent difficulties experienced by rape victims, including psychological impact. There is also extensive literature on public perception of rape victims, detailing characteristics of the victim, rape situation and perpetrator, which influence negative judgements made by others and question victim credibility. In the last 25 years there has been increasing research into Posttraumatic Stress Disorder (PTSD), resulting in an ever-growing literature, especially regarding epidemiology, symptomology and treatment. However, little research specifically investigates how



symptoms consistent with PTSD may impact on a rape victim's statement, nor how the general public perceives these symptoms.

Therefore, the first part of this literature review aims to review pertinent literature relating to common psychological sequelae, consistent with PTSD, following rape and how these symptoms may impact rape narratives, specifically in the form of a victim's statement. The second part of the review will survey literature investigating how others perceive these symptoms or narrative styles and whether they influence judgements of credibility.

It is acknowledged that the findings, implications and suggestions for further empirical research drawn from the current literature review will inform both clinical and social psychology, as well as law. However, the emphasis will be on furthering understanding of the sequelae of rape within the context of clinical psychology, with the clinical relevance of the findings highlighted where possible.

### **1.3 Methodology**

Relevant literature was sourced from major databases (PsycINFO and MEDLINE). Keyword searches with "explode/all subheadings" used; sexual assault and/or rape, Posttraumatic Stress Disorder (PTSD), trauma narratives, PTSD and/or rape and narratives, PTSD and/or rape and memory, PTSD and/or rape and dissociation, PTSD and/or rape and shame, PTSD and/or rape and social perception or public opinion or attitudes, PTSD and/or rape and credibility, PTSD and/or rape and expert witness, PTSD and/or rape and vignette studies. Additional searches were also conducted using Author searches, searching for articles written by pertinent authors

within specific areas. Reference lists from identified articles were also hand searched.

Due to the breadth of the reviewed area and heterogeneity across articles, a meta-analytic review was not suitable. A qualitative review is thus presented which attempts to directly address the question of how PTSD may affect a victim's statement and its perceived credibility and also, where little or no literature exists, to review literature in related areas which may provide further evidence/understanding.

## **2. RAPE**

### **2.1 Definitions**

There is no universal definition of rape, with legal definitions of sexual offences differing between countries. In England and Wales the Sexual Offences Act (2003) defines rape as: non-consensual 'penile' penetration of the vagina, anus or mouth. This legal definition of rape does not include penetration by objects or digital penetration. Assaults of this type are defined separately as 'assaults by penetration'. In addition, 'sexual assault' is not legally defined, however, this term is often used to denote assaults of a sexual nature which do not fit the criteria of rape or assaults by penetration (Welch & Mason, 2007).

#### ***2.1.1 Stranger versus Acquaintance Rape***

The legal definition of rape does not differentiate between 'stranger rape' and 'acquaintance rape'. However, research has demonstrated that the victim's relationship to the perpetrator affects reporting the rape (Bechhofer & Parrot, 1991),

others' perceptions of the victim (Burkhart, 1991; Culbertson & Dehle, 2001) and the magnitude of psychological difficulties following the rape (Gidycz & Koss, 1991; Mandoki & Burkhart; 1991). Therefore, stranger and acquaintance rape are distinguished in this literature review, wherein acquaintance rape is defined as non-consensual penile penetration between adults who know each other (Bechhofer & Parrot, 1991).

### *2.1.2 Gender*

It is acknowledged that both men and women can be raped and that male victims of rape are underrepresented in the literature and empirical research. However, the prevalence of female rape victims is significantly higher than of male victims and perpetrators of rape are predominantly male (Rozee & Koss, 2001). The current literature review focuses exclusively on rape against women perpetrated by men and in accordance will use the descriptor 'she' when referring to victims and 'he' when referring to perpetrators.

## **2.2 Prevalence**

It is difficult to compare prevalence rates across studies due partly to differing definitions of rape across countries and partly to studies failing to disclose whether a legal definition of rape has been used, or whether other forms of penetration and sexual assault are included. However, research indicates that the prevalence of rape and other acts of sexual assault is high with Edward and Macleod (1999) suggesting that in the USA up to 50% of the female population will experience at least one sexual assault in her lifetime. A comparison of prevalence rates of sexual violence

from countries around the world can be found in the World Report on Violence and Health (Krug, Dahlberg, Mercy, Zwi & Lozano, 2002).

The British Crime Survey (BCS; 2004/2005, cited in Finney, 2006) investigated the prevalence of rape in England and Wales and found that of the women sampled (aged between 16 and 59), 23% had suffered from at least one (attempted or completed) serious sexual assault in their lifetime. Of these, 5% met the legal criteria for rape and 2% met the criteria for assault by penetration. Only 11% of all serious sexual assaults had been committed by a stranger.

It is arguable however, that these prevalence rates are likely to be an underestimate of the actual rates of rape. The self-report nature of the BCS could result in underreporting due to shame/embarrassment, being unable to disclose for fear of others discovering (e.g. living with the perpetrator) or not realising that the incident could be considered rape, particularly due to the Survey's focus on 'crime' (e.g. acquaintance rape). In addition, the Survey is not disseminated to all women in society; for example it excludes women living in mental health institutions, prisons and homeless women, therefore excluding a number of high-risk women (Welch and Mason, 1997).

### **3. PSYCHOLOGICAL IMPACT OF RAPE**

#### **3.1 Overview of the Psychological Changes Following Rape**

Research into the impact of rape highlights numerous psychological sequelae, resulting in cognitive, affective and behavioural changes. Experiencing rape can

challenge beliefs about self-worth, decency of others and predictability/safety of the world, influencing perceptions of agency, vulnerability and decency and in turn result in disillusionment and emotional changes (Gidycz & Koss, 1991). Mandoki and Burkhart (1991) and Gidycz and Koss (1991) suggest that common emotional reactions to rape include: fear, anger, shame, confusion, guilt, helplessness and reduced self-esteem, which commonly develop into psychological disorders (for example; major depressive disorder, anxiety disorders, adjustment difficulties or sexual dysfunction). Behavioural changes are also common, with individuals demonstrating avoidance of rape related stimuli, reduced socialising, increased use of substances and increased isolation (Doyle & Thornton, 2002; Parrot, 1991).

There is no consensus in the literature as to whether the psychological impact of acquaintance and stranger rape differs. Gidycz and Koss (1991) suggest that victims of acquaintance rape are more likely to experience cognitive, affective and behavioural changes, than are victims of stranger rape. Katz (1991) supports this, claiming that victims of acquaintance rape are often more distressed and take longer to recover. Burkhart (1991) proposes that the mechanism behind this is 'self-blame', with victims of acquaintance rape more likely to blame themselves for the assault with self-blame positively correlating with anxiety and avoidant coping strategies. Conversely, Petrak (2002a) claims that there are no significant differences in the psychological impact between stranger and acquaintance rape. However, the literature does suggest an agreement that these psychological changes affect disclosure and that victims of acquaintance rape are more likely to delay reporting the rape and seeking treatment (Burkhart, 1991; Garrison, 2000; Petrak, 2002a).

### **3.2 Rape Trauma Syndrome**

In Burgess and Holmstrom's (1974, cited in Garrison, 2000) seminal paper on the social and psychological effects of rape, the cognitive, affective and behavioural symptoms outlined above were clustered, giving rise to the 'Rape Trauma Syndrome' (RTS; for a full review of RTS see Garrison, 2000). RTS is not a diagnosable disorder, but rather a way of explaining common psychological reactions to rape, consisting of acute (affective and behavioural changes) and reorganisation (coping strategies) phases. Typical post-rape responses include: increased arousal (e.g. interrupted sleep patterns, exaggerated startle responses), nightmares, emotional reactions (fear, guilt, shame, anger), impaired concentration, impaired memory processes and avoidance of objects, people and situations associated with the rape (Bownes, O'Gorman and Sayers, 1991; Katz, 1991; Parrot, 1991 and Petrak, 2002a). With the introduction of PTSD into the Diagnostic and Statistical Manual of Mental Disorders 3<sup>rd</sup> Edition in 1980 and subsequent editions following revision, it became apparent that although not synonymous, RTS and the modern criteria of PTSD are similar, describing many of the same symptoms. Bownes et al. (1991) provided empirical support for this, when they investigated common post-rape responses consistent with RTS and found that 75% of the sample also met the diagnostic criteria for PTSD.

### **3.3 Posttraumatic Stress Disorder (PTSD)**

#### ***3.3.1 Definitions***

PTSD can develop after exposure to a traumatic stressor where there is actual or perceived death, serious injury or threat to integrity of self or others. To meet the

diagnostic criteria of PTSD, the individual must have responded to the traumatic stressor with extreme fear, helplessness or horror and subsequently be experiencing particular symptoms including: persistent re-experiencing of the traumatic event (for example; intrusive images, flashbacks and/or nightmares), persistent avoidance of trauma-related stimuli and persistent symptoms indicative of increased arousal (for example; sleep disturbance, difficulty concentrating, anger, exaggerated startle response). In addition, these symptoms must persist for more than a month and result in significant distress and/or impairment in functioning (American Psychiatric Association, 1994).

### *3.3.2 Prevalence*

The estimated lifetime prevalence rate for PTSD is between 1-14% (American Psychiatric Association, 1994). Interestingly, women appear more vulnerable to developing PTSD following a traumatic event, than do men. The lifetime prevalence of PTSD in women is twice that for men (10.4% vs. 5.0%), even though research has shown that women are exposed to fewer significant traumatic events (Kessler, Sonnega, Bromet, Hughes & Nelson, 1995; Seedat, Stein & Carey, 2005). The literature reflects varying views of why this difference in prevalence occurs. Some researchers have suggested that this gender variation stems from the observation that men and women are commonly exposed to different traumatic events and that particular trauma types are more likely to lead to PTSD (Breslau, 2002). However, other studies have shown that susceptibility to PTSD is independent of type of trauma (see Seedat et al., 2005 for a full review). Citing findings from their prospective study, Perkonig, Kessler, Storz & Wittchen (2000; cited in Nemeroff, Bremner, Foa, Mayberg, North & Stein, 2006) claim that the strongest predictors of

developing PTSD following a traumatic event are female gender and exposure to an assault or sexual trauma. Empirical evidence thus supports the contention that women have a high risk of developing PTSD following rape: both from increased gender vulnerability to PTSD and greater prevalence of rape and sexual assault on women.

### **3.4 PTSD and Rape**

Studies investigating the prevalence of PTSD following different traumatic events have shown that the type of trauma most likely to be associated with PTSD is rape, with lifetime prevalence of PTSD following rape between 46-57% (Kessler et al., 1995; Kilpatrick, Saunders, Veronen, Best & Von, 1987).

Again it is difficult to interpret and compare the results of different studies within the literature due to differing methodology: different definitions of rape, inclusion of other forms of sexual violence, multiple assaults, reliance on self-report measures and inclusion/exclusion of childhood sexual abuse. Faravelli, Giugni, Salvatori and Ricca (2004) attempted to demonstrate the prevalence of PTSD in rape victims using a methodology free from the above confounds. They recruited 40 women who had been raped (forced sexual penetration), where the defendant had been found guilty in a legal trial. All of the women reported a single assault in adulthood (occurring between 4-9 months before the interview), with none reporting childhood sexual abuse. These participants were matched to women who had experienced a life-threatening trauma, without a sexual component (for example; car accident, robbery, physical assault) and with no reported childhood sexual abuse. Using measures to assess for psychiatric disorders compatible with DSM-IV criteria, they found that



95% of the raped women met the diagnostic criteria for PTSD, compared with 47% of the control group. These results suggest that not only is the prevalence of PTSD high in victims of rape, but also that the risk of developing PTSD following rape appears greater than following other traumatic events.

This finding was from a specific sample of raped women who had reported the rape to the police resulting in a trial ending in conviction and 90% of whom had been raped by a stranger. This profile is not representative of the majority of women who experience rape in the UK, hence the association between rape and PTSD may be even greater in the general population. Also, this study only assessed women at one time period and therefore cannot comment on the course of PTSD following rape.

One of the most influential studies investigating the onset and progression of PTSD following rape was a prospective study by Rothbaum, Foa, Riggs, Murdock and Walsh (1992). This assessed 64 women, between 17-65 years of age, who had suffered a rape or attempted rape within the past month. They assessed these women weekly for 12 weeks and used various self-report measures, including measures for PTSD diagnosis (using DSM-III-R criteria) and severity of symptoms. They found that in the immediate weeks post-rape ( $M = 12.64$  days), 94% of women met the diagnostic criteria for PTSD (excluding the duration of symptoms criterion), 65% met the full diagnostic criteria at one month post-rape and this figure reduced to 47% at a three-month follow-up. This research suggests that almost two-thirds of rape victims will display some of the cognitive, affective and behavioural symptoms associated with PTSD a month after the rape and that that these symptoms will still be present 3-4 months later for almost half the victims. Rothbaum et al. (1992) also

found that some PTSD symptoms were more common than others in their sample.

The most common symptoms (experienced by over 80%) a month after the rape included: increased arousal and startle responses, deficits in concentration and memory, fear and feeling detached, avoidance, impaired leisure (reduced socialising, increased isolation) and re-experiencing symptoms (including flashbacks).

Importantly, this study also demonstrated that if PTSD symptoms do not substantially reduce within a month post-rape, then they are unlikely to remit spontaneously (Rothbaum et al., 1992).

### **3.5 Public Understanding of the Psychological Impact of Rape**

Numerous studies have investigated public attitudes towards rape and rape victims and have shown how perceptions are influenced by victim characteristics including: gender, race, sexuality, personality, intoxication, clothing and behaviour (George & Martinez, 2002; Schult & Schneider, 1991; Wakelin & Long, 2003; Willis, 1992; for a review see Whatley, 1996); type of rape (acquaintance vs. stranger rape; Frese, Moya & Megias, 2004); outcome (physical vs. psychological injury; Schneider, Soh-Chiew Ee & Aronson, 1994) and participant characteristics including gender, race, professional status and acceptance of rape myths (Frese et al., 2004; George & Martinez, 2002; Lonsway & Fitzgerald, 1995; Schneider et al., 1994; Schult & Schneider, 1991; White & Kurpius, 1999; Willis, 1992). However, a thorough literature search yielded only two studies directly investigating common understanding of the *impact* of rape.

Johnson and Blazer (1980; cited in Frazier and Borgida, 1988) administered a questionnaire to law students, physicians, mental health professionals and para-

professionals, which measured knowledge about rapists, rape and other sexual acts. Two-thirds of the questions were answered correctly by the participants and thus it was concluded that this suggested evidence of a common understanding of the impact of rape. However, as noted by Frazier and Borgida (1988), there are three major limitations of this study reducing its generalisability. Firstly, the questionnaire focused on the epidemiology of rape (victim characteristics, rape perpetrator characteristics and type of rape) rather than the psychological after-effects, suggesting a general understanding of factors contributing to a rape occurring, but not the psychological impact. Secondly, the participants in the study were not representative of the 'general public', as the majority were medical professionals or law students. The results thus allude to common understanding within these professions, not to the average layperson. Finally, the questionnaire had been devised from known information about rape prior to 1979 whereas research since then has greatly informed scientific understanding of rape and the common behavioural, emotional and psychological effects (Garrison, 2000). Therefore, it is argued that the dated information used in this study does not accurately reflect what is now known about the impact of rape, including symptomology common to PTSD.

Frazier and Borgida (1988) attempted to remedy these limitations, designing a study to investigate jurors' understanding of RTS. They compiled a Sexual Assault Questionnaire, incorporating known facts about the epidemiology and after-effects of rape from the literature. The questionnaire was given to participants: 'experts' (both rape experts and PTSD experts) and 'non-experts' (psychology students and non-academic employees of a University). They found significant differences in the

understanding of rape between the 'experts' and 'non-experts', with the 'non-experts' demonstrating limited understanding of many rape-related issues.

Frazier and Borgida (1988) concluded that the general public do not understand the psychological impact of rape and are unaware of common reactions of rape victims. In addition, they generalised their findings to the judicial system, suggesting that jurors do not share a common understanding of the sequelae of rape, which may influence their view of the victim's testimony and therefore that education, in the form of expert witness testimony, would be useful during legal proceedings of rape cases.

Although Frazier and Borgida's (1988) study demonstrated limited understanding of 'non-experts' of the epidemiology and after-effects of rape their study has limited generalisability to the current day. Their sample of 'non-experts' included predominately young (average age of students 24 years and average age of staff 35 years), white and university educated women. This sample is not representative of the general public nor actual jurors, who in the UK, include both men and women from various ethnic groups, aged between 18-70, with varied educational and employment backgrounds. Additionally, the questionnaire, whilst grounded in the literature of the time, did not include any of the recent developments in scientific understanding of the common reactions to rape, including PTSD symptomology. Finally, Frazier and Borgida's (1988) study simply investigated understanding of rape and not how this understanding (or lack of) may influence judgements towards rape victims.

There has not been any further research into the general public's understanding of the psychological impact of rape, indicating a pertinent gap in the literature. Due to the paucity of literature investigating general understanding of psychological sequelae following rape, the literature search was narrowed to focus on specific symptomology consistent with PTSD, namely dissociation and shame. Dissociation was chosen as it features heavily in the PTSD literature, cited as one of the strongest predictors of PTSD development (Ozer, Best, Lipsey & Weiss, 2003). Additionally, dissociative experiences are commonly experienced by individuals following traumatic events and have been reported by rape victims. Shame was chosen to reflect the growing interest in the relationship between shame and PTSD in the current literature. Additionally, a relationship between shame and sexual assault has been documented, with shame implicated in reducing disclosure and impeding treatment and recovery (Gilbert, 1998).

#### **4. DISSOCIATION**

##### **4.1 Definitions**

Dissociation is conceptualised in numerous ways in the literature, as both a pervasive trait and a situationally bound response, occurring both in non-pathological and pathological extremes (Eisen & Lynn, 2001). These differing conceptualisations make comparisons between studies difficult, especially when the construct is not clearly operationally defined. For the purpose of the current literature review, dissociation is defined within a diagnostic (pathological) construct, distinguishing between peritraumatic dissociation (situationally bound response) and posttraumatic dissociation (trait observed in various settings).

The DSM-IV (American Psychiatric Association, 1994) defines dissociation as: “*a disruption of the usually integrated functions of consciousness, memory, identity or perception of the environment*” (p. 477). The most common dissociative symptoms include; memory impairment, derealisation (feeling detached from one’s surroundings), depersonalisation (experiencing the self as fragmented) and emotional numbing (American Psychiatric Association, 1994; Bryant, 2007).

#### **4.2 Peritraumatic Dissociation**

Peritraumatic dissociation is an acute dissociative response, describing perceptual alterations in person, time and place during, or in the immediate aftermath of, the trauma (Birmes, Brunet, Carreras, Ducasse, Charlet, Lauque, Sztulman & Schmitt, 2003). Individuals who experience peritraumatic dissociation often report perceptions such as; out-of-body experiences (e.g. feeling as if floating above the scene), an altered sense of time (e.g. acceleration or slow motion), confusion, disorientation and altered pain perception (Brewin, 2001; Jones, Harvey & Brewin, 2007). It is suggested that peritraumatic dissociation is a way of cognitively removing the self from stimuli that are threatening or protecting the self from experiencing aversive emotions (e.g. fear, helplessness, horror) in response to the traumatic event (Marshall & Schell, 2002; Yates and Nasby, 1993). However, it is clear from the literature that the mechanisms behind dissociation are not clearly understood (for a review see Bryant, 2007).

There is empirical evidence that peritraumatic dissociation is common during various traumatic events, with perceptions of out of body experiences, detachment, depersonalisation and derealisation commonly reported (Marmar, Weiss, Schlenger,

Fairbank, Jordan, Kulka & Hough, 1994). However, accurately researching peritraumatic dissociation is difficult due to reliance on retrospective self-reports, reducing reliability of findings.

### **4.3 Posttraumatic Dissociation**

Whereas peritraumatic dissociation is conceptualised as an automatic response to a traumatic event, posttraumatic dissociation is conceptualised as a learnt defence (Yates & Nasby, 1993). Posttraumatic dissociative experiences are frequently reported by individuals who also report dissociating peritraumatically and it is suggested that this indicates dissociation was learnt as an effective coping strategy. This learnt strategy then increases vulnerability to dissociation during subsequent stressful events (van der Kolk & Fisler, 1995; Yates & Nasby, 1993).

The presence of posttraumatic dissociative experiences following childhood sexual abuse (Chu & Dill, 1990), combat (Bremner, Southwick, Brett, Fontana, Rosenheck & Charney, 1992) and natural disaster (Cardena & Spiegel, 1993; Koopman, Classen & Spiegel, 1994) has been well documented. Cardena and Spiegel (1993) describe three main categories of symptoms indicative of posttraumatic dissociation; detachment (from others and environment), altered perceptions and memory impairment.

#### **4.3.1 *Posttraumatic Dissociation Following Rape***

Using a prospective study, Dancu, Riggs, Hearst-Ikeda, Shoyer and Foa (1996) investigated dissociative experiences in assault victims, comparing prevalence of dissociation following sexual and non-sexual assaults. Over a three-month period,

they assessed frequency and intensity of posttraumatic dissociative experiences in recent victims of rape, recent victims of nonsexual assault and a comparison group of women who had not suffered any type of assault in the preceding year. Their results showed that the prevalence of dissociation following rape was high, with rape victims obtaining significantly higher dissociation scores at all four assessment points. Although overall dissociative experiences decreased over time, rape victims continued to display substantial levels of dissociation three months following the trauma.

#### **4.4 Dissociation and PTSD**

Not only do individuals commonly experience dissociative experiences following a traumatic event, but some researchers argue that peritraumatic dissociation is a crucial factor in the development of psychopathology (Breh & Seidler, 2007). There are numerous studies citing the relationship between peritraumatic dissociation and development of PTSD, the strongest evidence stemming from prospective studies showing that peritraumatic dissociation is strongly predicative of PTSD development (Birmes et al., 2003; Marmar et al., 1994) and subsequent symptom severity (Bremner et al., 1992). Ozer et al.'s (2003) meta-analysis of the literature regarding predictors of PTSD symptomology, found that of the seven predictors analysed (including prior trauma and family history of psychopathology) peritraumatic dissociation was the strongest predictor (weighted  $r = .52$ ).

It has been repeatedly demonstrated that individuals suffering from PTSD experience changes in memory and that memory plays an important role in both the diagnosis and treatment of PTSD (Foa, Molnar & Cashman, 1995; Tromp, Koss, Figueredo &



Tharan, 1995). The literature reveals a growing interest in the relationship between dissociation and memory processes, with peritraumatic dissociation increasingly implicated as negatively impacting on encoding, storage and retrieval of traumatic memories (Brewin, Dalgleish & Joseph, 1996; van der Kolk & Fisler, 1995; Yates & Nasby, 1993).

#### 4.4.1 *The Effects of Dissociation on Memory Processes*

Investigators have found that individuals with PTSD typically describe two apparently conflicting memory phenomena (van der Kolk & Fisler, 1995). Memory for the traumatic event in individuals with PTSD is frequently characterised by a disorganised and fragmented narrative featuring gaps, inconsistencies and incoherence (Foa et al., 1995; van der Kolk & Fisler, 1995; Amir, Stafford, Freshman & Foa, 1998). However, a hallmark of PTSD and necessary for diagnosis, is the occurrence of spontaneous and intrusive images related to the traumatic event, which are re-experienced by the individual accompanied by intense emotion (Ehlers and Clark, 2000). During these periods, the trauma memory is experienced as extremely vivid, so much so that in some instances it is experienced as though it is happening again in the present. These experiences are known as 'flashbacks' (van der Kolk & Fisler, 1995).

In order to explain these contrasting phenomena, Brewin et al. (1996) proposed the dual representation theory which incorporates ideas from information-processing theories and suggests that memories of the traumatic event are stored in different representational formats within the brain; (verbally accessible memory [VAM]

versus situationally accessible memory [SAM]); giving rise to two distinct types of trauma memory.

In brief, autobiographical memory for the traumatic event is stored as VAM format, this includes information the individual has attended to before, during and after the trauma. These memories can be deliberately retrieved, are under the individual's control, are set within the context of the whole event and are updated over time (Hellawell & Brewin, 2004). Importantly, these memories can be verbally communicated with others (Brewin et al., 1996; Brewin, 2001). Therefore, trauma memories recounted in a trauma narrative will primarily have been stored within the VAM system, thus allowing for explicit verbal recall.

However, high emotional arousal, particularly relating to emotions of fear, helplessness and horror, reduces the functioning of the VAM system, leading to incomplete and disorganised trauma narratives and resulting in increased fragments of the trauma memory stored within the SAM system (Brewin, 2001; van der Kolk & Fisler, 1995). Thus within the trauma narrative memory impairment is more likely to be evidenced during periods where intense emotion was experienced.

In addition, the capacity of the VAM system may also be impacted by concurrent information-processing systems. For example, attentional processes impact on the quality and content of VAM. During situations of high emotional arousal, attention is restricted and often focused on specific aspects of the event. This results in less information encoded as VAM, impairing accessibility and resulting in fragmentation of the trauma memory (Brewin, 2001; Mechanic, Resick & Griffin, 1998; Wolfe,

1995). For example, Foa et al. (1995) suggest that during a traumatic event much of the individual's concentration is directed towards threats to physical or psychological integrity resulting in increased attention towards threat-related stimuli and reducing processing of non-threatening information such as time encoding or other semantic information.

Typically, SAM formats consist of fragments of sensory information, which have not been consciously processed (e.g. visual, proprioceptive, auditory, olfactory, taste), as well as the individual's physiological and emotional responses (Brewin, 2001).

These memories are difficult to communicate verbally, are not under the individual's control and do not interact with the autobiographical memory stored within VAM and thus are neither stored in context nor updated over time (Hellawell & Brewin, 2004; van der Kolk & Fisler, 1995). This results in spontaneous triggering of vivid and affect-laden trauma memories, consistent with the 'flashback' phenomenon described above. Support for information-processing models of traumatic memory is well documented in the literature (Mechanic et al., 1998). For a full review of dual representation theory see Brewin et al. (1996).

It is suggested that peritraumatic dissociation during periods of extreme stress, affects both VAM and SAM systems. Peritraumatic dissociation impairs encoding of the trauma memory into the VAM system, through cognitive disengagement and reduced attention. This results in incomplete memories stored within the VAM system and more memories stored as isolated elements within the SAM system, evidenced by an incoherent and fragmented trauma narrative, interspersed with spontaneous intrusive memories (Brewin, 2001; van der Kolk & Fisler, 1995).

Mechanic et al. (1998) cited the findings of their study as evidence of peritraumatic dissociation adversely impacting information processing during sexual trauma. In a sample of raped women they found that recall deficits were significantly positively associated with peritraumatic dissociation. Moreover, they found that memory deficits were also related to perpetrator type, finding that recall deficits were significantly greater in victims of acquaintance rape.

#### **4.5 The Effects of Dissociation on Rape Narratives**

As no literature appears to specifically investigate the effect of dissociative experiences on rape narratives, this literature review has focussed on studies which comment on the cognitive, emotional and behavioural markers of dissociation, using these to tentatively suggest how they may impact on a rape victim's statement and implications for the judicial system.

##### *4.5.1 Effects of Peritraumatic Dissociation on Narrative Content*

Evidence of peritraumatic dissociation may be evident in the content of a trauma victim's narrative. She may describe perceptual, emotional, cognitive or behavioural responses consistent with dissociation occurring during the rape, for example; experiencing distorted and unusual perceptions (e.g. out of body experiences), confusion, feeling emotionally and cognitively detached from the situation (numb) or responding passively and not actively fighting off her attacker. Foa, Riggs, Massie and Yarczower (1995) suggest that cognitive detachment and emotional numbing may present behaviourally as a passive or immobile peritraumatic response. In support of this, Kaysen, Morris, Rizvi and Resick (2005) found that only one third of their sample of raped women actively resisted the attacker, with the majority

displaying a passive/freeze peritraumatic response, where the victim did what she was told and became quiet and motionless.

Due to the relationship between peritraumatic dissociation and memory impairment, it may be that the memory of the traumatic event is incomplete, evidenced by an incoherent and fragmented statement. The content of the narrative may also be skewed towards threat-related information, with little information of non-threatening peripheral information. In addition, the effects of peritraumatic dissociation on trauma memory may be evidenced by inconsistent narratives over time. Prior to 1995 no empirical studies had specifically investigated the content and cohesiveness of trauma narratives and thus Foa et al. (1995) devised a system to qualitatively measure fragmentation and organisation of narratives. They used this system to explore trauma narratives in a sample of female sexual assault victims, investigating how narratives may change following treatment for PTSD. Their analysis showed that prior to treatment, rape narratives included significantly fewer thoughts/feelings (including organised and disorganised thoughts, desperate thoughts, unfinished thoughts and negative feelings), more references to actions/dialogues of both the victim and perpetrator and somewhat (although not significantly) increased fragmentation (including repetitions, unfinished thoughts and speech fillers).

Halligan, Michael, Clark and Ehlers (2003) investigated the influence of PTSD on trauma narratives, assessing participants at three and six months post trauma. They found a significant relationship between narrative disorganisation and PTSD symptom severity. Similarly, Jones et al. (2007) found that PTSD was related to reduced coherence, increased fragmentation, increased repetition and increased non-

consecutive chunks in trauma narratives of individuals following road-traffic accidents (RTA), when compared with RTA survivors who had not developed PTSD. They also found that narratives provided from the PTSD sample contained more direct references to dissociative experiences. These differences in narratives were still evident three months after the trauma.

Herlihy, Scragg and Turner (2002) investigated recall of traumatic events in refugees with and without PTSD. Specifically, they looked at inconsistent trauma-related information recalled in trauma narratives over time. Although inconsistencies between recalls were common, participants with severe PTSD demonstrated more discrepancies, especially when latency between the recall sessions was long. In addition, discrepancies were more likely to contain peripheral information, whereas central information was more likely to be recalled consistently over time. Southwick, Morgan, Nicolaou and Charney (1997) also demonstrated the inconsistency of trauma memories over time following combat-related traumatic events. They interviewed veterans involved in Operation Desert Storm about their combat related experiences one month after returning from war and again two years later. They found that 88% of their sample demonstrated changes in their memory for traumatic incidents, with 70% recalling additional incidents at the second interview which had not been recalled a month after the war. They also found a significant positive correlation between PTSD and changes in memory.

In addition to the evidence of PTSD and peritraumatic dissociation influencing content of trauma narratives, it has been suggested that rape memories in themselves are unique, with narratives of non-clinical rape victims displaying patterns of

impairment consistent with trauma narratives from people with PTSD. Tromp et al. (1995) investigated whether memories of rape were different from memories of other unpleasant events in a sample of employed women. They interviewed women from a non-clinical sample and asked them to recall the rape memory and rate it on various memory characteristics. If a woman had not experienced rape then she was instructed to choose another significant memory, rating it as pleasant or unpleasant as a function of emotional valence. The study showed that rape memories differed from other unpleasant memories in particular ways including: being less well remembered, difficult to recall in a meaningful order, less clear and vivid and containing less detail. However, as this study failed to include measures of PTSD symptomology or peritraumatic dissociation, it is probably premature to conclude that rape memories are intrinsically different to other trauma memories. However, given the high prevalence of PTSD in rape victims and the predictive power of peritraumatic dissociation in PTSD development, the above findings are strongly suggestive of the effects of peritraumatic dissociation on memory and rape narratives.

The findings from studies investigating the effects of peritraumatic dissociation and PTSD on trauma narratives suggest that the content of a rape victim's statement may contain references to specific cognitive, perceptual, emotional or behavioural experiences, may lack coherence and may be incomplete. In addition, during the legal process it would be common for a rape victim to give numerous accounts of the incident (e.g., her initial statement, statement for the prosecution and statement in the courtroom). Due to the lengthy process of trials in the UK, it is likely that these statements would be considerably separated in time. Therefore it is possible that just as in the study by Southwick and colleagues (1997), there will be discrepancies

between different versions of her statement, with new information added during subsequent recall.

#### *4.5.2 Effects of Posttraumatic Dissociation on Narrative Content and Style*

Dissociative experiences can continue after the trauma, and studies have suggested that posttraumatic dissociation is more common when emotional distress is high (Herlihy & Turner, 2007). Additionally, due to the nature of the traumatic memory, as conceptualised by Brewin et al.'s (1996) dual representation theory, it is likely that during deliberate recall, the individual may experience spontaneous reliving (flashbacks) of aspects of the event, accompanied by intense distress, resulting in dissociative experiences (Ehlers & Clark, 2000; Hellowell & Brewin, 2004). These flashbacks can be triggered by stimuli that were either semantically or temporally associated with the event including; physical sensory cues (e.g. objects, smells, sounds, particular words/tone of voice), emotional states (e.g. feeling trapped, feeling exposed) or internal cues (e.g. touch, arousal, proprioceptive feedback). It follows therefore that a woman may experience posttraumatic dissociation when giving a statement to police or in court, two potentially stressful and distressing events where many reminders of the trauma are present, thus affecting both the content and the emotional style of her statement.

##### *4.5.2.1 Content of Statement*

As with peritraumatic dissociation, posttraumatic dissociation may affect the content of the statement. During a flashback the individual often experiences the event as if it were happening in the present, with the same affect and emotional intensity experienced during the trauma (Ehlers and Clark, 2000). This may be evidenced



within the content of the statement by direct references to the individual's emotional state at the time of the trauma as well as sensory and perceptual experiences.

Hellawell and Brewin (2004) invited participants with diagnosed PTSD to write a narrative account of their trauma. Participants were then asked to identify which parts of the narrative had been written during flashbacks. On analysing the narrative they found that during flashbacks narratives contained increased references to death and dying, increased emotive words related to fear, helplessness and horror and increased words depicting sensory information. Similarly the intensity and vividness of intrusive memories may influence the temporal aspects of the trauma narrative, demonstrated by switching from past to present tense during recall. Evidence for this was also shown in Hellawell and Brewin's (2004) study where parts of the narrative written during flashbacks were associated with a significant increase in present-tense verbs.

Finally, due to the distressing and uncontrollable nature of flashbacks, individuals learn to avoid cues that trigger them. This avoidance may increase the fragmentation of the trauma narrative, with the individual avoiding recalling the most distressing parts of the trauma (Ehlers & Clark, 2000).

#### *4.5.2.2 Style of Statement.*

The consequences of posttraumatic dissociation are likely to affect the style of the trauma narrative. Posttraumatic dissociation can lead to emotional blunting, flat affect or detachment from other people and surroundings (Doyle & Thornton, 2002). Therefore, posttraumatic dissociation may be evidenced in the delivery of the

statement, with the individual displaying reduced affective expression, an impassive facial expression and/or reduced vocal range.

Hellawell and Brewin (2002) investigated the effect of flashbacks on a person's observable behaviour whilst writing a trauma narrative. The dual representation theory posits that SAM representations not only contain sensory information of the trauma, but also the person's emotional and body (autonomic and motor) responses. Therefore, they predicted that autonomic and motor behaviour would differ depending on whether information was recalled from the VAM or SAM system. They found that parts of the narrative recalled during flashbacks (evidence of SAM activation) were associated with significantly higher frequencies of overt behaviours including: movement (limb movement, hand tremor, moving about the room), stasis (limb rigidity, clenching/unclenching fists), involuntary vocalisations (groans, moans), respiration (swallows, sighs, gasping) autonomic nervous system activation and facial changes (perspiring, blushing, crying), visuomotor behaviours (looking around the room, closing eyes) and writer's block.

This finding suggests that the rape victim's presentation could change whilst she is giving her statement, with certain behaviours influenced by the nature of the trauma memory being recalled. Following rape, Petrak (2002b) suggests that it is common for victims to present with one of two distinct emotional styles. Around 50% of rape victims will present in a 'controlled' style, displaying minimal visible affect (e.g. masked emotion, flat speech and calm demeanour), whilst the rest will present with an 'expressed' style. Petrak (2002b) argues that the way a rape victim presents in the aftermath of rape, including whilst giving a statement, will impact on others'

reactions towards her. She claims that only an 'expressed' style (displaying overt signs of emotional distress) fits with commonly held stereotypes regarding response to a traumatic event and therefore variations in emotional display, particularly displays consistent with a dissociative state, will be viewed with suspicion. Reduced affective expression may lead observers to conclude that the person is unaffected emotionally by their reported experience; reduced distress whilst describing rape may suggest fabrication. In addition, some of the common behaviours of participants during recall of flashbacks cited by Hellowell and Brewin (2002) including blushing, increased perspiration and gaze aversion, are commonly understood by lay public as behavioural markers of deceit and confabulation (Akehurst, Kohnken, Vrij & Bull, 1996) and therefore may be erroneously used to judge credibility.

#### **4.6 Others' Perceptions of Dissociative Experiences**

The finding that traumatic memories are often incomplete contradicts the lay understanding of memory. A commonly held view is that all detail of a traumatic event would be remembered vividly and that recall would remain accurate in the long term. Herlihy and Turner (2007) suggest that this lay notion is commonly expressed in legal settings and may influence decisions about truthfulness of an account. They also suggest that the type of detail recalled may influence judgements of credibility. They suggest that narratives containing intact central information (e.g. I was raped) but reduced peripheral detail (e.g. what time it was, how long it went on for, what he was wearing) may be judged as fabricated. Masinda (2004) investigated the effect of memory impairment on outcome of Home Office Refugee Hearing decisions. He found that incomplete memory for specific events, contradictions around peripheral information and inconsistencies following repeated recall, all negatively impacted

judgements of credibility. Moreover, feminist critique of rape trials have suggested that one of the dominant tactics used by the defence is the use of repeated questioning in an attempt to confuse the witness about the sequence of events and thus contradict herself, reducing credibility (Murphy & Whitty, 2000).

The extent to which a woman resists an attacker has been cited as the primary factor in determining whether an assault is classed as rape and that jurors place great emphasis on resistance when judging guilt (Calhoun & Townsley, 1991). Wyer, Bodenhausen and Gorman (1985) investigated the influence of peritraumatic behaviour on judgements of credibility. They found that victims who did not actively resist during the rape were judged as more responsible for the rape, less harmed and less credible. This effect was greater for the male participants and for the rapes depicted as acquaintance, rather than stranger, rapes. McCaul, Veltum, Boyechko and Crawford (1990) also found that women who do not actively resist during a rape are blamed more than those who do and also are judged as deriving more sexual pleasure from the experience. From these findings it could be tentatively concluded that a woman who 'freezes' during a rape, consistent with peritraumatic dissociation, may be judged more negatively, particularly by male participants, than a woman who actively resists her attacker. Furthermore, these judgements may also be made by female participants in cases of acquaintance rape, leading to reduced perceived credibility. However, other studies report inconsistent findings, suggesting that the effect of resistance on judgements of credibility is not clear and requires further investigation (for a review see Pollard, 1992).

There have been several controlled studies investigating the influence of emotional style on perceived credibility. Kaufmann, Drevland, Wessel, Overskeid and Magnussen (2003) investigated the influence of displayed emotion on perceived credibility of rape victims. They prepared testimonies of an acquaintance rape scenario, which were then videotaped with an actress playing the role of the victim. The testimonies were acted in three emotional styles; 'congruent' (showing despair and distress), 'neutral' (flat affect, controlled) and 'incongruent' (positive and paradoxical emotion). Participants, all of whom were university students, watched one video and were asked to rate the credibility of the victim and her testimony. Displayed emotion was found to have a significant effect on credibility ratings, with the testimony rated most credible in the 'congruent' condition and perceived credibility reduced when the witness displayed neutral or incongruent emotions (Kaufmann et al., 2003). Thune-Ellefsen (2003; cited in Wessel, Drevland, Eilertsen and Magnussen, 2006) repeated the study with elderly participants producing results consistent with the above findings.

Interestingly, these results were not found when repeated with legal professionals. Wessel et al. (2006) attempted to replicate Kaufmann et al.'s (2003) study, using Norwegian judges as participants. They found that with this group all testimonies were deemed credible with no significant effect of displayed emotion on credibility ratings. It is suggested that these results could be explained by judges' increased experience, increased exposure to differing psychological reactions displayed by rape victims and professional training to focus on factual content of the statement.

These findings support the argument that the average layperson does not have an understanding of normal psychological reactions to rape. Specifically, the studies suggest that the general public are unaware of how dissociative experiences may manifest and how memory, behaviour and emotional expression may be influenced. It would appear that the general public are more biased by social stereotypes of how a rape victim should react and misunderstand how to judge deception using memory impairment and seemingly incongruent emotional expression as a way of judging both credibility and guilt.

## **5. SHAME**

### **5.1 Definitions**

The Oxford English Dictionary (2005) defines shame as “a feeling of humiliation or distress caused by the consciousness of wrong or foolish behaviour” (p.1322).

Scientific understanding of the construct has increased over the last 30 years through systematic research and theory development. Shame is thus currently conceptualised in two main ways; as a primary emotion or as a secondary emotion formed from a composite of other emotions (fear, anger, disgust), cognitions (about the self and others) and behaviours (Gilbert, 1998). The main property of shame (both as a primary and secondary emotion), differentiating it from other affective states, is that arousal of the affective and cognitive components of shame are predominantly negative, involuntary, intense, distressing and difficult to control (Gilbert 1998, Keltner & Harker, 1998). Moreover, the negative experience of shame compels the individual to withdraw, in an attempt to hide the ‘damaged’ self from the scrutiny of others (Lewis, 1998).

Tomkins (1963, cited in Gilbert 1998) argues that shame is an innate affective state which can be recognised, and differentiated from other affective states, by specific patterns of body posture and facial display observable from a young age. Within this conceptualisation, the experience of shame leads to specific physiological and behavioural responses. The experience of shame is linked to arousal of the parasympathetic nervous system, resulting in 'freeze' behaviours, including submissiveness and demobilization (Gilbert, 1998; Keltner & Harker, 1998). Common behavioural markers of shame include: gaze aversion, lowering of eyes/head, turning the face away from observers, attempting to hide the face, slumped body posture, low levels of expressive behaviour and reduced vocalisation (Gilbert, 1998; Keltner & Harker, 1998; Stone, 1992).

Whereas primary shame occurs during the 'shaming' event, secondary shame occurs in its aftermath following cognitive appraisal of the event, the individual's emotional and behavioural responses and perceived appraisal of others (Lee, Scragg and Turner, 2001). Gilbert (1998) further differentiates between internal and external shame. Internal shame relates to the self-evaluation of the subjective sense of self, with the individual appraising the situation or their responses as indicative of damage to their core self. Conversely, external shame focuses on the individual's appraisal of how the event and their responses may be perceived and judged by others and a fear that this will result in social evaluation of the self as unattractive, inadequate or devalued (Gilbert, 1998; Lee et al., 2001; Wilson, Drozdek & Turkovic, 2006). Therefore, self-consciousness and social comparison are salient cognitions within secondary shame.

## **5.2 Shame and Trauma**

There has been a recent increase in scientific interest into the relationship between shame and traumatic experiences and how the experience of shame may influence cognitive processing of the trauma and coping strategies (Gilbert, 1998).

Conceivably, shame could be experienced both peritraumatically and posttraumatically. Where shame is conceptualised as a primary emotional reaction to events that are intrinsically shaming, shame may be experienced peritraumatically and this experience may be influenced by trauma type. For example, traumatic events that are particularly associated with disempowerment, humiliation, intimacy and social taboo (e.g. sexual assault) may be more likely to trigger shame (Lee et al., 2001).

Posttraumatic shame is more likely to be evidenced by the conceptualisation of shame as a secondary emotion, activated by the individual attempting to understand the meaning and cause of the trauma through cognitive appraisal (Brewin et al., 1996; Lee et al., 2001). The individual may appraise the traumatic event as inherently damaging, permanently altering self-identity (internalised shame). Conversely, externalised shame may be experienced where the individual believes that the trauma or their actions during the event are being scrutinized and negatively judged by others, resulting in others' seeing them as inadequate, defective or devalued (Lee et al., 2001).

Secondary shame can also be triggered by the experience of PTSD symptoms, with the individual appraising their presence as indicative of weakness, defectiveness or worthy of social stigmatisation (Stone, 1992). The individual's idiosyncratic beliefs



around the meaning of PTSD symptomology, as well as contextual beliefs (relating to culture, gender, age and/or profession) about the traumatic event, PTSD symptomology and/or mental illness, will affect appraisals of the traumatic event, influencing the occurrence and magnitude of shame responses (Lee et al., 2001).

Vidal and Petrak (2007) investigated shame (characterological, behavioural and body shame) in a sample of women who had been sexually assaulted in adulthood. They found that up to 75% of the sample indicated feeling ashamed following the assault with feelings of shame more likely following acquaintance rape. Their findings suggest that the prevalence of shame following rape is high and that shame is significantly related to both non-disclosure and PTSD development.

### **5.3 Shame and PTSD**

Although not crucial for a diagnosis of PTSD, shame is included as an associated feature in the DSM-IV (American Psychiatric Association, 1994). Moreover, over the last 20 years scientific interest in the relationship between shame and PTSD has developed, with researchers investigating the role shame plays in the onset and course of PTSD.

A relationship between shame and PTSD in veterans has been established. Wong and Cook (1992) found that veterans with PTSD had higher rates of self-reported internalised shame, than veterans without PTSD who were suffering from other disorders, (depression and/or substance abuse). Leskela, Dieperink and Thuras (2002) also found a relationship between PTSD and shame in war veterans, claiming that shame-proneness is positively correlated with severity of PTSD symptomology.

Andrews, Brewin, Rose and Kirk (2000) investigated the predictive power of shame in the development of PTSD following violent crime (including physical and sexual assault), compared with anger (self-directed and other-directed) and childhood sexual abuse. They interviewed victims of violent crime within a month post-crime and again 6-months later. They found that both shame and other-directed anger independently predicted PTSD symptomology one month post-crime, however, only shame independently predicted PTSD symptomology six months after the crime. This suggests that shame influences both the onset and course of PTSD following violent crime. Interestingly, the two most common themes identified in the crime-related shame experiences were feeling ashamed about actions during the crime (that is, not doing anything to prevent or stop the crime, not able to defend oneself) and shame related to perceived judgements of others (looking bad to others).

#### **5.4 Effects of Shame on Statement**

Although there is literature investigating the influence of shame on initial disclosure of traumatic events and the role of shame and disclosure within the therapeutic relationship (Hook & Andrews, 2005; Swan & Andrews, 2003), literature examining the direct effect of shame on trauma narratives is sparse. Therefore, the current literature review includes studies which investigate the cognitive, emotional and behavioural markers of shame, and uses these studies to propose how rape narratives may be influenced.

It is plausible that whilst giving a statement, rape victims will experience both primary and secondary shame. During a trial it is common to be asked to give a detailed account of the event, and the social taboo surrounding talking about sexual

intercourse to others in general further exacerbated by the additional factors of disempowerment, helplessness and humiliation commonly experienced during rape, may make giving a statement an intrinsically shaming event, resulting in primary shame reactions. Furthermore, the presence of friends and/or family members in the court room may act as reminders of social/cultural contexts and reinforce the victim's belief that they did not uphold cultural values or failed to respond in an expected way, increasing humiliation and intensity of primary shame (Wilson et al., 2006). In addition, if the woman's cognitive appraisals of the rape, her behaviour and subsequent symptomology result in her feeling defective, self-conscious, or inadequate when compared to others, then she may also experience secondary shame whilst having to re-tell her story. Secondary shame may be further increased in a court room by the awareness that jury members are scrutinising her and her story to support judgements of credibility and decisions of guilt.

As previously mentioned, deliberate recall may trigger spontaneous reliving of aspects of the event, with the individual re-experiencing the emotions experienced peritraumatically, in both type and intensity (Hellowell & Brewin, 2004). If the woman experienced peritraumatic shame then it follows that she may experience strong feelings of shame during her statement, particularly in parts recalled during flashbacks, influencing both content and style. Effects of primary shame on the content of the statement could be evidenced by the woman making direct references to feelings of shame during the rape or descriptions of behaviours indicative of a primary shame response (e.g. "I felt so ashamed", "I felt so dirty", "I felt so small", "I couldn't do anything, it was if my body was frozen"; Wilson et al., 2006).

Experiencing shame is painful and aversive and therefore individuals are highly motivated to avoid potentially shaming situations (Brewin, 2001; Gilbert & McGuire, 1998; McDonald, 1998). This could result in rape victims being reluctant to disclose the rape at all or to give a statement, or in an increase in shame-avoidant behaviours (Gilbert, 1998), affecting both the content and style of the statement. Shame avoidance behaviours evident in the statement's content could include a description of a prolonged time delay between the rape occurring and disclosure, as well as reduced detail and gaps in the narrative, particularly in relation to aspects of the trauma the victim finds especially shaming or particularly likely to trigger shame-filled flashbacks (Ehlers & Clark, 2000; Wilson et al., 2006). The style of the statement could also be influenced by shame-avoidant behaviours in an attempt to withdraw from observers including gaze aversion, closed body-posture, attempting to hide the face from observers, and/or reluctance to speak (Gilbert, 1998; Keltner & Harker, 1998; Stone, 1992; Wilson et al., 2006). At their extremes, shame avoidant behaviours may also result in dissociative experiences, with Irwin (1998) suggesting a significant relationship between shame proneness and dissociative tendencies.

### **5.5 Others' Perceptions of Shame**

A literature search revealed a paucity of empirical studies directly investigating how observers perceive shame behaviours and how judgements of credibility are influenced by perceptions of shame. However, within the Social Psychology literature there are numerous studies investigating the cues individuals use to judge deception, some of which can be generalised to suggest how jurors might interpret statements of rape victims displaying shame behaviours.

Numerous studies suggest that the lay public are not accurate at detecting deceit, frequently using erroneous cues as evidence that someone is lying, based on lay understanding of 'body language'. Bond and DePaulo (2006) analysed the accuracy of judgements of deception from 206 published studies, citing a 54% average accuracy rate when attempting to distinguish truth from lies. This slightly better than chance accuracy rate is demonstrated both when participants judge strangers and when judging people they know, where familiarity of idiosyncratic non-verbal behaviours is assumed (Anderson, DePaulo, Ansfield, Tickle and Green, 1999).

In an attempt to understand why individuals have difficulty detecting deceit, Akehurst et al. (1996) investigated beliefs of laypersons and police officers regarding indicators of deception including facial behaviours, bodily behaviours, speech characteristics and statement content. They found that the majority of participants mistakenly attributed certain behaviours to lying which are actually behaviours utilised whilst telling the truth. Moreover, there was no difference between the number of errors made between the lay public and the police. Some of the items cited as indicative of deceit included: reduced eye-contact, blushing, postural shifts, longer speech latency, hesitation, higher pitched voice, increased arm/leg movements, tense facial expression, reduced detail and memory deficits. Although people use verbal (number of words, words used, length of sentences), vocal (pitch, pauses, volume) and non-verbal visual (eye-contact, facial expression, body movement, posture) cues to detect deceit, it appears that people, especially women, place more emphasis on non-verbal visual cues. However, Wiseman (1995) demonstrated that these cues actually decrease accuracy of deception detection. Critically, these findings suggest that some of the behavioural markers of shame; gaze avoidance, reduced verbal

communication and flat affect, are commonly assumed by both the lay public and some professionals to indicate deception.

Studies using mock jurors to assess credibility of an alleged victim have shown that eye-contact strongly influences jurors' perceptions of the witness. Helmsley and Doob (1978) demonstrated that perceived witness credibility was significantly reduced when eye-contact with the questioning attorney was avoided. Gilbert and McGuire (1998) suggest that typically women who avoid making eye-contact are judged as less honest than those who are able to hold their gaze with others. Conversely, Weir and Wrightsman (1990) found that when a witness was described as demonstrating 'passive' eye-contact towards the defendant, as opposed to 'staring' eye-contact, she was judged as more credible, although only by female participants. However, the cues in this study were manipulated within written vignettes and therefore it is argued that the generalisation of these findings to legal settings is limited. Furthermore, reference to non-verbal cues in this format may have increased the salience of these cues, thus reducing reliability.

When specifically investigating ability to detect shame, Izard (1971) found that people were reasonably accurate at recognising shame in others, citing a 64% accuracy rate. Keltner and Buswell (1996) also found that people were able to distinguish shame from other affective expressions, including embarrassment, anger and disgust. However, they noted that frequently shame was erroneously labelled as an expression of guilt. Bond and DePaulo (2006) suggest that there is a commonly held stereotype of a 'liar' as someone who is so ashamed of lying and nervous of being detected that they are unable to make eye-contact, fidget and can barely speak.

This assumes that even if individuals are able to accurately detect shame, if this is attributed to the victim's inner torment at lying in court rather than in relation to the rape itself, then perceived credibility may still be reduced. They describe a 'double standard' whereby if the consequences of not being believed are high, people are likely to ruminate over these consequences and their own credibility, becoming increasingly anxious and therefore beginning to match the liar stereotype, thus reducing perceived credibility. These findings have important implications for the influence of shame behaviours on rape victims' statements and judgements of credibility. Mistakenly perceiving shame behaviours as admissions of guilt, or as indication of inner anguish, could result in the victim being perceived as untrustworthy, reducing the perceived credibility of her statement.

## **6. SUMMARY AND CONCLUSIONS**

This literature review investigated PTSD following rape, particularly focusing on how symptoms may affect perceived credibility of a rape victim's statement. This focus arose in response to recent UK Government initiatives to address the low conviction rate in rape cases, specifically the proposed introduction of expert witness information to inform juries of the psychological impact of rape. Informed by the literature, the review aimed to identify whether there is an argument for specialist expert information, as well as identifying any particularly pertinent psychological sequelae which should be addressed. It thus examined studies of common psychological sequelae of rape and how these symptoms may impact rape narratives, extrapolating these findings to suggest how a rape victim's statement may be influenced. The review then examined how the general public understands these symptoms, how trauma narratives are perceived and finally whether these symptoms

influence judgements of credibility. The conclusions made from the literature review will be summarised below and clinical implications, gaps in the literature and suggestions for further research highlighted.

The literature regarding sexual violence indicated that the lifetime prevalence of rape in the UK is high, with an estimated 5% of women raped at least once in their lifetime. The majority of rapes are committed by an acquaintance and the proportion resulting in conviction is low (5.3%). The literature provided consensus that numerous psychological sequelae follow rape, resulting in cognitive, affective and emotional symptomology. Although it was not clear from the literature whether severity of sequelae differs between stranger and acquaintance rape, it is accepted that victims of acquaintance rape are likely to delay reporting and seeking treatment. Research investigating patterns of psychological symptoms following rape have consistently demonstrated a strong association between rape and the development of PTSD, with suggestions that 47% of women will meet the diagnostic criteria of PTSD 3-4 months following rape. From these findings it follows that a substantial proportion of women reporting rape to the police may display symptoms consistent with PTSD and that these symptoms may impact on aspects of the legal process, including initial statements and behaviour in court.

Empirical research demonstrated that numerous factors influence attitudes towards rape victims, however literature specifically investigating common understanding of the psychological impact of rape was sparse. The most recent empirical study showed that the general public are unaware of common reactions of rape victims and concluded that the psychological impact of rape is not well understood. However,



this study did not include recent developments in scientific understanding of the common psychological sequelae of rape, including PTSD, and no further research has been completed to date. This is a pertinent gap in the literature and it is suggested that research specifically focusing on the general public's understanding of the sequelae of rape is necessary. Whilst research involving actual jurors is legally precluded, studies involving members of the public eligible for jury service or incorporating mock-jury methodology could be used, increasing ecological validity. This research would not only indicate whether the psychological impact of rape is understood by potential jurors, but also whether psychological reactions, consistent with PTSD symptomology, influence judgements of credibility.

This review revealed growing scientific interest in the phenomena of dissociation and its influence on both peritraumatic and posttraumatic behaviour. Peritraumatic dissociation is cited as one of the strongest predictors of PTSD development and posttraumatic dissociative experiences are commonly described by rape victims. The literature suggested that the cognitive, emotional and behavioural markers of dissociation influence rape narratives, in both content and style. Peritraumatic dissociation may be evidenced by descriptions of perceptual, cognitive or behavioural responses during the rape, as well as incoherent, inconsistent, fragmented and disorganised narratives. Posttraumatic dissociation may influence the semantic and temporal aspects of the trauma narrative, as well as the emotional presentation of the rape victim. Findings suggest that a statement from a woman who has developed PTSD following rape may be incomplete, inconsistent and incoherent, and may describe passive peritraumatic behaviour. In addition, whilst giving the statement the woman may appear calm, detached and impassive.

No empirical studies were found which investigated how dissociative experiences are understood by the general public, although some researchers claim that variations in memory and emotional display, consistent with dissociation, do not match commonly held stereotypes regarding responses to traumatic events and therefore are erroneously perceived as suggestive of fabrication and deception. The literature provided some evidence of this in that incomplete trauma memories, inconsistency of recall of peripheral detail and flat/controlled affective expression, all reduced perceived credibility. These findings suggest that the general public do not understand how dissociative experiences may influence rape narratives and that the effects of dissociation are sometimes interpreted as signs of deception. However, further research into this area is necessary to specifically investigate potential jurors' understanding of the relationship between dissociation and trauma and how dissociative experiences may manifest. Moreover, mock-jury studies could be used to investigate whether the cognitive, affective and behavioural markers of dissociation influence judgements of credibility.

This literature review also highlighted a developing interest in the relationship between trauma and shame, with shame implicated in the development and severity of PTSD symptomology following rape. A rape victim may experience primary and secondary shame, both during and after the rape, affecting both the content and style of her statement. The effect of shame on the statement's content could be evidenced by descriptions of shame-related cognitions, affective states, fragmentation or behaviours during the rape. The victim's delivery style could also be influenced by shame-avoidant behaviours, affecting facial expression, posture and speech. These findings suggest that the statement of a woman who has developed PTSD following

rape may include descriptions of shame-related cognitions and affect, a passive ('frozen') peritraumatic response and fragmentation or reduced detail around particularly shaming aspects (e.g. the sexual act). In addition, the woman may display shame avoidant behaviours including reduced eye-contact, blushing, closed posture, turning the face from observers and quiet/hesitant vocalisation.

There was a paucity of literature investigating common understanding of shame and how shame and shame-avoidant behaviours may influence rape narratives. There was evidence that generally people are poor at judging deception, incorrectly labelling specific verbal and non-verbal cues as evidence of deceit. Importantly it was suggested that some of the behavioural markers of shame such as gaze avoidance, flat affect, reduced vocalisation and passive peritraumatic responses, are commonly understood as signs of deception, therefore reducing perceived credibility. These findings suggest limited understanding of the relationship between shame and trauma and how shame may present. Further research is necessary to specifically investigate common understanding of shame and how cognitions, behaviours and emotional expression may be influenced. Mock-jury studies could also be used to investigate the impact of shame on judgements of credibility in rape trials. Moreover, it would be interesting to investigate potential jurors' understanding of the epidemiology and function of shame as previous research suggests that shame, even if correctly identified, may be interpreted as an admission of guilt or arising from the internal anguish of lying.

In conclusion, the literature review indicates that the relationship between rape and developing PTSD is high, with rape victims commonly experiencing psychological,

affective and behavioural symptoms, consistent with this diagnosis. It is also clear that many of the psychological sequelae, evidenced by cognitive, affective and behavioural markers, may impact on both the content and style of rape narratives. The effects of these sequelae do not appear to be clearly understood by the general public and may negatively impact on judgements of credibility. Therefore, the literature review adds some support to the argument that allowing jury members to make decisions of witness credibility in rape trials without adequate knowledge of the psychological impact of rape may be partially responsible for the low conviction rates. Introducing expert witness information, explaining common psychological reactions and how they may influence the content, consistency and coherence of the witness' statement, as well as informing jurors about common peritraumatic and posttraumatic behaviour, could increase trial fairness and increase conviction rates. However, due to the limited research in this area, additional empirical research, using mock-jury methodology, is required to further investigate juror understanding of psychological reactions following rape, how PTSD symptomology influences perceived credibility and the impact of expert witness information on jurors' decision making processes.

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## **PART 2: EMPIRICAL PAPER**

### **A Study of the General Public's Understanding of Reactions to Rape, with Implications for the Judicial System.**



## **ABSTRACT**

Currently UK law assumes that psychological sequelae of rape are within the realm of public understanding. Contesting this, the current study aimed to discover whether behavioural and emotional manifestations of dissociation and shame, common features of Posttraumatic Stress Disorder, influenced jurors' perceptions. Specifically, it investigated whether posttraumatic emotional expression (shame vs. not shamed), memory of the event (coherent vs. incoherent) and peritraumatic resistance (fight vs. freeze) influenced judgments of witness credibility and defendant guilt. Each bi-level independent variable was factorially crossed to produce eight video-vignettes performed by a professional actor. Participants were 124 members of the UK jury-eligible public. The results provided evidence that descriptions of passive peritraumatic resistance significantly reduced credibility ratings and preliminary evidence of the influence of emotional expression and incoherence on judgements. Clinical implications, including relevance to the proposed Government initiative to introduce expert information into rape trials, are discussed.

## **1. INTRODUCTION**

### **1.1 Rape and Current Legislation**

There is a high prevalence of rape in the UK although this is neither reflected in the number of rapes reported to the police nor in the number of legal trials resulting in conviction. The British Crime Survey (BCS; 2004/2005, cited in Finney, 2006) estimates that 7% of women (aged between 16-59) are raped in their lifetime, 89% by a known assailant. The BCS also indicates that rape is one of the least-reported violent crimes, with only an estimated 15% reported to the police (BCS, 2001, cited in Office for Criminal Justice Reform, 2006). Although reporting has increased over the years, possibly attributable to Government initiatives since the 1980s to improve initial police contact and support offered to victims, there are still a number of factors cited by rape victims as negatively impacting reporting. These include self-blame, shame, fear of not being believed or being negatively judged by others and/or fear of being re-traumatised by the legal process (Burgess & Holmstrom, 1974, cited in Garrison, 2000; Office for Criminal Justice Reform, 2006; Williams, 1984).

The type of rape most likely to be reported is that which depicts a 'classic rape' situation, where the victim is raped by a stranger in a deserted place, the attack is sudden and violent and the perpetrator uses enough force to physically injure the victim (Weis & Borges, 1973; Williams, 1984). Brown and King (1998) and Temkin (1999) have also demonstrated that victims of 'stranger-rape' experience more empathic reactions from police on initial reporting and rate the following legal process as more positive than those raped by an acquaintance.

In the UK the proportion of reported rapes resulting in conviction has steadily decreased and currently only 5.3% (1 in 20) of rapes reported to police lead to conviction (Office for Criminal Justice Reform, 2006). It is acknowledged that attrition rates in the early stages of the legal process, before referral to Crown Prosecution Services, are common. However, of the cases tried, only 28% result in conviction of the defendant, with conviction more likely in 'classic rape' scenarios where there is physical and/or forensic evidence (Office for Criminal Justice Reform, 2006).

These figures have prompted the UK government to introduce a National Action Plan on sexual violence to address the low conviction rate, with proposed interventions focussed on legal proceedings within the courtroom. In cases where the assailant is known to the victim, there is no physical or forensic evidence, with one person's word against the other, it is difficult for members of the jury to establish guilt beyond reasonable doubt (Office for Criminal Justice Reform, 2006). It is argued that when presented with conflicting stories with no tangible evidence members of the jury may focus their attention on information available from the witness's<sup>1</sup> statement including: descriptions of behaviour before, during and after the rape, coherence of the statement and its delivery (memory of events, emotional expression and other non-verbal cues). Moreover, it is suggested that jury members are actively directed towards descriptions of 'unusual behaviour', incomplete memory, confusion, errors or discrepancies by the Defence in an attempt to question the victim's reliability and reduce perceived credibility (Herlihy & Turner, 2007; Murphy & Whitty, 2000).

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<sup>1</sup> The term 'witness' is used in this study instead of 'victim' to denote a woman, in a court setting, who claims to have been raped.

Studies have also demonstrated that perceptions of rape victims are strongly influenced by 'rape myths'; "*prejudicial, stereotyped, or false beliefs about rape, rape victims and rapists*" (Burt, 1980, p.217). Lonsway and Fitzgerald (1995) suggest that false beliefs about rape are pervasive in society, held by men and women, to deny or justify sexual violence. They claim that rape myths affect all areas of the rape construct: victim's behaviour before, during and after the rape, definitions of rape and issues of consent, male intent, victim desire, false charges and trivialisation/denial of the act. In addition, they not only impact others' attitudes towards rape victims but also on the victim herself, affecting her<sup>2</sup> own interpretation of the event, increasing distress and influencing reporting to police and treatment outcome (Edward & Macleod, 1999). It is suggested that activation of these stereotypes and attitudes is automatic and once activated can unconsciously influence judgements of credibility and blame, particularly if the victim's behaviour or the circumstances of the rape do not fit with these stereotyped beliefs (Brekke & Borgida, 1998).

Historically, in UK law it has been assumed that understanding of reactions to rape is within the realm of public knowledge and experience and therefore the Prosecution is neither able to further educate the jury about the sequelae of rape nor dispel any rape myths. However, it has recently been suggested that the general public may not fully understand common reactions of rape victims and that decisions of witness credibility could be further biased by acceptance of rape myths (Office for Criminal Justice Reform, 2006; Petrak, 2002a, Rogers, 2002). Consequently, a proposed

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<sup>2</sup> It is acknowledged that rape can also be perpetrated against men. However, the prevalence of rape for women is significantly higher than for men and perpetrators are predominantly male (Rozee & Koss, 2001). Therefore, this study uses the descriptor 'she' when referring to victims and 'he' when referring to perpetrators.

Government initiative in the National Action Plan on sexual violence is the incorporation of expert witness information into court proceedings specifically to educate jurors about the psychological reactions to rape which might influence the consistency and coherence of the witness's statement and behaviour during and after the rape. Additionally, an expert witness could challenge common rape myths and indicate how these assumptions might influence decisions of credibility, especially if the witness's statement includes information inconsistent with these beliefs (Office for Criminal Justice Reform, 2006). Inclusion of expert information may be particularly important in rape trials which do not fit the 'classic rape' scenario, aiming to make trials of this type more fair and potentially increasing successful convictions.

## **1.2 Posttraumatic Stress Disorder and Rape**

There is increasing evidence that the psychological sequelae of rape lead to certain cognitive, affective and behavioural changes (Doyle & Thornton, 2002; Gidycz & Koss, 1991; Mandoki & Burkhart, 1991; Parrot, 1991). Burgess and Holstrom (1974, cited in Garrison, 2000) first coined Rape Trauma Syndrome (RTS) as a framework to help explain clusters of psychological symptoms commonly seen following rape and to inform treatment. With the introduction of Posttraumatic Stress Disorder (PTSD) into the Diagnostic and Statistical Manual of Mental disorders (DSM) it was discovered that the diagnostic criteria for PTSD and the symptoms indicated in RTS significantly overlapped, with Bownes, O'Gorman and Sayers (1991) reporting that 75% of their sample of women with RTS also met the diagnostic criteria for PTSD.

The lifetime prevalence of PTSD is between 1-14% and to meet the diagnostic criteria an individual must have experienced a traumatic event where there is actual or perceived death, serious injury or threat to integrity of self or others and, as a consequence, have experienced extreme fear, helplessness and/or horror (American Psychiatric Association, 1994). Symptoms of PTSD necessary for diagnosis include re-experiencing the traumatic event (e.g. intrusive images, flashbacks and/or nightmares); avoidance of trauma-related stimuli and increased arousal (e.g. sleep disturbance, difficulty concentrating, anger, exaggerated startle response). These symptoms must persist for more than a month and result in significant distress and/or impairment in functioning (American Psychiatric Association, 1994).

Empirical studies reveal a strong relationship between PTSD and rape, with lifetime prevalence of PTSD following rape estimated between 46-95% (Faravelli, Giugni, Salvatori & Ricca, 2004; Kessler, Sonnega, Bromet, Hughes & Nelson, 1995; Kilpatrick, Saunders, Veronen, Best & Von, 1987; Rothbaum, Foa, Riggs, Murdock & Walsh, 1992). Importantly, Rothbaum et al. (1992) demonstrated PTSD symptoms in rape victims frequently persist, with 47% of their sample continuing to meet diagnostic criteria three to four months following the rape. In addition, they found that if symptoms had not significantly reduced one month following the rape then they were unlikely to spontaneously remit. The most common symptoms experienced by over 80% of their sample included increased arousal and startle responses, deficits in concentration and memory, fear, dissociative experiences, avoidance and re-experiencing symptoms (including flashbacks). Due to the increased prevalence of PTSD following rape and the findings that these symptoms often persist, it is likely that a large proportion of women who are raped will develop PTSD with persistent

symptoms, potentially affecting initial reporting to the police, statement(s) and behaviour in court.

### **1.3 Dissociation and Rape**

Research into the epidemiology of PTSD indicates that peritraumatic dissociation is strongly predictive of PTSD development (Birmes, Brunet, Carreras, Ducasse, Charlet, Lauque, Sztulman & Schmitt, 2003; Breh & Siedler, 2007; Marmar, Weiss, Schlenger, Fairbank, Jordon, Kulka & Hough, 1994; Ozer, Best, Lipsey & Weiss, 2003) and subsequent symptom severity (Bremner, Southwick, Brett, Fontana, Rosenheck & Charney, 1992). Peritraumatic dissociation acts as a protective mechanism, enabling the individual to cognitively disengage from threatening stimuli (Marshall & Schnell, 2002; Yates & Nasby, 1993). Individuals who have experienced peritraumatic dissociation describe perceptual alterations of person, place and time including: confusion, disorientation, detachment from others and their surroundings, depersonalisation, emotional numbing and memory impairment (American Psychiatric Association, 1994; Breh & Seidler, 2007; Bryant, 2007). Importantly, research has demonstrated that peritraumatic dissociation disrupts the encoding, storage and retrieval of the trauma memory (Brewin, 2001; van der Kolk & Fisler, 1995; Mechanic, Resick & Griffin, 1998). This leads to fragmentation of the stored trauma memory, resulting in amnesic memory impairment, as well as spontaneous intense and intrusive memories for aspects of the trauma, often experienced as 'flashbacks'.<sup>3</sup>

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<sup>3</sup> See Brewin, Dalgleish & Joseph (1996) for a review of dual representation theory.

Moreover, individuals may continue to report dissociative experiences following the trauma. Posttraumatic dissociation is conceptualised as a learnt defence, with the individual learning to dissociate in response to threatening stimuli (Yates & Nasby, 1993). Investigating dissociative experiences following rape, Dancu, Riggs, Hearst-Ikeda, Shoyer and Foa (1996) found that not only are dissociative experiences more commonly experienced by rape victims than by victims of other non-sexual assaults, but that these experiences frequently persist, with substantive levels of posttraumatic dissociation evident three months after the rape.

These dissociative experiences may influence cognitive, affective and behavioural processes, both during and after the traumatic event, and thus could potentially impact legal proceedings. The witness's statement could be influenced by the effect of peritraumatic dissociation on memory processes, evidenced by an incomplete, incoherent and fragmented statement. Koss (1996, cited in Garrison, 2000) and Doyle and Thornton (2002) describe common difficulties in recall experienced by rape victims including reduced vividness, amnesic gaps and difficulty recalling memories in a meaningful order. Similarly, strong relationships between disorganised, fragmented and incoherent trauma narratives and PTSD development (Jones, Harvey and Brewin, 2007) and symptom severity (Halligan, Michael, Clark and Ehlers, 2003) have been recorded. Rothbaum et al. (1992) demonstrated that two to three months after the trauma 80% of rape victims reported memory deficits and Mechanic et al. (1998) suggest that memory recall is more impaired following acquaintance rape. These memory deficits could also lead to changes in statements over time and inconsistencies on repeated recall (Herlihy, Scragg & Turner, 2002; Southwick, Morgan, Nicolaou & Charney, 1997).



Peritraumatic dissociation may also influence the content of a statement in relation to descriptions of peritraumatic behaviour, with the witness describing feeling cognitively detached from the situation and unable to respond actively. Foa, Riggs, Massie and Yarczower (1995) suggest that cognitive detachment and emotional numbing may present behaviourally as a passive or immobile peritraumatic response. Indeed, empirical studies of victim behaviour during rape have shown that women frequently display a passive/freeze peritraumatic response and that these women often go on to develop PTSD (Kaysen, Morris, Rizvi and Resick, 2005).

Posttraumatic dissociation is likely to be triggered during stressful events, where perceived threat is increased and emotional distress is heightened (Herlihy & Turner, 2007). Therefore, it is possible that a witness prone to posttraumatic dissociation could dissociate during her statement, affecting both verbal and non-verbal behaviour. Posttraumatic dissociation can lead to flattened affect and detachment from the immediate environment, negatively impacting on the witness's emotional expression, eye contact, facial expressions and vocal range (Doyle & Thornton, 2002; Hellowell and Brewin, 2002). In support of this, Petrak (2002b) researched common emotional expressions of rape victims, finding that a 'controlled' presentation is common, with 50% of victims' displaying a limited range of affect, impassive facial expression, flat speech and a calm demeanour.

#### **1.4 Shame and PTSD**

Scientific interest into the relationship between shame and PTSD has increased, with research suggesting that shame may influence symptomology, cognitive processing of the trauma, coping strategies and treatment outcome (Gilbert, 1998; Lee, Scragg &

Turner, 2001; Wilson, Drozdek & Turkovic, 2006). Although not necessary for diagnosis, shame is included in the DSM-IV as an associated feature of PTSD (American Psychiatric Association, 1994), with empirical studies demonstrating that shame influences the onset and course of PTSD (Andrews, Brewin, Rose and Kirk, 2000; Wong & Cook, 1992) as well as increasing symptom severity (Leskela, Diepernick & Thuras, 2002).

Shame can be conceptualised as both a primary (innate affective state) and secondary (composite of emotions, cognitions and behaviours) emotion (Gilbert, 1998).

Irrespective of its conceptualisation, shame is a highly aversive affective state compelling the individual to avoid experiencing it or, once activated, to withdraw from public scrutiny (Gilbert, 1998; Lewis, 1998). Social and cultural attitudes towards speaking openly about sexual intercourse, the association of rape with disempowerment, humiliation and social taboo and the victim's cognitive appraisal of the rape, her behaviour and comparison with social and cultural norms, may mean that a rape victim could experience both primary and secondary shame whilst giving a statement, further impacted by her awareness of scrutiny from the jury (Gilbert, 1998; Lee et al., 2001; Wilson et al., 2006).

Experiencing shame leads to activation of the parasympathetic nervous system resulting in submissiveness and 'freeze' behaviours (Gilbert, 1998; Keltner & Harker, 1998). These behaviours could potentially affect the style of the witness statement, evidenced by gaze aversion, lowering of the head, attempting to hide the face from others, blushing, low levels of expressive behaviour and reduced vocalisation (Gilbert, 1998; Keltner & Harker, 1998; Stone, 1992). In addition, due

to the aversive nature of shame, motivation to avoid experiencing it is high (Brewin, 2001; Gilbert & McGuire, 1998; MacDonald, 1998). Therefore, the witness may display a number of shame-avoidant behaviours such as gaps in the narrative (particularly around aspects of the event that are highly distressing or intrinsically shaming), longer speech latency and/or reduced speech volume, reduced eye-contact and closed body posture (Gilbert, 1998; Keltner & Harker, 1998; Stone, 1992; Wilson et al., 2006).

### **1.5 Public Understanding of the Psychological Impact of Rape**

It is apparent that the psychological sequelae of rape, specifically PTSD and the related cognitive, behavioural and affective manifestations of dissociation and shame, could affect both the content and style of the witness's statement in a rape trial. Currently in UK law it is assumed that these sequelae are within the realm of general public knowledge and that potential jurors thus understand not only common reactions to rape but also how such manifestations may impact a statement.

However, there is little empirical evidence to support this assumption.

Studies have investigated general understanding of the epidemiology of rape (Johnson & Blazer, 1980; cited in Frazier & Borgida, 1988) and how attitudes are influenced by victim characteristics (e.g. gender, race, sexuality, personality, intoxication, clothing, behaviour; for a review see Whatley, 1996) and type of rape (e.g. stranger vs. acquaintance rape and level of physical violence; Frese, Moya & Megias, 2004; George & Schneider, 2002; Schneider, Soh-Chiew Ee & Aaronson, 1994). However, there is a paucity of studies directly investigating general

understanding of the impact of rape and whether symptoms of PTSD influence judgements of credibility.

Frazier and Borgida (1988) devised a questionnaire to measure understanding of the epidemiology of rape and its impact and demonstrated limited understanding of RTS in a sample of 'non-experts'. They concluded that the general public were unaware of common reactions of rape victims and used these findings as support for the introduction of expert witness information into legal proceedings. However, this study used a homogenous sample, unrepresentative of heterogeneous jury groups and although the questionnaire was grounded in literature of the time, it did not reflect recent scientific understanding of common reactions to rape, including PTSD symptomology. In addition, it was not determined whether limited understanding of RTS impacted on judgements of credibility. Because of these methodological limitations it is argued that this study offers only tentative support for current UK Government initiatives and thus further research in this area is required.

Empirical studies have investigated how judgements of the witness and defendant are influenced by various factors, including some of the manifestations of dissociation and shame. Masinda (2004) found that memory impairment for specific aspects of the trauma, conflicting information and inconsistencies over repeated recall negatively impacted judgements of credibility in Home Office Refugee hearings.

Levels of peritraumatic resistance during rape have been found to strongly influence judgements of blame, credibility and guilt, with women who display passive/freeze behaviours rated as more blameworthy and less credible than those who actively

resist their attacker (Calhoun & Townsley, 1991; McCaul, Veltum, Boyechko and Crawford, 1990; Wyer, Bodenhausen and Gorman, 1985). Moreover, Wyer et al (1985) found that the effect of peritraumatic resistance on judgements was greater for rapes committed by someone known to the victim. However, Pollard (1992) cites studies which report conflicting findings and thus concludes that the effect of resistance on judgements of credibility is inconclusive and requires further investigation.

Kaufmann, Drevland, Wessel, Overskeid and Magnussen (2003) and Thune-Ellefsen, (2003, cited in Wessel, Drevland, Eilertson & Magnussen, 2006) investigated the influence of displayed emotion on credibility judgements, demonstrating that emotional expression significantly altered judgements of credibility, with testimonies delivered in a neutral or incongruent (positive and paradoxical emotions) emotional style perceived as less credible than those delivered in a congruent style (showing despair and distress).

Izard (1971) reports that the accuracy rate of recognising shame in others is better than chance (64%). However, it has also been shown that shame is often erroneously perceived as an expression of guilt (Bond and DePaulo, 2006; Keltner and Buswell, 1996). Studies investigating the effect of eye-contact on perceptions of the witness have demonstrated that gaze-aversion strongly influences judgements of witness honesty (Gilbert and McGuire, 1998) and credibility (Helmsley and Doob, 1978). Finally, studies investigating both verbal and nonverbal behaviours thought to detect deceit in others suggest that many of the factors commonly considered to indicate deception include some of behavioural manifestations of shame and dissociation

including: reduced eye-contact, blushing, longer speech latency, hesitation, flat affect, reduced detail and memory deficits (Akehurst, Kohnken, Vrij & Bull, 1996).

### **1.6 Rationale for the Current Study**

Taken together, the findings from previous research suggest that the general public may not have sound understanding of common reactions to rape as assumed in UK law. Moreover, they suggest that some of the emotional and behavioural sequelae consistent with PTSD, specifically related to dissociation and shame and particularly those which conflict with stereotyped beliefs about rape and rape victims, may be erroneously seen as markers of deceit and deception, negatively impacting judgements of witness credibility. To date there is no research which systematically investigates the impact of the emotional and behavioural manifestations of dissociation and shame on jury members' decisions of witness credibility and defendant guilt.

Research using real jury members is prohibited under section eight of the Contempt of Court Act (1981). However, it is possible to emulate aspects of a court trial using mock-jury methodology and jury-eligible participants to access information on potential juror behaviour (Diamond, 1997). Therefore, the current study aimed to determine whether symptomology consistent with a PTSD reaction to rape, influences judgments of witness credibility. Specifically, it aimed to investigate how members of the public interpret post-rape emotional expression (shame vs. not-shamed), memory of the event (coherent recollection vs. incoherent recollection) and peritraumatic resistance (active 'fight' response vs. passive 'freeze' response), and

whether manipulations of these variables affected judgements of witness credibility and defendant guilt.

It is hypothesised that:

- The witness will be judged less credible and the defendant less guilty if the witness appears shamed whilst giving her statement than if she does not appear shamed.
- The witness will be judged less credible and the defendant less guilty if the witness has an incomplete memory of the event than if she demonstrates complete recollection.
- The witness will be judged less credible and the defendant less guilty if the witness responded passively during the event than if she responded actively.

## **2. METHODS**

### **2.1 Participants and Design**

Participants were members of the general public eligible for jury service. Inclusion criteria were being on the UK electoral role, aged between 18-70 years and literate in English. Participants were recruited via advertisements in local businesses, community and charity organisations, University College London and through subsequent 'snowballing' (Barker, Pistrang & Elliot, 2002).

A between subjects design was used to compare the responses of individuals randomly allocated to one of eight experimental conditions. These eight conditions were generated from two factors in each of three independent variables: emotional expression whilst giving the statement (shamed vs. not shamed), memory of the event (coherent vs. incoherent) and peritraumatic resistance ('fight' response vs. 'freeze' response). Each of the bi-level independent variables was factorially crossed, resulting in eight vignettes incorporating all combinations of the independent variables.

## **2.2 Power Calculation**

The only source of information for estimating effect size is Kaufmann et al. (2003) as some of their measures are replicated in the current study. Unfortunately, the authors provide incomplete information regarding group means, group numbers and ANOVA results. However, using the procedure suggested by Hullett and Levine (2003) it was possible to calculate an estimate of the non-partialled effect size for the relevant variable, emotional expression. It was important to calculate the non-partialled effect size as the other variable in Kaufmann et al.'s (2003) analysis is irrelevant to the current study. According to their results, non-partialled eta-squared for the main effect of emotional expression = 0.07 from which an effect size of  $r = 0.27$  is calculated, conventionally equivalent to a medium effect. Sample size estimations were then performed using the Gpower software (Faul, Erdfelder, Lang & Buchner, 2007), suggesting that for a main effect with 2 levels with a medium effect size, in a design with 8 groups in a total (2x2x2), to achieve 80% power at an alpha level of 5%, a sample size of 110 was needed.



This approach was conservative; the partial eta-squared for emotional expression in Kaufmann et al.'s (2003) study is 0.93, a large effect size. However, given that the current design is very different and contains untested variables for which no power calculation is possible, it seems sensible to err on the side of caution, thus a relatively large sample size of 120 was used.

### **2.3 Ethical Considerations**

The study was approved by the UCL Research Ethics Committee (see Appendix A).

Due to the study's topic, it was acknowledged that some participants might find the video and the content of the questionnaires distressing. The researcher aimed to minimise the potential risk of participant distress in a number of ways. The information sheet explicitly stated that the study related to rape and involved material that some people may find distressing to ensure that participants were informed of this potential risk before agreeing to take part. As a Trainee Clinical Psychologist, the researcher was well practiced in supporting people to manage distress. She was present throughout the study and was available to offer support if a participant became distressed. She was also knowledgeable about local support agencies and was able to offer information when necessary. In addition, the information sheet included contact details for local Specialist Sexual Assault Services (e.g. the Haven) in London to allow participants to have contact details without having to disclose any history of sexual assault to the researcher.

Due to limited funding all participants were entered into a prize-draw to win a £25 store-voucher. There were six prize-draws, giving odds of 1: 20.

## **2.4 Materials**

Eight vignettes were prepared all describing the same rape scenario in which the witness and defendant are acquaintances (the defendant is a senior colleague of the witness), both attending a conference in a hotel. After dinner the witness invites the defendant into her hotel room, following his offer to help with some work. The rape occurs in the witness's hotel room. In all scenarios no alcohol has been consumed, there is no physical injury to either the witness or the defendant, there is no forensic evidence and reporting is delayed.

The sections of the vignettes detailing the rape are initially all similar, in that the witness initially rejects the defendant's advances. However, the vignettes differ in relation to the witness's response when the defendant approaches her physically, dependent on the level of the 'peritraumatic resistance' variable. In the 'fight' condition the witness describes actively resisting the defendant by shouting, wriggling, kicking out and attempting to push him off her. In the 'freeze' condition the witness describes a passive response to the defendant. Importantly, she describes wanting to actively resist but that she is unable to do so (see Appendix B for examples of vignettes highlighting the difference between the 'fight' and 'freeze' conditions).

The 'emotional expression' variable was predominantly manipulated in the style of the vignette. In the 'shamed' condition the witness displays shame-avoidant behaviours including: gaze aversion, closed body posture, bowed head, touching her face, longer speech latency and reduced speech volume. She also makes direct references to feeling shamed/embarrassed/humiliated and dirty during and after the

rape. In the 'not shamed' condition the witness does not display shame-avoidant behaviour and delivers the statement in a 'matter-of-fact' style.

The 'memory' variable was manipulated in the content of the vignette. In the 'coherent' condition the witness begins by alluding to a clear memory of events and is able to recall the entire event coherently in chronological order. In the 'incoherent' condition the witness begins by alluding to difficulty remembering aspects of the event and is unable to give a coherent account. She does not give a chronological account of the event and her delivery is slowed to suggest that recall is difficult. On occasion she explicitly states that she cannot remember details, however, all information is finally recalled to ensure consistency across vignettes.

The vignettes were developed through several stages, through consultation with Clinical Psychologists experienced in working with victims of trauma and rape who advised on the authenticity/plausibility of the transcripts. The final versions were then video recorded with a Clinical Psychologist playing the role of the witness and these videos were informally piloted to Clinical/ Forensic Psychologists and Trainee Clinical Psychologists, who commented on the plausibility of the scenario, as well as completing manipulation checks of the independent variables. Following feedback the transcripts were edited and videotaped with an actor playing the witness.

The professional actor employed was unlikely to be recognised by the general public. In each video only her face, torso and hands were visible and she was sitting in front of a blank wall. The background lighting and sound remain constant, as does the actor's clothes, makeup and hairstyle. During the statement the witness is prompted

to continue (e.g. *“what happened next?”*) by one of the female researchers. Her prompts are audible and the tone, pitch and volume of her voice remains constant across all videos. The identity of the prompter is not made explicit, however, she also sets the scene of the statement by saying; *“I would like you to begin by describing the events you allege took place on the 6<sup>th</sup> February 2007. Please can you talk through what happened, including the events leading up to and preceding the event, giving as much detail as possible. This statement will be video recorded for our records*

The duration of each recording was approximately 10minutes (Videos ranged from 7m39s-13m15s,  $M = 11m16s$ . This was because more time was required in the ‘incoherent’ memory conditions).

## **2.5 Procedure**

Participants were randomly allocated to the experimental conditions with the restriction of an approximately equal distribution of males and females in each condition. They were tested in mixed-gender groups, comprising 2-8 participants.

Prior to the study commencing participants were informed that they were to take part in a study investigating the general public’s understanding of reactions to rape and were given an information sheet detailing the background, purpose and procedure of the study (see Appendix C). After reading the information sheet, participants were invited to ask questions about the information provided. In addition, without explicitly stating as such, participants were led to believe that they were going to watch an actual video recording of a rape witness’s statement, where the witness had

been asked to give a free-recall account of the incident. The researcher explained that this was an account of an alleged rape and that further information about the case would be provided at the end of the study. Participants were also informed that there would be a full-debrief and they could withdraw at any time without giving a reason and without consequence. Participants then signed an informed consent form (see Appendix D).

Participants watched the video in silence and were then given the questionnaire measures. They were instructed to attempt to complete the questionnaires in relation to what they had just viewed rather than preconceived ideas about rape, rape victims and rapists. They were also instructed to refrain from conferring with fellow participants. The researcher was present throughout the entire procedure to answer any specific questions about the questionnaires and to ensure that participants did not discuss the content of the questionnaires or their answers with each other.

Once all questionnaires had been completed and collected by the researcher, participants were fully debriefed with information about the study's background and aims. Participants were also told that the video had depicted a hypothetical scenario portrayed by a professional actor and the reasons why deception had been necessary. Participants were invited to ask any questions about the study or comment on its design. Finally, the researcher requested that participants did not disclose the procedure of the study, its aims or the deception used, to others until completion of data collection.

## 2.6 Measures

(See Appendix E).<sup>4</sup>

### 2.6.1 *Response to the Witness*

The first part of this section featured manipulation checks of the independent variables. Participants were presented with 10-point visual analogue scales anchored by descriptors representing opposite ends of a continuum. Participants used these scales to indicate their opinion of the witness's appearance (not at all shamed – extremely ashamed), her memory of the event (very good/complete – very poor/incomplete) and her resistance during the event (not to resist at all – to resist very strongly).

The remaining questions related to perceptions of credibility, plausibility and honesty of the witness and her statement. Participants were presented with 10-point visual analogue scales again anchored with pairs of descriptors representing opposite ends of a continuum. Participants used these scales to indicate their overall opinion of the statement's credibility (not at all credible – extremely credible) and plausibility (not at all plausible – extremely plausible), as well as confidence in making a judgement about the event based on the statement (not at all confident – extremely confident). Participants also used these scales to indicate their overall opinion of the witness's credibility (not at all credible – extremely credible) and honesty (not at all honest – extremely honest), as well as confidence in making a judgement about the event based on the appearance of the witness (not at all confident – extremely confident).

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<sup>4</sup> Many of the measures used in the current study were adapted from Kaufmann et al. (2003).

To measure the extent to which participants saw the scenario as rape they were presented with a 10-point visual analogue scale to indicate the likelihood the witness voluntarily agreed to have sex with the man (not at all likely that she agreed – extremely likely that she agreed).

Finally, as a measure of how traumatic the participants rated the scenario, they were presented with a 10-point visual analogue scale to indicate how traumatic the experience must have been for the witness (not at all traumatic – extremely traumatic), as well as a 7-point scale indexing judged length of recovery (one day, one week, one month, six months, one year, several years, never recover completely).

#### *2.6.2 Information Important in Judging Witness Credibility*

Further questions related to which aspects of the statement participants used to judge credibility, pertaining to both content (circumstances of the event, woman's reactions to the man's advances, man's response to the woman's reactions, description of the intercourse, detail of the event) and style (facial expression, emotional expression, gaze, speech rate, voice, gestures, coherence, memory) of the statement. Participants were presented with 10-point visual analogue scales and asked to indicate how important the aforementioned aspects had been when judging credibility (not at all important – extremely important). They were also asked to indicate which aspect of the statement was most important for their judgements, content or style (only content – only style).

### *2.6.3 Response to the Defendant*

The final questions assessed whether the manipulated variables impacted on participants' beliefs and judgements about defendant guilt. Participants were asked to assume that they were on a jury and had been asked to vote on the question of guilt in a court trial. It was acknowledged that other pieces of information should be considered when deciding on a verdict but to give an opinion based purely on the statement they had seen. On ten-step percentage scales (0-100%) participants were asked to rate the likelihood they would judge the defendant guilty of rape, as well as the likelihood of a jury in a court trial judging the defendant guilty of rape. They were also requested to give their verdict (guilty or not guilty) in a forced-choice question.

The final question investigated the extent to which participants felt they had been given adequate information to make a decision, presented in a ten-step percentage scale (0% completely inadequate information – 100% completely adequate information).

### *2.6.4 Attitudes Towards Rape*

To indicate participants' general attitudes towards rape victims the Attitudes Towards Rape Victims Scale (ARVS; Ward, 1988) was used. The ARVS consists of 25 positively (8) and negatively (17) worded statements relating to attitudes towards rape victims including: blame, denigration, credibility, responsibility, deservingness and trivialisation. The ratings for each statement are added to obtain a total score, ranging between 0-100. Higher scores on the AVRS indicate more unfavourable attitudes towards rape victims (Ward, 1988). Participants were required to rate the



degree to which they agreed with each statement on 5-point Likert-type scales, ranging from 'disagree strongly' to 'agree strongly', with a neutral midpoint.

#### *2.6.5 Social Desirability*

Due to the study's topic and its between subjects design, it was felt important to measure participants' social desirability, as a desire to hold socially acceptable views could impact responses to the questionnaires. The original Marlowe-Crowne Social Desirability Scale (1960. cited in Reynolds, 1982) is a 33-item scale, utilising a true-false response format. However, Reynolds (1982) introduced a shorter 13-item form as a valid and reliable alternative measure of social desirability. As social desirability is not the primary construct under investigation in the current study, the short form was used. Participants were presented with 13 questions and asked to respond true or false. Scores for each question are summed with a higher overall score indicating greater socially desirable response tendencies.

### **2.7 Statistical Analyses**

Prior to analysis, data was checked to ensure that the assumptions of parametric tests were met (normal distribution and homogeneity of variance; Field, 2005). To check the distribution of scores, particular attention was paid to the values of skewness and kurtosis. Due to the relatively large sample size, data was considered to violate normality assumptions if the absolute z-score was greater than 1.96, significant at  $p < .05$  (Field, 2005). When data violated these assumptions, transformations were conducted in an attempt to remedy violations. If this did not significantly improve skewness or kurtosis (i.e.  $z > 1.96$ ), parametric tests were deemed inappropriate.

The majority of variables were significantly negatively skewed and transformations did not significantly improve distribution so non-parametric analyses were conducted.<sup>5</sup> When variables did not violate these assumptions, parametric analyses are reported.

### **3. RESULTS**

#### **3.1 Demographics**

The sample comprised 124 participants, 80 women (64.5%) and 44 men (35.5%), aged between 18 and 70 years ( $M = 37.2$  years;  $S.D = 15.9$  years). Eighty-one participants described their ethnicity as White British (65.3%), 3 Black African, 4 Black Caribbean, 9 Asian (Bangladeshi/Indian/Chinese), 20 White Other (including Irish) and 7 Mixed Race. Of the sample, 14 were unemployed or retired, 76 were currently employed and 24 were fulltime students. A further 10 participants indicated that they were part-time students and employed part-time. Sixty-nine participants were in a relationship (relationship/married), whilst 55 were single (single/divorced/widowed). Eighteen (14.5%) had participated in jury service.

#### **3.2 Group Homogeneity Analyses**

Due to the random allocation of participants into one of the eight vignette groups, analyses were conducted to see whether there were significant differences between the groups on a number of key variables including: age, gender, attitudes towards rape victims and social desirability. See Table 1 for participants' demographic

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<sup>5</sup> Although it is sometimes claimed that non-parametric tests have reduced power, increasing the likelihood of type-II error, this is only true if the data is normally distributed (Field, 2005).

information in each of the eight vignette groups. See Table 2 for participants' scores on the ARVS and social desirability scale.

Table 1: *Demographics of Participants in Each Vignette Group.*

| Variables                    | Vignette Group |               |               |               |               |               |               |               |
|------------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                              | 1              | 2             | 3             | 4             | 5             | 6             | 7             | 8             |
|                              | <i>N</i>       | <i>N</i>      | <i>N</i>      | <i>N</i>      | <i>N</i>      | <i>N</i>      | <i>N</i>      | <i>N</i>      |
| Participant N                | 15             | 15            | 16            | 18            | 15            | 15            | 15            | 15            |
| Age ( <i>M</i> , <i>SD</i> ) | 37.0,<br>16.0  | 37.6,<br>16.9 | 38.7,<br>15.7 | 35.8,<br>17.8 | 36.3,<br>11.6 | 35.3,<br>14.7 | 40.1,<br>16.7 | 37.6,<br>19.9 |
| Gender                       |                |               |               |               |               |               |               |               |
| Male/Female                  | 5/10           | 5/10          | 6/10          | 8/10          | 5/10          | 5/10          | 5/10          | 5/10          |
| Ethnicity                    |                |               |               |               |               |               |               |               |
| White British                | 11             | 9             | 9             | 15            | 9             | 10            | 6             | 12            |
| Black African                | 0              | 0             | 0             | 1             | 0             | 0             | 2             | 0             |
| Black Caribbean              | 0              | 0             | 1             | 0             | 2             | 0             | 0             | 1             |
| Asian                        | 2              | 1             | 3             | 1             | 0             | 1             | 0             | 1             |
| White other                  | 1              | 5             | 3             | 1             | 2             | 3             | 4             | 1             |
| Mixed race                   | 1              | 0             | 0             | 0             | 2             | 1             | 3             | 0             |
| Employment                   |                |               |               |               |               |               |               |               |
| Unemployed/retired           | 0              | 2             | 1             | 3             | 0             | 0             | 4             | 4             |
| Employed                     | 11             | 8             | 12            | 7             | 12            | 10            | 7             | 9             |
| Fulltime student             | 4              | 3             | 2             | 5             | 1             | 5             | 3             | 1             |
| Student/employed             | 0              | 2             | 1             | 3             | 2             | 0             | 1             | 1             |
| Marital status               |                |               |               |               |               |               |               |               |
| Relationship                 | 8              | 11            | 10            | 9             | 8             | 6             | 9             | 8             |
| Single                       | 7              | 4             | 6             | 9             | 7             | 9             | 6             | 7             |
| Jury service?                |                |               |               |               |               |               |               |               |
| Yes                          | 4              | 3             | 3             | 1             | 2             | 2             | 1             | 2             |

Note:

Vignette Group 1 = Fight/Not-shamed/Incoherent, Vignette Group 2 = Fight/Shamed/Incoherent, Vignette Group 3 = Freeze/Not-shamed/Incoherent, Vignette Group 4 = Freeze/Shamed/Incoherent, Vignette Group 5 = Freeze/Not-shamed/Coherent, Vignette Group 6 = Freeze/Shamed/Coherent, Vignette Group 7 = Fight/Not-shamed/Coherent, Vignette Group 8 = Fight/Shamed/Coherent.

Table 2: *Participants' ARVS Scores, Social Desirability Scores and Forced-Choice Verdict in Each Vignette Group.*

| Measures            | Vignette Group            |                           |                           |                           |                           |                           |                           |                           |
|---------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
|                     | 1                         | 2                         | 3                         | 4                         | 5                         | 6                         | 7                         | 8                         |
|                     | <i>M</i><br>( <i>SD</i> ) | <i>M</i><br>( <i>SD</i> ) | <i>M</i><br>( <i>SD</i> ) | <i>M</i><br>( <i>SD</i> ) | <i>M</i><br>( <i>SD</i> ) | <i>M</i><br>( <i>SD</i> ) | <i>M</i><br>( <i>SD</i> ) | <i>M</i><br>( <i>SD</i> ) |
| ARVS scores         | 15.0<br>(11.5)            | 19.8<br>(10.8)            | 16.4<br>(11.5)            | 18.8<br>(11.5)            | 17.5<br>(10.9)            | 18.5<br>(12.9)            | 20.1<br>(15.7)            | 17.3<br>(19.9)            |
| Social desirability | 7.00<br>(2.00)            | 6.67<br>(2.64)            | 7.31<br>(3.79)            | 5.61<br>(3.48)            | 5.40<br>(2.06)            | 6.27<br>(3.51)            | 6.53<br>(3.96)            | 5.60<br>(2.95)            |
| Verdict             | <i>N</i>                  | <i>N</i>                  | <i>N</i>                  | <i>N</i>                  | <i>N</i>                  | <i>N</i>                  | <i>N</i>                  | <i>N</i>                  |
| Guilty              | 13                        | 11                        | 12                        | 16                        | 12                        | 14                        | 13                        | 11                        |
| Not guilty          | 2                         | 4                         | 4                         | 2                         | 3                         | 1                         | 2                         | 4                         |

Note: Vignette Groups as above (see Table 1).

Kruskal-Wallis and Chi-squared analyses showed there were no significant differences in the ages ( $H(7) = 1.68, p = .976$ ) or gender ( $X^2(7) = 0.84, p = .997$ ) of participants between the eight vignette groups.

There were no significant group differences in attitudes towards rape (ARVS scores;  $H(7) = 2.69, p = .912$ ) although Mann-Whitney analyses showed that male participants' scores were significantly higher ( $Mdn = 22.5$ ) than females ( $Mdn = 14.0; U = 1083.5, p < .001$ ).

A one-way ANOVA showed there were no significant group differences in social desirability (Marlowe-Crowne Social Desirability Scale – short form scores; Welch's  $F^6(7,49) = 0.998, p = .444$ ).

Assumptions of the chi-squared test were violated for ethnicity, employment, marital status and participation in jury service due to small numbers in each cell and therefore chi-squared analyses were not appropriate for these variables. However, they appeared to be evenly spread between groups when 'eyeballing' the data (see Table 1) and specifically at least one participant in each of the eight groups had previously participated in jury service. Moreover, in total 14.5% of the sample had previously participated in jury service, comparable with figures in the general public. The Criminal Justice Reform Unit (2002) cites that the lifetime prevalence of participating in jury service within the UK jury-eligible public is 16.6%.

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<sup>6</sup> The Levene's test indicated that the assumption of homogeneity of variances was violated. Therefore, the Welch F-ratio is reported due to its robustness when homogeneity of variance is violated and additional power (Field, 2005).

These findings suggest between-group homogeneity and therefore any subsequent differences in judgements of credibility between the eight groups are unlikely to have been confounded by these variables.

### **3.3 Analyses of Vignette Comparability**

Analyses were conducted to check the comparability of the eight vignettes in terms of authenticity and to check that the manipulations of the independent variables had been successful.

#### **3.3.1 Plausibility**

There were no significant differences in rated plausibility between the eight vignette groups ( $H(7) = 5.13, p = .644$ ) with all vignettes rated as plausible ( $Mdn = 9.00$ ).

#### **3.3.2 Manipulation Checks**

Participants rated the witness as appearing significantly more shamed in the ‘shame’ vignettes ( $Mdn = 8.00$ ) than in the ‘not shamed’ vignettes ( $Mdn = 7.00; U = 1185.5, p < .001$ )

Participants rated the witness’s memory for the event as significantly more complete in the ‘coherent’ memory vignettes ( $M = 2.55, SD = 2.09$ ) than in the ‘incoherent’ vignettes ( $M = 7.02, SD = 1.92; t(122) = -12.40, p < .001$ ).

Participants rated the witness’s resistance as significantly stronger in the ‘fight’ vignettes ( $M = 7.18, SD = 1.78$ ) than in the ‘freeze’ vignettes ( $M = 3.95, SD = 2.33; t(117.39) = 8.72, p < .001$ ).

### 3.4 Analyses of Measures

Due to the number of exploratory measures included in the study only measures directly related to the hypotheses were analysed and are presented below. In addition, due to the high correlation between participants' ratings of the witness's credibility with ratings of her honesty ( $r_s = .789, p < .001$ ) it was decided to omit 'woman's honesty' from the analyses.

#### 3.4.1 Comparison of Ratings Between the Shamed and Not-Shamed Vignettes

Table 3: Means (Standard Deviation) and Medians (Interquartile Range) of Ratings Between Shamed and Not-Shamed Vignettes.

| Measures  | Mean<br>(Standard Deviation) |             | Median<br>(Interquartile Range) |             | Mann-Whitney<br>U | P-value |
|---|------------------------------|-------------|---------------------------------|-------------|-------------------|---------|
|   | Shamed                       | Not-shamed  | Shamed                          | Not-shamed  |                   |         |
| Statement credibility   | 7.70 (1.55)                  | 7.40 (2.21) | 8.00 (2.00)                     | 8.00 (3.00) | 1890.50           | .438    |
| Confidence in making a judgement based on statement             | 5.70 (2.43)                  | 6.22 (2.60) | 6.00 (3.00)                     | 7.00 (3.00) | 1615.50           | .062    |
| Woman's credibility   | 7.52 (1.73)                  | 7.51 (2.02) | 7.00 (3.00)                     | 8.00 (2.50) | 1870.00           | .397    |
| Confidence in making a judgement based on woman's appearance    | 6.02 (2.24)                  | 6.44 (2.65) | 6.00 (3.00)                     | 7.00 (3.50) | 1656.50           | .091    |
| Likelihood of voluntary sex                                     | 2.37 (1.91)                  | 2.26 (2.03) | 2.00 (3.00)                     | 2.00 (3.00) | 1829.00           | .320    |
| Overall likelihood of participant judging the defendant guilty. | 6.54 (1.86)                  | 6.82 (2.56) | 7.00 (2.00)                     | 7.00 (3.50) | 1627.50           | .266    |
| Overall likelihood of jury judging defendant guilty.            | 4.38 (2.06)                  | 4.70 (2.52) | 5.00 (3.00)                     | 5.00 (4.00) | 1797.00           | .265    |

Note: All tests were one-tailed.

There were no significant differences on any measures between the shamed and not-shamed vignettes.

### 3.4.2 Comparison Of Ratings Between the Coherent and Incoherent Vignettes

Table 4: Means (Standard Deviation) and Medians (Interquartile Range) of Ratings Between Coherent and Incoherent Vignettes.

| Measures  | Mean<br>(Standard Deviation) |                      | Median<br>(Interquartile Range) |                      | Mann-Whitney U | P-value |
|---|------------------------------|----------------------|---------------------------------|----------------------|----------------|---------|
|   | Coherent<br>memory           | Incoherent<br>memory | Coherent<br>memory              | Incoherent<br>memory |                |         |
| Statement credibility   | 7.53 (2.09)                  | 7.56 (1.73)          | 8.00 (3.00)                     | 8.00 (2.00)          | 1884.50        | .429    |
| Confidence in making<br>a judgement based on<br>statement             | 5.98 (2.43)                  | 5.93 (2.62)          | 6.00 (3.00)                     | 6.00 (3.75)          | 1916.50        | .493    |
| Woman's credibility   | 7.60 (2.03)                  | 7.43 (1.73)          | 8.00 (3.00)                     | 7.00 (2.00)          | 1802.50        | .276    |
| Confidence in making<br>a judgement based on<br>woman's appearance    | 6.05 (2.63)                  | 6.39 (2.28)          | 6.00 (3.00)                     | 7.00 (3.00)          | 1810.50        | .290    |
| Likelihood of<br>voluntary sex  | 2.25 (1.77)                  | 2.38 (2.14)          | 2.00 (2.00)                     | 2.00 (3.00)          | 1911.00        | .482    |
| Overall likelihood of<br>participant judging the<br>defendant guilty. | 6.60 (2.51)                  | 6.75 (1.94)          | 7.00 (2.75)                     | 7.00 (2.00)          | 1861.50        | .384    |
| Overall likelihood of<br>jury judging defendant<br>guilty.            | 4.75 (2.35)                  | 4.34 (2.24)          | 5.00 (3.00)                     | 4.00 (3.00)          | 1727.50        | .166    |

Note: All tests were one-tailed.

There were no significant differences in any measures between the coherent memory and incoherent memory vignettes.

### 3.4.3 Comparison Of Ratings Between the Fight and Freeze Vignettes

Table 5: Means (Standard Deviations) and Medians (Interquartile Range) of Ratings Between Fight and Freeze Vignettes.

| Measures  | Mean<br>(Standard Deviation) |                    | Median<br>(Interquartile Range) |                    | Mann-Whitney<br>U | P-value |
|---|------------------------------|--------------------|---------------------------------|--------------------|-------------------|---------|
|   | Fight<br>response            | Freeze<br>response | Fight<br>response               | Freeze<br>response |                   |         |
| <b>Statement credibility</b>  | 8.03 (1.50)                  | 7.09 (2.13)        | 8.00 (2.00)                     | 7.00 (3.00)        | 1426.50           | .006**  |
| <b>Confidence in making a judgement based on statement</b>            | 6.65 (2.39)                  | 5.31 (2.48)        | 7.00 (2.75)                     | 6.00 (3.75)        | 1305.00           | .001**  |
| <b>Woman's credibility</b>  | 7.90 (1.79)                  | 7.16 (1.89)        | 8.00 (2.00)                     | 7.00 (2.75)        | 1478.00           | .013*   |
| Confidence in making a judgement based on woman's appearance          | 6.47 (2.63)                  | 6.00 (2.27)        | 7.00 (3.75)                     | 6.00 (2.00)        | 1640.50           | .079    |
| Likelihood of voluntary sex   | 2.13 (1.74)                  | 2.48 (2.15)        | 2.00 (2.00)                     | 2.00 (3.00)        | 1804.50           | .279    |
| <b>Overall likelihood of participant judging the defendant guilty</b> | 7.12 (2.17)                  | 6.27 (2.22)        | 7.00 (3.00)                     | 7.00 (3.00)        | 1465.50           | .011*   |
| Overall likelihood of jury judging defendant guilty                   | 4.83 (2.43)                  | 4.27 (2.14)        | 5.00 (4.00)                     | 4.00 (2.75)        | 1688.50           | .121    |

Note: All tests were one-tailed; \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

The resistance variable significantly influenced several participant ratings, as seen in Table 5. The witness's statement was rated as significantly more credible in the 'fight' conditions than in the 'freeze' conditions and participants felt significantly more confident making a judgement of credibility based on the statement in the 'fight' conditions than in the 'freeze' conditions. The witness herself was also rated as significantly more credible in the 'fight' conditions than in the 'freeze' conditions. Finally, participants were significantly more likely to rate the defendant guilty of rape in the 'fight' conditions than in the 'freeze' conditions.



### 3.4.4 Intercorrelations for Ratings on Measures of Victim Credibility and Defendant Guilt as a Function of Shame, Memory and Resistance.

Finally, Spearman's correlational analyses were conducted to investigate potential associations between participants' ratings of shame, memory and resistance and ratings of victim credibility, irrespective of which vignette had been seen. This was analysed to ascertain if 'perceived' witness shame, memory or resistance influenced participants' ratings<sup>7</sup>.

Table 6: *Intercorrelations for Ratings on Measures as a Function of Shame, Memory and Resistance.*

| Measures   | 1.      | 2.       | 3.      | 4.      |
|--|---------|----------|---------|---------|
| 1. Statement credibility   | -       | -        | -       | -       |
| 2. Woman's credibility   | .755*** | -        | -       | -       |
| 3. Overall likelihood of participant judging the defendant guilty. | .648*** | .608***  | -       | -       |
| 4. Overall likelihood of jury judging defendant guilty.            | .252**  | .327***  | .387*** | -       |
| 5. How shamed did the woman appear?                                | .272**  | .347***  | .250**  | .065    |
| 6. How complete did the woman's memory of the event appear?        | -.285** | -.299*** | -.286** | -.198*  |
| 7. How much did the woman appear to resist during the event?       | .403*** | .305***  | .343*** | .400*** |

Note: All tests were one-tailed; \* $q < .026$ , \*\* $q < .005$ , \*\*\* $q < .0005$ <sup>8</sup>

<sup>7</sup> Plotting data from the resistance variable revealed that although there were significant group differences, the data from the two groups (fight/freeze) did not appear stratified and thus unlikely to confound the correlations.

<sup>8</sup> The False discovery rate (FDR)  $q$ -value was calculated to control for multiple comparisons, thus limiting the percentage of type I errors.

Spearman's Correlations (see Table 6) showed significant positive associations between participants' ratings of shame and statement credibility, as well as the credibility of the witness. In addition, there was also a significant positive association between rated shame of the witness and the likelihood that participants would judge the defendant guilty of rape.

Spearman's Correlations (see Table 6) showed significant negative associations between participants' ratings of statement coherence and statement credibility, as well as the credibility of the witness. There was also a significant negative association between perceived coherence of the statement and the likelihood that participants would judge the defendant guilty of rape, as well as participants' ratings of how likely a jury would judge the defendant guilty.

Spearman's Correlations (see Table 6) supported the findings shown in Table 5, indicating significant positive associations between participants' ratings of the witness's resistance and ratings of her credibility and the credibility of her statement, as well as the likelihood that participants would judge the defendant guilty of rape. In addition, the correlations showed that irrespective of the actual resistance manipulation, participants' ratings of witness resistance was significantly positively associated with ratings of the likelihood of a jury finding the defendant guilty.

#### *3.4.5 Information Important in Judging Witness Credibility*

Overall, participants rated the content and style of the statement as equally important when judging credibility ( $M = 4.72$ ,  $SD = 2.18$ ) and there were no significant differences between the eight vignette groups,  $F(7,115) = 1.54$ ,  $p = .160$ .

When investigating which individual aspects were most important participants rated that the woman's reactions to the man's advances ( $M = 8.23$ ,  $S.D = 1.96$ ), the man's response to the woman's reactions ( $M = 8.14$ ,  $S.D = 1.96$ ) and the detail of the event ( $M = 8.03$ ,  $S.D = 2.11$ ) were the most important aspects within the content of the statement. Participants rated emotional expression ( $M = 7.37$ ,  $S.D = 2.38$ ) and memory of the event ( $M = 7.25$ ,  $S.D = 2.40$ ) as the most important aspects relating to the style of the statement.

#### *3.4.6 Forced-Choice Defendant Guilt*

The majority of participants rated the defendant as guilty (102/124) in the forced-choice measure of guilt. Comparison between the eight vignette groups was not possible due to the small number of not-guilty verdicts in each cell. However, it did not appear that verdicts differed between groups (see Table 2). In addition, there was not a significant difference in the number of not-guilty verdicts between the 'fight' vignettes ( $N = 12$ ) and the 'freeze' vignettes ( $N = 10$ ),  $X^2(1) = 0.41$ ,  $p = .524$ .

## **4. DISCUSSION**

Currently the UK legal system assumes a common understanding of reactions to rape amongst jury-eligible public, claiming that expert witness testimony to educate jurors about the psychological sequelae of rape is not warranted (Office for Criminal Justice Reform, 2006). The current study challenges this assumption by attempting to systematically investigate whether behavioural and emotional manifestations of dissociation and shame, two factors known to play a role in PTSD development and symptom severity, influence jurors' judgements of the witness. It is the first study to consider specifically how posttraumatic emotional expression, memory of the event and peritraumatic resistance may impact on a rape witness's statement and whether

this might influence jurors' perceptions of witness credibility and decisions of defendant guilt.

This study showed that emotional expression, memory of the event and peritraumatic resistance could be successfully manipulated and the findings are summarised for each of these variables. The relative strengths and limitations of the study are then highlighted and clinical implications and directions for further research discussed.

#### **4.1 Emotional Expression**

The findings indicated that the emotional expression of the witness did not influence participants' ratings, with no significant differences in ratings between the 'shamed' and 'not shamed' vignettes. However, when participants' ratings of the witness's degree of shame were further investigated, positive associations between ratings of shame and credibility were found, irrespective of which vignette had been seen. This suggested that as participants' perceptions of the witness's shame increased, so did judgements of witness credibility and the likelihood that they would judge the defendant as guilty. These findings do not support the study's hypothesis relating to the influence of shame on judgements of credibility, with the direction of the relationship between shame and credibility being the inverse of that predicted. Furthermore, although statistically significant, the correlations indicate that the shame manipulation accounted for only 6-12% of the variability in participants' ratings. These small effects reduce clinical significance and must be considered when interpreting the findings. However, they are comparable with effects reported in similar studies where emotional expression was found to account for 2-19% of the variance in witness credibility ratings (Wessel et al., 2006).

These findings could suggest that participants were able to recognise the emotional expression of shame and that shame did not negatively influence judgements of witness credibility, supporting the view that additional expert information relating to emotional expression may not be warranted. However, although Izard (1971) states that individuals are relatively adept at recognising shame in others, Buddie and Miller (2001) found that only 24% of participants expected a rape victim to experience shame. Therefore, it is possible that participants in the current study were not in fact recognising the witness's emotional expression as purely indicative of shame, but also of other affective states (e.g. distress, fear, guilt or anger), impacting judgements of credibility. It is suggested that one stereotype of a rape victim is that she will be significantly negatively affected by the rape, reflected by her emotional expression. Moreover, if 'inconsistent' emotions are displayed then she may be less likely to be believed (Buddie & Miller, 2001; Kaufmann et al., 2003). Thus, a second hypothesis to explain the findings of the current study could be that participants were equating the emotional expression of shame with increased distress and thus rating the witness as more credible when perceived as more distressed.

This interpretation would support the findings of Kaufmann et al. (2003) and Thune-Ellefsen (2003, cited in Wessel et al., 2006) and suggest that education relating to how the psychological sequelae of rape could impact on witness emotional expression might be beneficial for jurors. Participants in the current study also indicated that emotional expression was an important factor when judging witness credibility. Specifically, additional information on the impact of dissociation on emotional expression may be most important with jurors educated about how

posttraumatic dissociation may result in a more 'controlled' and less distressed affective expression (Doyle & Thornton, 2002; Petrak, 2002b).

## **4.2 Memory of the Event**

The findings indicated that the woman's memory of the event did not influence participants' ratings, with no significant differences in ratings between the 'coherent' and 'incoherent' vignettes. However, when participants' ratings of the woman's memory for the event were further investigated, several negative relationships between ratings of memory coherence and credibility were found, irrespective of which vignette was actually seen. This suggested that as participants' ratings of the woman's memory for the event increased (indicative of increased coherence), ratings of witness credibility and the likelihood that the defendant would be judged as guilty also increased. However, the effect was again small, with the memory manipulation accounting for only 4-9% of the variability in participants' ratings. Participants also indicated that the woman's memory of the event and the amount of detail given were important when judging witness credibility. These findings offer some preliminary support for the hypothesis that the witness will be seen as less credible and the defendant less guilty if she has an incomplete memory of the event. They are also consistent with Masinda's (2004) findings that memory impairment negatively impacts judgements of the credibility of traumatised refugees and could be tentatively used as further evidence of the stereotype that memory impairment for aspects of a traumatic event is indicative of fabrication (Herlihy & Turner, 2007).

Although the manipulation of the memory variable appeared successful, with participants rating the woman's memory of the event as significantly more complete

in the 'coherent' vignettes than in the 'incoherent' vignettes, it is suggested that the manipulation may have had reduced ecological validity due to methodological constraint. That is, it is common for individuals with PTSD to experience significant memory impairment, including partial or complete amnesic memory loss (van der Kolk & Fisler, 1995). In the current study the actor had to recount the same pertinent information in each of the eight vignettes to ensure internal consistency. Therefore, in the 'incoherent' vignettes although the witness repeatedly proclaimed she could not remember aspects of the event, she was able to eventually recount the same information as in the 'coherent' vignettes. It is possible that although participants rated the woman's memory less complete in the 'incoherent' vignettes, perhaps due to the inclusion of salient utterances, the effect of memory impairment on judgements of credibility may have been diluted due to ineffective manipulation. Further investigation with a methodology allowing for more realistic manipulation of memory impairment is warranted before definitive conclusions about the impact of witness' memory impairment on juror decision making can be made. Nonetheless, the findings from the current study can be used to make tentative inferences about how the coherence of a witness' testimony may impact judgements of witness credibility and defendant guilt.

The findings offer provisional evidence that an incoherent statement influences perceptions of witness credibility and suggests that introducing expert information relating to the impact of a traumatic event on memory processes into rape trials might be useful. Specifically, jurors could be educated about the impact of dissociation on the encoding and retrieval of trauma memories and how this may result in a fragmented and incoherent narrative (Foa et al., 1995; van der Kolk &

Fisler, 1995). Jury education might also be necessary on how shame avoidance behaviours may influence the witness's statement resulting in a less coherent and detailed description of some of the most shaming aspects of the rape (Ehlers & Clark, 2000).

#### **4.3 Peritraumatic Resistance**

The findings indicate that descriptions of peritraumatic resistance did influence participants' ratings, with participants rating both the woman and her statement as significantly less credible in the 'freeze' vignettes than in the 'fight' vignettes. In addition, participants indicated that they felt significantly more confident making a judgement of credibility based on the statement in the 'fight' vignettes and the likelihood they would judge the defendant guilty of rape also significantly increased when the witness was depicted as actively resisting the defendant.

Correlational analyses investigating the relationship between participants' ratings of the woman's resistance and measures of guilt, irrespective of the actual resistance manipulation, supported these findings. As participants' ratings of the woman's resistance increased so did ratings of witness credibility and defendant guilt, with the resistance manipulation accounting for 9-16% of the variability in ratings.

Participants also indicated that they believed peritraumatic resistance would impact on actual jurors' decision-making indicating a positive trend between ratings of degree of active resistance and the likelihood that a jury would find the defendant guilty. These findings support the hypothesis that the witness will be perceived as less credible and the defendant less guilty if she responded passively during the event than if she responded actively.



The current findings support those from other studies which have shown that women who are raped are more likely to be seen as less credible and more at fault by jury members if there is not clear evidence of active resistance during the rape (Calhoun & Townsley, 1991; McCaul et al., 1990; Wyer et al., 1985). Moreover, these findings support the notion that there is a stereotype or 'rape myth' which holds that the 'normal' behaviour of rape victims includes active resistance and those who do not react in this way are seen as less credible, more responsible for the rape and more likely to have consented to sexual intercourse (Kaysen et al., 2005; Rozee & Koss, 2001).

The findings demonstrate that degree of peritraumatic resistance does significantly influence perceptions of witness credibility and that the introduction of expert information about peritraumatic behaviour into rape trials is necessary. Specifically, expert information could explain the impact of peritraumatic dissociation on behaviour and how this may result in seemingly passive or submissive behaviour (Foa et al., 1995). In addition, it would be important to highlight the range of different 'normal' peritraumatic behaviours, stressing that rape victims are just as likely to demonstrate non-active resistance as they are to actively fight back (Kaysen et al., 2005). This information would help to dispel the apparent stereotype that only active resistance is indicative of non-consent and that passive resistance may even suggest compliance.

#### **4.4 Strengths of the Current Study**

This is the first study of its kind to systematically investigate the general public's understanding of the behavioural and emotional manifestations of dissociation and

shame and specifically how these variables might influence judgments of a rape witness's credibility and defendant's guilt. Diamond (1997) argued that the quality of mock-jury studies needed to be improved to allow for valid inference to decision-making processes of actual jury members. The current study attempted to remedy some of the limitations critiqued by Diamond (1997), with the resultant methodology a relative strength. The study used a sample representative of UK jury-eligible public including men and women eligible for jury service, aged between 18-70 years, from various cultural and socio-economic backgrounds. This addresses methodological limitations of previous studies investigating public awareness and attitudes which have relied on student samples, even though concerns that student attitudes do not necessarily represent attitudes of non-student populations have been raised and the generalisability to real-life jurors questioned (Cutler, Dexter & Penrod, 1989; Schneider, 1992, cited in Schneider et al., 1994). The sampling methods of the current study allowed for participants as closely representative of actual jurors as possible within current legal constraints, significantly increasing external validity.

Whilst the current study was unable to incorporate a full-trial simulation into its methodology, primarily due to time and financial constraints, the methodology did include video-vignettes, with an actress playing the role of the witness, allowing for manipulation of non-verbal cues. Participants rated all of the vignettes as plausible, indicating that they were seen as realistic and representative of a real rape scenario, also increasing face validity. In addition, the study incorporated measured variables more realistic to a jury setting including a forced-choice guilty/not-guilty verdict. Therefore, the careful consideration of the methodology increased the ecological validity of the study and thus the generalisability of the findings.

## **4.5 Limitations of the Current Study**

### ***4.5.1 Sample Biases***

Participant recruitment relied on advertisement and self-selection. This sampling technique may have resulted in a biased sample as the majority of people coming forward appeared well-educated and interested in the area and to hold relatively pro-victim views. It is possible that a self-selection bias in the current study diluted the effects of the manipulated variables on judgements of witness credibility.

Furthermore, although recruitment of similar numbers of men and women was attempted, it was extremely difficult to recruit male participants. The current study did demonstrate that male participants held significantly more unfavourable attitudes towards rape victims than female participants did, as evidenced by scores on the ARVS. However, due to the small number of male participants it was not possible to look at gender effects on judgements of witness credibility and defendant guilt. Further research is needed to ascertain whether there are gender differences when judging witness credibility and whether male and female participants are equally influenced by manipulations of the independent variables.

### ***4.5.2 Limitations within Manipulations of the Independent Variables***

The manipulation of the shame variable was not entirely successful. Although manipulation checks indicated that participants' ratings of shame between the 'shamed' and 'not-shamed' vignettes were significantly different, the woman depicted in the 'not-shamed' conditions was still rated as appearing moderately shamed. The methodology of the current study did not include measures of other affective states and thus does not allow further inference into whether participants

were actually recognising the emotional expression manipulation as shame or some other affective construct. It is plausible that failure to strongly manipulate the shame variable diluted the findings, thus conclusions drawn regarding the impact of shame on judgements of credibility remain tentative and require further research.

Due to methodological constraints, the memory variable only included rudimentary manipulation of memory impairment, relying on speech utterances to suggest recall deficit (e.g. *"I really can't remember"*, *"Suddenly I was on the floor and I don't remember how I got there"*) and a disjointed and disorganised narrative to suggest incoherence. Difficulties in adequately reproducing trauma narratives in artificial settings are acknowledged by Tromp, Koss, Figueredo and Tharan (1995). However further research utilising a more in-depth manipulation of memory impairment and incorporating manipulation of further facets of memory known to be affected following traumatic events is necessary to improve ecological validity and may increase the magnitude of the effect of memory on judgements of credibility.

#### *4.5.3 Limitations of the Measured Variables*

All of the measures used were self-report. It is suggested that when using multiple self-ratings, trends in responding arise with multiple self-report measures inevitably correlating with each other. This phenomenon could have influenced some of the correlations between measured variables found in the current study and should be taken into consideration when drawing conclusions from the findings. Further research could incorporate qualitative measures to reduce the influence of this response bias whilst providing additional information regarding participants' decision-making processes.

#### *4.5.4 Limitations within the Methodological Design*

Limitations arose from being unable to use full-scale trial simulation methodology. The witness gave her statement in a free-recall style without questioning or cross-examination. Only hearing the witness's side of the story may have made participants more likely to empathise with her, increasing ratings of credibility (Weir & Wrightsman, 1990). Furthermore, it is argued that in real trials, inconsistencies between the witness and defendant's statements, discrepancies within the witness's statement and examples of 'unusual' behaviour proposed by the Defence, have increased salience. The activation of stereotypes positing that incoherent or inconsistent narratives are indicative of unreliability and/or dishonesty may be more likely under these circumstances and thus hold more relevance. It would therefore be interesting for future research to replicate the current study using full-scale mock-trial methodology to ascertain whether the influence of the manipulated variables on jurors' judgements is magnified.

A further methodological limitation was that participants were required to complete ratings and make decisions of witness credibility and defendant guilt without group deliberation. Research has found that jury deliberation can reduce the effects of social stereotypes and prejudices (Dahl, Enemo, Drevland, Wessel, Eilertsen & Magnussen, 2006), as well as reinforcing inaccurate and biased views of the majority (Diamond, 1997). Therefore, it would be useful for further studies to adapt the methodology of the current study to allow for conferring to investigate whether this magnified or minimised the influence of the manipulated variables on jurors' decision making whilst increasing ecological validity.

Finally, as with all mock-jury studies, participants are aware that their decisions have no consequence on outcome. Therefore, participants may be more likely to rate the witness credible and the defendant guilty, influenced more by social desirability and the knowledge that the ‘defendant’ will not be affected by their decision, rather than by certainty of his guilt.

#### **4.6 Clinical Implications**

With consideration of the relative methodological strengths and limitations the findings of the current study provide preliminary evidence that the emotional and behavioural manifestations of dissociation negatively influence judgements of witness credibility and defendant guilt as made by UK jury-eligible public. In addition, participants appeared biased by social stereotypes of ‘normal’ victim behaviour. The findings suggest that it might be useful for jury members to be educated about common psychological reactions to rape and specifically how these reactions could potentially impact on the content and style of the witness’s statement, particularly in relation to descriptions of peritraumatic behaviour. Therefore, these findings support the proposed introduction of expert information into rape trials outlined in the UK Government’s National Action Plan on sexual violence (Office for Criminal Justice Reform, 2006).

It is anticipated that improving potential jurors’ knowledge about the psychological sequelae of rape will benefit rape victims in several ways. Primarily, it is hoped that increasing jurors’ understanding of the prevalence of PTSD in rape victims and how symptomology may impact a witness’s statement, will allow them to focus on the factual information presented rather than being unduly influenced by verbal and non-

verbal information inconsistent with pre-conceived stereotypes of 'genuine' rape victims. Therefore, expert information would not be used to determine whether rape occurred but rather to help jurors understand the impact of rape, thereby facilitating informed decisions about witness credibility and defendant guilt. It is suggested that additional information may be most important in cases of acquaintance rape where there is no physical or forensic evidence and thus the content and style of the statement has increased relevance.

This could not only improve the fairness of legal proceedings, potentially increasing conviction rates, but could also have the secondary benefit of increasing initial reporting of rape to police. Authors cite that fear of re-traumatisation by the legal process and specifically of not being believed as common reasons given by rape victims for delayed reporting (Burgess & Holstrom, 1974, cited in Garrison, 2000; Temkin, 1999; Williams, 1984). Therefore, rape victims may be encouraged to come forward if the Government were seen to be actively attempting to decrease the negative impact of a rape trial on the witness.

The current study suggests that members of the general public appear to hold beliefs about how genuine rape victims should appear and behave during and after the rape and that credibility is questioned if these stereotypes are not adhered to. These beliefs are likely to impact on the reactions towards, and level of support offered to, rape victims with those displaying 'conflicting' behaviour receiving less positive responses (Temkin, 1999). Davis, Brickman and Baker (1991, cited in Ullman, 1996) have demonstrated that whilst positive reactions towards rape victims do not significantly impact well-being, negative reactions can have a significantly

detrimental effect, increasing symptom severity and prolonging recovery. Moreover, not only has lack of social support been implicated in increasing the risk of PTSD development (Andrews, Brewin, Rose & Kirk, 2000) but also that negative social reactions increase severity of PTSD symptomology (Ullman & Fillipas, 2001). Furthermore, rape victims themselves are potentially likely to hold these stereotypes and may scrutinise their own behaviour in an attempt to determine the legitimacy of the rape. Cognitive appraisals which do not meet social and/or cultural stereotypes may increase feelings of self-blame, shame and/or guilt and negatively impact on reporting and symptom severity (Andrews et al., 2000; Gilbert, 1998; Lee et al., 2001). For these reasons it is suggested that it might be beneficial to disseminate information relating to the psychological sequelae of rape to the general public in order to raise awareness of all individuals who may have contact with rape victims including: front-line police, professionals within formal support systems, members of informal social support networks and rape victims themselves.

#### **4.7 Conclusions**

The current study has provided evidence that descriptions of peritraumatic behaviour influence perceptions of witness credibility, as judged by members of the general public. The correlational analyses offer additional preliminary evidence that the way in which a rape witness appears whilst giving her statement and, to a lesser extent, the coherence of her statement, also influence perceptions and require further investigation. Furthermore, it asserts that educating jury members about common psychological sequelae, specifically the influence of dissociation on the content and style of the statement, is necessary. In particular the importance of educating jurors about 'normal' peritraumatic behaviour and the impact of dissociation on resistance



is stressed. It is argued that providing this information may improve conviction rates in rape trials by increasing jurors' understanding of PTSD prevalence and symptomology, whilst dispelling erroneous stereotypes of how 'genuine' rape victims should appear and behave. Further research, investigating the effects of these manipulations on other participant groups, whilst correcting methodological limitations of the current study, is needed to increase the strength of the findings and thus the conclusions made.

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### **PART 3: CRITICAL APPRAISAL**

## **1. CRITICAL APPRAISAL**

### **1.1 Overview**

This critical appraisal will begin with further discussion of difficulties arising during the current study in relation to participant recruitment, sampling biases and methodological design, with suggestions for improvement made. The findings will then be considered in a wider-context and areas for further research will be suggested. Finally, the researcher will reflect on the process of carrying out the study and will comment on aspects of the process that she found most rewarding, as well as those that proved most challenging.

### **1.2 Difficulties Arising During the Current Study**

#### ***1.2.1 Participant Recruitment***

Although it is commonly suggested that recruiting from the general population is a relatively simple process, recruitment of participants for the current study was an arduous task. It is acknowledged that recruitment difficulties may have been enhanced by a lack of financial incentive. However, it is also possible that individuals' reluctance to participate reflects a general unease felt in relation to the topic of rape. Some of the reasons given for declining to participate included being concerned that the material would be too upsetting, being worried about having to share views with others and some potential male participants expressed concerns about participating in mixed-gender groups. Recruitment difficulties could be suggestive of the prevailing stigma surrounding rape and thus the influence of this on recruitment in rape research requires consideration. It may be that participants with

more liberal views or those who have experienced rape themselves (or know someone who has) are more likely to volunteer to participate in research of this kind, thus potentially leading to biased samples.

### *1.2.2 Biased Sample*

It can be argued that the sample in the current study was inherently biased due to self-selection and that this may have influenced the findings. During informal discussions and de-brief many participants appeared knowledgeable about the topic-area, citing the recent Government initiatives and appearing relatively pro-victim. Participants were also not asked whether they had experienced rape themselves or knew someone who had and in fact many alluded to having experience of supporting a victim of rape through legal proceedings. Edward and Macleod (1999) state that individuals holding more liberal attitudes are less likely to blame the victim and Wessel, Drevland, Eilertsen and Magnussen (2006) found that emotional expression did not influence credibility ratings of educated judges with experience of working with rape victims.

The participant sample in the current study was further biased by the large proportion of female participants due to difficulty recruiting male participants. Some studies have demonstrated that men are less empathic and hold more negative attitudes towards rape victims than do women, assigning less responsibility to the defendant in mock-jury studies (For a review see Pollard, 1992). However, other studies have documented no differences between the genders in acceptance of rape myths (Frese, Moya & Megias, 2004) or impressions of rape victims (Schneider, Soh-Chiew Ee & Aronson, 1994). The current study demonstrated that male participants held

significantly more unfavourable attitudes towards rape victims than the female participants did. However, male scores on the ARVS in the current study were considerably lower than those reported by Ward (1988). This suggests that the male participants in the current study held fewer negative attitudes towards rape victims than would be predicted in a general population of men, perhaps further indicative of self-selection sampling biases.

Finally, participants' scores on the Marlowe-Crowne Social Desirability Scale – Short Form were higher than the average scores cited in Reynolds (1982), suggesting that the participants in the current study may have demonstrated increased socially desirable response tendencies. Taken together, it is plausible that the sample in the current study, biased by self-selection, a reduced number of male participants, more liberal attitudes and increased social desirability, may have impacted the findings, possibly reducing the effects of the variables on judgements of victim credibility and defendant guilt.

### *1.2.3 Methodological Difficulties*

The shame variable was not adequately manipulated, resulting in participants having difficulty distinguishing between the 'shame' and 'not shamed' manipulations. This may reflect the greater complexity of using an actor to play the role of a rape victim within mock-jury methodology. Whilst the actor was able to imitate many of the emotional and behavioural markers consistent with a shamed affective expression (e.g. averted gaze, slumped body posture, reduced speech volume and longer speech latency), she was unable to include a number of more subtle cues, particularly behaviours indicative of autonomic arousal (e.g. blushing or perspiring). In addition,

non-verbal affective markers were prioritised over other dimensions of shame during vignette construction. It is possible that increased manipulation of subtle non-verbal markers, as well as inclusion of verbal references to cognitive processing indicative of a shame response such as submission, defeat, worthlessness, inadequacy, helplessness and loss of self-respect (Andrews, Brewin, Rose & Kirk, 2000; Lee, Scragg & Turner, 2001; Wilson, Drozdek & Turkovic, 2006) may have increased participants' ability to differentiate between the two conditions. Thus, it is possible that with additional manipulation emotional expression may have had more of an impact on participants' judgements.

The decision to only include measures allowing for quantitative analysis reduced the richness of the findings. The rating scales used did not allow participants to explain their answers, prohibiting additional information about other possible paradigms which may have influenced decision making. Furthermore, it was assumed that the measures adequately measured the constructs under investigation but the methodology did not allow for investigation of this. During the de-brief participants frequently commented on the vignettes, the measures and the process, citing additional information that had influenced their judgements. Furthermore, they often expressed views relating to rape victims and their behaviour, which were not reflected in their answers on the measures. It is possible that this discrepancy reflects the influence of social desirability on responding to questionnaire measures or the effects of deliberation on attitudes and decision-making. However, the methodology of the current study did not allow for further investigation and suggests that further research incorporating qualitative measures would be useful.



### **1.3 Consideration of Findings Within a Wider Context**

The current study asserts that educating jury members about common reactions to rape and the influence of PTSD symptomology, particularly dissociation, on the statement's style and content is necessary. It is acknowledged, however, that whilst this could potentially increase the conviction rates of trials actually reaching court, further intervention may be necessary to significantly improve conviction rates following rape in the UK. Between 50-67% of reported rapes to the police do not proceed to referral to Crown Prosecution Services and one reason offered for this high attrition rate is the decision by the police that the event does not constitute rape (Edward & Macleod, 1999; Office for Criminal Justice Reform, 2006). Lees and Gregory (1993, cited in Edward & Macleod, 1999) suggest that nearly half of all 'rapes' reported to the police are not considered to constitute a criminal offence. Edward and Macleod (1999) have demonstrated that police officers often make decisions of victim credibility based on the circumstances surrounding the event and the witness's relationship with the accused. However, there is no apparent research directly investigating the attitudes of UK police officers towards rape victims nor whether police officers are aware of the sequelae of rape and subsequent impact on behaviour. Therefore, it is suggested that the current study should be replicated within a police population to ascertain whether it would be advantageous for police officers to receive additional training about psychological reactions of rape and specifically how dissociation may impact the presentation of a witness and her initial statement.

The current study suggested that participants' perceptions of the witness influenced judgements of her credibility. The actor used was a young (early 30s), white, middle-

class woman and the majority of participants were also white middle-class women. Bottoms, Nysse-Carris, Harris & Tyda (2003) describe a similarity-leniency bias observable in jurors with Schauer (1970, cited in Wakelin & Long, 2003) stating that individuals are less likely to blame victims who are similar to themselves. Therefore, the observation that the witness appeared demographically similar to the majority of participants could have influenced the findings, potentially diluting the effects of the manipulations.

It has also been demonstrated that the ethnicity of both witness and defendant can significantly influence participants' ratings of credibility and guilt. Wakelin and Long (2003) state that participants show reduced sympathy for ethnic-minority victims and Brownmiller (1975, cited in Willis, 1992) found that black victims were seen as less honest and more responsible for the rape than were white victims. Moreover, George and Martinez (2002) found that rape victims are more likely to be judged less credible if raped 'interracially' with Willis (1992) indicating that ratings of liability increases for black defendants.

Further research is required to systematically investigate the effect of these variables on participants' judgements of witness credibility. It appears that stereotypes relating to various demographic variables further impact public attitudes towards rape victims and thus it would be important to investigate the effects of manipulating the witness's age, ethnicity and social class on participants' judgements of witness credibility and defendant guilt and whether any interaction effects are observed.

Although the conclusions drawn from the findings of the current study suggest that the introduction of expert information into rape trials is necessary and hypothesizes that this may increase conviction rates, it is outside the scope of the study to provide any support for the effectiveness of this proposal. Brekke and Borgida (1988) conclude that expert testimony is useful for dispelling stereotypes and correcting juror misconceptions in rape trials but only if presented early and if directly linked to the case. Significantly, they demonstrated that introduction of expert testimony impacted the content of jury deliberation particularly in relation to witness resistance, with discussion becoming more prosecution orientated when additional information about peritraumatic resistance had been presented.

Further research could directly investigate the impact of expert testimony on juror decision-making and whether presenting information regarding PTSD symptomology and the behavioural and emotional manifestations of dissociation and shame, influences judgements of credibility. Moreover, expert witness testimony, as proposed in the Government Consultation paper, may not be the most effective way of introducing expert information. There have been a number of alternative methods proposed in the Response to Consultation Paper (Criminal Justice System, 2007), such as information leaflets, research papers and specialist training for jurors. Further research is needed to investigate the impact each of these has on juror decision-making to ascertain efficacy.

Finally, the current study focused on specific manifestations of dissociation and shame. It is acknowledged that other symptoms of PTSD could potentially influence a witness's statement and may elicit behaviours inconsistent with stereotypical

beliefs. Proof is required that additional information is beyond the understanding of the average juror before it can be introduced into court (Office for Criminal Justice Reform, 2006). Therefore, further research could investigate a more general understanding of the effects of rape, including PTSD symptomology. The SAQ developed by Frazier and Borgida (1988) could be expanded, with a questionnaire devised to measure contemporary stereotyped beliefs about rape victims, as well as understanding of the psychological effects of rape and how both peritraumatic and posttraumatic behaviour may be influenced by psychological symptomology.

#### **1.4 Personal Reflections**

Although the process of carrying out the current study was generally a positive experience there were some professional and personal challenges. The major professional challenge arose from deciding to undertake a project of this size with limited time and finances. Incorporating video vignettes into the methodology was exciting and innovative but also brought additional challenges. The vignettes were created before I had been able to read extensively about the behavioural and emotional manifestations of shame and dissociation. Retrospectively, a more developed understanding of these constructs would have enhanced the vignettes and allowed better judgement of which aspects to include, thus increasing the differences between the conditions and the strength of the manipulations.

Including three variables for manipulation may have been ill-advised as this further reduced the salience of individual variables, as well as possibly reducing the main effects of individual manipulations. If designing this study again I would consider focussing on one aspect and increasing the magnitude of the manipulation, to allow

for more decisive conclusions to be drawn. For example, findings from the current study suggested that the resistance variable most influenced judgements of witness credibility and defendant guilt. However, the manipulation used was basic, active physical resistance vs. passive resistance. Kaysen, Morris, Rizvi and Resick (2005) outline various peritraumatic responses to rape including: physical resistance (struggling, kicking, punching, biting), verbal resistance (screaming, trying to reason, begging, threatening) and passive resistance (keeping quiet, being motionless, doing what she was told). If peritraumatic resistance had been the only variable under investigation then 'peritraumatic resistance' could have been further deconstructed to ascertain whether certain types of resistance or specific behaviours had greater influence on jurors' judgements.

Using this methodology also introduced the challenges of scripting vignettes and working successfully with an actor. Writing the vignettes was a somewhat disturbing experience as scripting them for the actor required not only a description of the event, but also detail of behaviour and associated emotional expression. I discovered that this process was most successful if I attempted to take the position of a rape victim and describe associated cognitions and emotions. This process was extremely emotionally challenging although it extended my empathy for rape victims and strengthened my resolve to persevere with the project.

I also learnt about the restrictions of using actors to portray real victims in mock-jury methodology, such as not being able to manipulate some non-verbal cues (e.g. blushing, sweating or crying) and the difficulty of achieving complete consistency between takes. However, despite the challenges inherent in this methodology, its use

is recommended in further research. Participants frequently commented that they found the experience interesting and informative and were generally positive about the methodology used. Notably, using video vignettes allowed manipulation of many non-verbal behaviours and significantly increased ecological validity and thus the generalisability of the findings.

Another personal challenge arose from the topic, which at times I found difficult as it required spending a large proportion of my time reading and/or thinking about rape. This was particularly challenging for the period when immersed in the rape and PTSD literature whilst also working at the Traumatic Stress Clinic. Campbell (2002, cited in Campbell & Wasco, 2005) alludes to negative consequences of researching rape and I certainly found that I was emotionally affected by the literature I was reading. However, increasing my understanding of the psychological impact of rape, the current legal process and attitudes towards rape victims held by the general public, again fuelled my interest in researching this area and determination to carry out a piece of research which could potentially improve support for rape victims.

The main rewards from conducting this research stemmed from being involved in a piece of research in an area not only of great personal interest but also with clear clinical relevance. Being involved in research that was topical and had direct implications for proposed Government initiatives was stimulating and exciting. Media coverage of the topic not only kept me motivated but also enhanced others' interest in the research and facilitated recruitment. Many of the participants were aware of the current legal situation and very supportive of the project. In addition, the topic area required researching literature outside the Clinical Psychology domain

and allowed for investigation of Social Psychology and Legal literature. This enhanced appreciation of how different domains can overlap and highlighted the wider implications of this piece of research.

Finally, the process of carrying out the current study, especially researching shame and dissociation literature, impacted on my clinical practice. Specifically, my developed understanding of the role of shame in PTSD and the associated verbal and non-verbal markers, helped me to recognise shame and shame-avoidance behaviours in some patients. This assisted subsequent formulations and treatment plans, as well as facilitating successful treatment interventions.

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## **APPENDICIES**

## **APPENDIX A**

### **UCL Research Ethics Committee Notification of Ethical Approval Letter**



Sub-Department of Clinical Health Psychology  
UCL  
Gower Street

22 May 2007

**Notification of Ethical Approval**

**Project ID/Title: 0920/001: A study of the general public's understanding of a traumatic reaction to rape and implications for the judicial system**

I am pleased to confirm that the UCL Research Ethics Committee has approved your research proposal for the duration of the project. Approval is subject to the following conditions:

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

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

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

**Reporting Non-Serious Adverse Events.**

For non-serious adverse events you will need to inform \_\_\_\_\_, Ethics Committee Administrator ( \_\_\_\_\_ ), within ten days of an adverse incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Chair or Vice-Chair of the Ethics Committee will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

**Reporting Serious Adverse Events**

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

On completion of the research you must submit a brief report (a maximum of two sides of A4) of your findings/concluding comments to the Committee.

Yours sincerely

**Chair of the UCL Research Ethics Committee**

Cc: Sub-Department of Clinical Health Psychology, UCL

## **APPENDIX B**

### **Examples of Vignettes:**

- 1) The Fight/Not-shamed/Coherent Vignette**
- 2) The Freeze/Not-shamed/Coherent Vignette**

## **1) Fight/Not Shamed/Coherent**

**[Prompt: I would like you to begin by describing the events you allege took place on the 6<sup>th</sup> February 2007. Please can you talk through what happened including the events leading up to and preceding the event, giving as much detail as possible. This statement will be video recorded for our records.]**

Ok I find this really difficult but I will try. I can remember it clearly, as if it was yesterday.

My company had organised a training course, held in a hotel conference centre out of town. It was over two-days and the company had put us up in the hotel.

I remember that the first day of the conference was really full-on and I was really tired. I had to give a presentation the next day and didn't feel fully prepared. I felt really stressed.

After dinner, I was on my way up to my room to do a bit more preparation when one of my colleagues approached me. He said he had heard me talking about my presentation at dinner and knew that I was stressed about it. He said he had some papers which he thought would be useful and that he could bring them up to my room and we could talk about them.

**[Prompt – who was this man?]**

He was someone from work. I didn't really know him I didn't know his name but knew he was one of the managers from another department. I remember feeling pleased and so grateful that he had offered to help.

He suggested that we went to the hotel bar to discuss them further. But I was so tired. I couldn't face a drink... so I suggested that we go up to my room and have a coffee and go through things with me there. Which he did.

We sat in my room and talked about my presentation for about an hour. I remember thinking it was getting late and started to feel worried as I had to get up early in the morning and had a lot more work to do after he left. I started hinting that I was tired and that he should go. I started yawning in the hopes that he would leave. He didn't seem to get the hint.

I remember starting to feel really uncomfortable. He was sat close to me and his hand was really near my leg. I really wanted him to go and said that I was grateful for his help but that I thought it was time for him to leave.

At this point he got really cross and said that he had spent all this time talking about my presentation and the least I could do was have a drink with him. I told him again that I thought he should leave.

**[Prompt – what happened next?]**

I felt really uncomfortable now and didn't really know what to do. Suddenly he leant over and kissed me. I was really surprised. I really didn't expect it. I didn't know

what to do. I think I kissed him back. Even though I really didn't want to. I was just quite shocked.

I remember being really worried now and I really wanted him to leave. I pushed him off me and told him that I wanted him to leave. I told him that I wanted him to stop.

But he didn't and just kept on kissing me. He was kissing my neck. He was touching me. Touching my breast and my leg. He had his arms around me tightly. I remember wriggling to get away from him and pushing him off me. I was shouting at him.

**[Prompt – what happened next?]**

He pushed me off the sofa and onto the floor. He put his hand over my mouth and I couldn't breathe. I was really scared of him. I really didn't know what he was capable of and I was scared of him. I remember really struggling now. I was kicking him and pushing him and screaming at him. I remember thinking that he might try and rape me and so I was really fighting him and screaming.

But he started saying things to me like "I was being silly and that I was enjoying it as much as he was". He was looking at me in a really horrible way, with really evil eyes and I was really scared of him.

He was holding me with one hand and with his other hand, he was pulling his trousers down and I remember thinking how strong he was. I remember pushing my legs really close together. I was pushing him off me really hard. He pulled my knickers down.

**[Prompt – what happened next?]**

He raped me. I don't know how long it went on for and then he just got off me and he left. He left me lying on the floor. I got up and decided that I should have a shower. I couldn't stay in my room anymore so I left a note for my boss, saying that I wasn't well and had needed to go home.

**[Prompt; what happened next?]**

Nothing. I didn't really do anything. Sometime later I bumped into a close friend of mine who noticed that I was not myself and I ended up telling her everything. She said that I should go to the police and make a statement.



## **2) Freeze/Not shamed/Coherent**

**[Prompt: I would like you to begin by describing the events you allege took place on the 6<sup>th</sup> February 2007. Please can you talk through what happened including the events leading up to and preceding the event, giving as much detail as possible. This statement will be video recorded for our records.]**

Ok I find this really difficult but I will try. I can remember it clearly, as if it was yesterday.

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I remember that the first day of the conference was really full-on and I was really tired. I had to give a presentation the next day and didn't feel fully prepared. I felt really stressed.

After dinner, I was on my way up to my room to do a bit more preparation when one of my colleagues approached me. He said he had heard me talking about my presentation at dinner and knew that I was stressed about it. He said he had some papers which he thought would be useful and that he could bring them up to my room and we could talk about them.

**[Prompt – who was this man?]**

Oh..ummm.. he was someone from work. I didn't really know him I didn't know his name but knew he was one of the managers from another department. I remember feeling pleased and so grateful that he had offered to help.

He suggested that we went to the hotel bar to discuss them further. But I was so tired. I couldn't face a drink... so I suggested that we go up to my room and have a coffee and go through things with me there. Which he did.

We sat in my room and talked about my presentation for about an hour. I remember thinking it was getting late and started to feel worried as I had to get up early in the morning and had a lot more work to do after he left. I started hinting that I was tired and that he should go. I started yawning in the hopes that he would leave. He didn't seem to get the hint.

I remember starting to feel really uncomfortable. He was sat close to me and his hand was really near my leg. I really wanted him to go and said that I was grateful for his help but that I thought it was time for him to leave.

At this point he got really cross and said that he had spent all this time talking about my presentation and the least I could do was have a drink with him. I told him again that I thought he should leave.

**[Prompt – what happened next?]**

I felt really uncomfortable now and didn't really know what to do. Suddenly he leant over and kissed me. I was really surprised. I really didn't expect it. I didn't know what to do. I think I kissed him back. Even though I really didn't want to.

I remember being really worried now and I really wanted him to leave. I turned my head to the side to try and get away from him. I told him that I wanted him to stop.

But he didn't and just kept on kissing me. He was kissing my neck. He was touching me. Touching my breast and my leg.

I remember shouting at him to stop and that he should leave my room. I remember wanting to keep shouting at him but nothing was coming out of my mouth. It felt like I had no voice. I remember he was holding me really tightly and I think I knew then that he was going to rape me.

**[Prompt – what happened next?]**

He pushed me off the sofa and onto the floor. He put his hand over my mouth and I couldn't breathe. I was really scared of him. I really didn't know what he was capable of and I was scared of him. I remember just lying there and remember thinking that maybe if I just lay there he would get off and leave me alone. But he started saying things to me like "I was being silly and that I was enjoying it as much as he was". He was looking at me with really evil eyes and I was really scared of him.

**[Prompt – what happened next?]**

I remember just lying there. He was holding me with one hand and with his other hand, he was pulling his trousers down and I remember thinking how strong he was. I really wanted to get up and run away but my legs weren't working properly. My legs felt like jelly and my body wouldn't do anything. I remember pushing my legs really close together. He pulled my knickers down. I still couldn't do anything. I was really scared of him.

**[Prompt – what happened next?]**

He raped me. I don't know how long it went on for and then he just got off me and he left. He left me lying on the floor. I remember feeling really useless lying on the floor. I got up and decided that I should have a shower. I couldn't stay in my room anymore so I left a note for my boss, saying that I wasn't well and had needed to go home.

**[Prompt; what happened next?]**

Nothing. I didn't really do anything. I felt like I had let him do it to me and that I couldn't really do anything. Sometime later I bumped into a close friend of mine who noticed that I was not myself and I ended up telling her everything. She said that I should go to the police and make a statement.

## **APPENDIX C**

### **Participant Information Sheet**



# UCL

## Information Sheet for Participants in Research Studies

You will be given a copy of this information sheet.

Title of Project: **A study of the general public's understanding of reactions to rape and implications for the judicial system.**

This study has been approved by the UCL Research Ethics Committee [Project ID Number]: **0920/001**

Name, Address and Contact Details of Investigators: **Martha Nicholson  
University College London**

**Email:**

We would like to invite you to participate in this research project. You should only participate if you want to; choosing not to take part will not disadvantage you in any way. Before you decide whether you want to take part, it is important for you to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or you would like more information.

### **Background to the study**

It is estimated that 7% of women are raped or suffer from a serious sexual assault in their lifetime. Although the reporting of sexual crimes such as rape has increased over the last 20 years, the rate of convictions in this area has not. Currently in the UK, the proportion of reported rapes resulting in a conviction is very low (5.3%). This observation has prompted the government to introduce a National Action Plan on sexual violence to address these low conviction rates. One of the proposed plans is the introduction of Expert Witnesses into court to inform juries of the psychological impact of rape, to assist assessment of victim credibility.

### **The purpose of this study**

The aim of current study is to investigate how members of the public interpret aspects of a rape victim and her statement and whether this influences judgements of credibility. It is hoped that this study will be helpful in informing Services working with people who have been raped to improve the care that they are offered. Additionally, this study could be used to inform Government initiatives attempting to address the low conviction rates in rape cases in the UK.

**What is involved for participants?**

Participants will complete the study in a mixed-group (containing both female and male participants) of approximately 10 people. The study will be carried out by Martha Nicholson, either at University College London or your workplace. It is estimated that the study will take 30 minutes (max.) to complete.

You will be asked to watch a video (approximately 10 minutes), of a woman giving an account of a rape incident. You will then be asked to fill in a number of questionnaires relating to the video, including your perceptions of the woman and her statement, and two questionnaires about general attitudes.

All participants will be fully de-briefed on completion of the study and the researcher will be available to answer any questions you may have about the study.

Additionally, it is acknowledged that due to the topic of the study, some participants may find the video and the content of the questionnaires distressing. Should this study raise any difficult issues or feelings that you would like to discuss further, please approach the researcher (Martha Nicholson), who is available at the end of the study to talk about these issues.

Alternatively, you could contact:

- Your GP to discuss a referral to counselling/psychological therapies.
- The Havens – Specialist Sexual Assault Service  
Haven-Paddington:  
Haven-Camberwell:  
Haven-Whitechapel:

**Confidentiality**

Although you will be watching the video within a group, you will be asked to complete the questionnaires independently and your responses will not be discussed with other group-members.

Your name or any other identifying information will not be included on any of the data collected. Your responses will be identified only by a code. All responses will be kept confidential.

**For more information about the study please contact:**

Ms Martha Nicholson  
Sub-department of Clinical Health Psychology  
University College London

It is up to you to decide whether or not to take part. If you choose not to participate it will involve no penalty or loss of benefits to which you are otherwise entitled. If you decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason.

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

## **APPENDIX D**

### **Informed Consent Form for Participants in Research Studies**



# UCL

## Informed Consent Form for Participants in Research Studies

*(This form is to be completed independently by the participant after reading the Information Sheet and/or having listened to an explanation about the research.)*

Title of Project: **A study of the general public's understanding of reactions to rape and implications for the judicial system**

This study has been approved by the UCL Research Ethics Committee [Project ID Number]:

**0920/001**

### Participant's Statement

I .....

agree that I have

- read the information sheet and/or the project has been explained to me orally;
- had the opportunity to ask questions and discuss the study;
- received satisfactory answers to all my questions or have been advised of an individual to contact for answers to pertinent questions about the research and my rights as a participant and whom to contact in the event of a research-related injury.

I understand that I am free to withdraw from the study without penalty if I so wish and I consent to the processing of my personal information for the purposes of this study only and that it will not be used for any other purpose. I understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.

Signed:

Date:

### Investigator's Statement

I .....

confirm that I have carefully explained the purpose of the study to the participant and outlined any reasonably foreseeable risks or benefits (where applicable).

Signed:

Date:

## **APPENDIX E**

### **Questionnaire Measures**



PARTICIPANT NUMBER

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## DEMOGRAPHIC INFORMATION

Please answer all questions below.

**Gender** (Please circle response):

Female

Male

**Age:** \_\_\_\_\_

**Ethnicity** (Please circle response):

Asian Bangladeshi

Black African

White British

Mixed – White + Asian

Asian Indian

Black Caribbean

White Irish

Mixed – White + Black African

Asian Pakistani

Black - other

White - other

Mixed – White + Caribbean

Asian - other

Mixed - other

Chinese

Any other Ethnic group: \_\_\_\_\_

**Marital status** (Please circle response):

Single

Relationship

Married

Divorced

Widowed

**Employment** (Please circle response):

Un-employed

Retired

Part-time employment

Full-time  
Employment

Student

If employed, what is your current job title?

\_\_\_\_\_

If currently a student, which course are you studying and at which level (e.g. undergraduate, post-graduate etc).

\_\_\_\_\_

**Are you on the electoral role?** (please circle response):

YES

NO

**Have you ever participated in jury service?** (please circle response):

YES

NO

PARTICIPANT NUMBER

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**RESPONSE TO THE WITNESS**

You have just viewed a recording of a woman giving an account of an alleged rape. In response to this recording, please answer the questions below.

Please indicate your opinion by placing a tick in **one** box between the descriptors at the end of **each** row. Please answer all the questions.

**The woman appeared:**

|                       |   |   |   |   |   |   |   |   |   |   |    |                      |
|-----------------------|---|---|---|---|---|---|---|---|---|---|----|----------------------|
| Not at all<br>ashamed | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely<br>ashamed |
|-----------------------|---|---|---|---|---|---|---|---|---|---|----|----------------------|

**The woman's memory of the event appeared:**

|                       |   |   |   |   |   |   |   |   |   |   |    |                          |
|-----------------------|---|---|---|---|---|---|---|---|---|---|----|--------------------------|
| Very<br>good/complete | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Very poor/<br>incomplete |
|-----------------------|---|---|---|---|---|---|---|---|---|---|----|--------------------------|

**During the event the woman appeared:**

|                         |   |   |   |   |   |   |   |   |   |   |    |                            |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|----------------------------|
| Not to resist<br>at all | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | To resist<br>very strongly |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|----------------------------|

**Overall, the woman's STATEMENT was:**

|                        |   |   |   |   |   |   |   |   |   |   |    |                       |
|------------------------|---|---|---|---|---|---|---|---|---|---|----|-----------------------|
| Not at all<br>credible | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely<br>credible |
|------------------------|---|---|---|---|---|---|---|---|---|---|----|-----------------------|

CREDIBLE – is it believable? (e.g. **did** this event happen?)

|                         |   |   |   |   |   |   |   |   |   |   |    |                        |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|------------------------|
| Not at all<br>plausible | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely<br>plausible |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|------------------------|

PLAUSIBLE – is it reasonable? (e.g. **could** this event have happened?)

**How confident would you be in making a judgement about the event based on the statement?**

|                         |    |     |     |     |     |     |     |     |     |     |      |                        |
|-------------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------------------------|
| Not at all<br>confident | 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% | Extremely<br>confident |
|-------------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------------------------|

PARTICIPANT NUMBER 

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Overall, the WOMAN appeared:

|                     |   |   |   |   |   |   |   |   |   |   |    |                    |
|---------------------|---|---|---|---|---|---|---|---|---|---|----|--------------------|
| Not at all credible | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely credible |
|---------------------|---|---|---|---|---|---|---|---|---|---|----|--------------------|

|                   |   |   |   |   |   |   |   |   |   |   |    |                  |
|-------------------|---|---|---|---|---|---|---|---|---|---|----|------------------|
| Not at all honest | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely honest |
|-------------------|---|---|---|---|---|---|---|---|---|---|----|------------------|

How confident would you be in making a judgement about the event based on the way the woman appeared during the statement?

|                      |    |     |     |     |     |     |     |     |     |     |      |                     |
|----------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|---------------------|
| Not at all confident | 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% | Extremely confident |
|----------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|---------------------|

How likely is it that the woman voluntarily agreed to have sex with the man?

|                                   |   |   |   |   |   |   |   |   |   |   |    |                                  |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|----|----------------------------------|
| Not at all likely that she agreed | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely likely that she agreed |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|----|----------------------------------|

How traumatic must this experience have been for the woman?

|                      |   |   |   |   |   |   |   |   |   |   |    |                     |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|
| Not at all traumatic | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely traumatic |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|

How long would it take for the woman to completely recover from the event?

|         |          |           |            |          |               |                          |
|---------|----------|-----------|------------|----------|---------------|--------------------------|
| One day | One week | One month | Six months | One year | Several years | Never recover completely |
|---------|----------|-----------|------------|----------|---------------|--------------------------|

PARTICIPANT NUMBER 

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### INFORMATION IMPORTANT IN JUDGING WITNESS CREDIBILITY

You have just viewed a recording of a woman giving an account of an alleged rape and have rated the credibility of the woman and her statement.

We are interested in which aspects of the account you found particularly important when judging credibility.

#### CONTENT OF THE STATEMENT

##### The circumstances of the event

|                         |   |   |   |   |   |   |   |   |   |   |    |                        |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|------------------------|
| Not at all<br>important | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely<br>Important |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|------------------------|

##### The woman's reactions to the man's advances

|                         |   |   |   |   |   |   |   |   |   |   |    |                        |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|------------------------|
| Not at all<br>important | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely<br>Important |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|------------------------|

##### The man's response to the woman's reactions

|                         |   |   |   |   |   |   |   |   |   |   |    |                        |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|------------------------|
| Not at all<br>important | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely<br>Important |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|------------------------|

##### The description of the intercourse

|                         |   |   |   |   |   |   |   |   |   |   |    |                        |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|------------------------|
| Not at all<br>important | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely<br>Important |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|------------------------|

##### The detail of the event

|                         |   |   |   |   |   |   |   |   |   |   |    |                        |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|------------------------|
| Not at all<br>important | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely<br>Important |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|------------------------|

PARTICIPANT NUMBER 

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**STYLE OF THE STATEMENT**

**Facial expressions**

|                      |   |   |   |   |   |   |   |   |   |   |    |                     |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|
| Not at all important | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely Important |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|

**Emotional expression (e.g. distress, anger, sadness, shame etc).**

|                      |   |   |   |   |   |   |   |   |   |   |    |                     |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|
| Not at all important | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely Important |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|

**Gaze (i.e. eye-contact)**

|                      |   |   |   |   |   |   |   |   |   |   |    |                     |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|
| Not at all important | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely Important |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|

**Speech rate**

|                      |   |   |   |   |   |   |   |   |   |   |    |                     |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|
| Not at all important | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely Important |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|

**Voice (e.g. loudness, pitch)**

|                      |   |   |   |   |   |   |   |   |   |   |    |                     |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|
| Not at all important | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely Important |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|

**Gestures**

|                      |   |   |   |   |   |   |   |   |   |   |    |                     |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|
| Not at all important | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely Important |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|

**Coherence of the statement (e.g. logical/consistent/easy to follow)**

|                      |   |   |   |   |   |   |   |   |   |   |    |                     |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|
| Not at all important | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely Important |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|

**Memory of the event**

|                      |   |   |   |   |   |   |   |   |   |   |    |                     |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|
| Not at all important | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Extremely Important |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|

Overall, which aspect of the statement was MOST important when making a judgment of credibility?

|              |   |   |   |   |   |   |   |   |   |   |    |            |
|--------------|---|---|---|---|---|---|---|---|---|---|----|------------|
| Only CONTENT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Only STYLE |
|--------------|---|---|---|---|---|---|---|---|---|---|----|------------|

## RESPONSE TO THE DEFENDANT

To answer the following questions please assume that you are on a jury and have been asked to vote on the question of guilt in a court trial.

We know that there are other pieces of information that should be considered when deciding on a verdict, but we would like you to give your opinion on the basis of the statement you have just viewed.

**From the statement you have just seen, what is the likelihood (in a percentage (%)) that YOU would judge the defendant guilty of rape?**

|                   |     |     |     |     |     |     |     |     |     |               |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|
| 0%                | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100%          |
| <b>Not Guilty</b> |     |     |     |     |     |     |     |     |     | <b>Guilty</b> |

Please indicate **YOUR** opinion of the defendant, by placing a tick in one of the boxes below.

**Overall, would YOU rate the defendant as guilty or not guilty?**

GUILTY

☐

NOT GUILTY

☐

**From the statement you have just seen, what is the likelihood (in a percentage (%)) that the defendant would be judged guilty of rape by a jury in a court trial?**

|                   |     |     |     |     |     |     |     |     |     |               |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|
| 0%                | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100%          |
| <b>Not Guilty</b> |     |     |     |     |     |     |     |     |     | <b>Guilty</b> |

**Finally, to what extent do you feel that the statement gave adequate (enough) information to make a decision in this case?**

|  |     |     |     |     |     |     |     |     |     |  |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| (0%)<br><b>Completely<br/>inadequate<br/>information</b> | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | (100%)<br><b>Completely<br/>adequate<br/>information</b> |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|

PARTICIPANT NUMBER

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## ATTITUDES TOWARD RAPE

**INSTRUCTIONS:** For the statements that follow, please circle the number which best indicates your opinion (what you think/believe).

Please answer all questions.

|   | DISAGREE<br>STRONGLY | DISAGREE<br>MILDLY | NEUTRAL | AGREE<br>MILDLY | AGREE<br>STRONGLY |
|---|----------------------|--------------------|---------|-----------------|-------------------|
| 1. A raped woman is a less desirable woman.....   | 1                    | 2                  | 3       | 4               | 5                 |
| 2. The extent of a woman's resistance should be the major factor in determining if a rape has occurred.....       | 1                    | 2                  | 3       | 4               | 5                 |
| 3. A raped woman is usually an innocent victim.....   | 1                    | 2                  | 3       | 4               | 5                 |
| 4. Women often claim rape to protect their reputation.....  | 1                    | 2                  | 3       | 4               | 5                 |
| 5. "Good" girls are as likely to be raped as "bad" girls.....   | 1                    | 2                  | 3       | 4               | 5                 |
| 6. Women who have had prior sexual relationships should not complain about rape.....                              | 1                    | 2                  | 3       | 4               | 5                 |
| 7. Women <b>do not</b> provoke rape by their appearance or behaviour.   | 1                    | 2                  | 3       | 4               | 5                 |
| 8. Intoxicated women are usually willing to have sexual relations.....  | 1                    | 2                  | 3       | 4               | 5                 |
| 9. It would do some women good to be raped.....   | 1                    | 2                  | 3       | 4               | 5                 |
| 10. Even women who feel guilty about engaging in premarital sex are <b>not</b> likely to falsely claim rape.....  | 1                    | 2                  | 3       | 4               | 5                 |
| 11. Most women secretly desire to be raped .....  | 1                    | 2                  | 3       | 4               | 5                 |
| 12. Any female may be raped.....  | 1                    | 2                  | 3       | 4               | 5                 |
| 13. Women who are raped while accepting rides from strangers get what they deserve.....                           | 1                    | 2                  | 3       | 4               | 5                 |
| 14. Many women invent rape stories if they learn they are pregnant  | 1                    | 2                  | 3       | 4               | 5                 |
| 15. Men, not women, are responsible for rape .....  | 1                    | 2                  | 3       | 4               | 5                 |
| 16. A woman who goes out alone at night puts herself in a position to be raped .....                              | 1                    | 2                  | 3       | 4               | 5                 |
| 17. Many women claim rape if they have consented to sexual relations but have changed their minds afterwards..... | 1                    | 2                  | 3       | 4               | 5                 |

PARTICIPANT NUMBER

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|  |  |  |
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|   | DISAGREE<br>STRONGLY | DISAGREE<br>MILDLY | NEUTRAL | AGREE MILDLY | AGREE<br>STRONGLY |
|---|----------------------|--------------------|---------|--------------|-------------------|
| 18. Accusations of rape by bar workers, escorts and prostitutes should be viewed with suspicion.....  | 1                    | 2                  | 3       | 4            | 5                 |
| 19. A woman <b>should not</b> blame herself for rape.....   | 1                    | 2                  | 3       | 4            | 5                 |
| 20. A healthy woman can successfully resist a rapist if she really tries .....  | 1                    | 2                  | 3       | 4            | 5                 |
| 21. Many women who report rape are lying because they are angry or want revenge on the accused.....   | 1                    | 2                  | 3       | 4            | 5                 |
| 22. Women who wear short skirts or tight blouses <b>are not</b> inviting rape.....  | 1                    | 2                  | 3       | 4            | 5                 |
| 23. Women put themselves in situations in which they are likely to be sexually assaulted because they have an unconscious wish to be raped..... | 1                    | 2                  | 3       | 4            | 5                 |
| 24. Sexually experienced women are not really damaged by rape   | 1                    | 2                  | 3       | 4            | 5                 |
| 25. In most cases when a woman was raped, she deserved it....   | 1                    | 2                  | 3       | 4            | 5                 |



PARTICIPANT NUMBER

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|  |  |  |
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**Instructions:** Read each statement and circle the response (true or false) that best describes you.

Please answer all questions

- |   |      |       |
|---|------|-------|
| 1. It is sometimes hard for me to go on with my work if I am not encouraged.  | True | False |
| 2. I sometimes feel resentful when I don't get my own way.  | True | False |
| 3. On a few occasions, I have given up doing something because I thought too little of my ability.                  | True | False |
| 4. There have been times when I felt like rebelling against people in authority even though I knew they were right. | True | False |
| 5. No matter who I'm talking to, I'm always a good listener.  | True | False |
| 6. There have been occasions when I took advantage of someone.  | True | False |
| 7. I'm always willing to admit it when I have made a mistake.   | True | False |
| 8. I sometimes try to get even rather than forgive and forget.  | True | False |
| 9. I am always courteous, even to people who are disagreeable.  | True | False |
| 10. I have never been irked when people expressed ideas very different from my own.                                 | True | False |
| 11. There have been times when I was quite jealous of the good fortunes of others.                                  | True | False |
| 12. I am sometimes irritated by people who ask favours of me  | True | False |
| 13. I have never deliberately said something that hurt someone's feelings.  | True | False |