VICTIM REACTIONS DURING RAPE/SEXUAL ASSAULT: A PRELIMINARY STUDY OF THE IMMOBILITY RESPONSE AND ITS CORRELATES

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ONE OF THE MOST TROUBLESOME AREAS REGARDING RAPE CONTINUES TO BE the issue of 'consent' on the part of the survivor (Cohn 1975). Struggling, screaming, and other forms of active resistance by the victim become a crucial element in the handling of the crime of rape/sexual assault and in the treatment and recovery of the rape survivor.

Police seek visible signs of resistance in determining whether a rape has occurred, and when these signs are absent, it is difficult to convince investigators that a rape has taken place (Rose & Randall 1982). Further, indifferent treatment by medical personnel is often

based on their judgment of whether a victim adequately resisted (Schwendinger & Schwendinger 1980, p. 9). A survivor told of a physician who informed her that 'if she had really struggled, she could not have been raped' and demonstrated this by having the survivor try to put a pencil into a cup that he moved around quickly.

While most American states have deleted resistance standards from their statutes, the type and degree of victim resistance continue to influence jury verdicts (Abarbanel 1986). Harsher sentences are also given in cases where there is greater victim resistance (Scroggs 1976). Attitudes of both family and friends often depend on their perception of the victim's responses during the assault. Barnett and Field (1977, p. 94) found that 18 per cent of college women and 40 per cent of college men agreed that '. . . the degree of a woman's resistance should be the major factor in determining whether a rape has occurred'. Subjects also attributed more blame for the assault to the assailant as the perceived level of victim resistance increased (McCaul, Veltum, Boyechko & Crawford 1990).

During recovery, women who were passive or felt paralysed during an attack were especially vulnerable to self-blame (Meyer & Taylor 1986), and experienced higher levels of guilt and self-derogation (Mezey & Taylor 1988). Stewart, Hughes, Frank, Anderson, Kendall and West, (1987) found that 58 per cent of a group of survivors who sought immediate treatment had attempted to fight back, while only 27 per cent of a delayed treatment group had attempted to defend themselves. Clearly, active resistance is a critical factor in rape, yet anywhere from 12 per cent (Brickman & Briere 1984) to 50 per cent (Amir 1975) of victims are quiet and motionless during the attack and do not resist the attackers in any way. Burgess and Holmstrom (1976) report 37 per cent of a sample of rape survivors indicated they felt paralysed and unable to move. What is the nature of this reported immobility and what role might it play in the aftermath of rape?

There may be an involuntary, reflexive, physiological basis for this immobility. A long-documented physiological, involuntary, reflexive response which occurs in many animal species is 'tonic immobility' (Suarez & Gallup 1976). This is an *unlearned* state of profound motor inhibition typically elicited by a high fear situation that involves threat and/or restraint. After some struggling, a catatonic-like posture ensues. Vocalisation stops, tremors occur, and there are periods of eye closure. Heart rate decreases while body temperature and respiration increase (Suarez & Gallup 1976). Tonic immobility has seldom been studied in humans (Crawford 1977), but Suarez and Gallup (1976) proposed that freezing reactions during rape may be an instance of tonic immobility in human beings. This possibility is supported by victim self-reports such as, 'I felt faint, trembling and cold . . . I went limp' (Burgess & Holmstrom 1976, p. 416), or feeling '. . . unable to do anything . . . even move my legs (Rose 1986, p. 819).

The similarities between a rape attack and the methods used to induce tonic immobility are apparent (Suarez & Gallup 1976). Rape can, and frequently does, involve restraint and fear-producing stimuli such as weapons or violent threats. Ratner (1967) has suggested that tonic immobility may be an evolved defence mechanism to predation, and rape has been described as a predatory act (Selkin 1975).

Given that the experience of freezing or immobility during rape has such important consequences, it seems important to explore this phenomenon in greater detail. The specific goals of this preliminary study were to:

- evaluate the degree of similarity between the features of rape victim immobility and the features of tonic immobility observed in the animal laboratory;
- ascertain the frequency of occurrence of such immobility responses in a sample of rape survivors; and
- identify possible psychosocial correlates to the immobility response (such as childhood trauma, presence of weapons, post-rape adjustment).

Method

Participants

Thirty-five rape survivors (aged eighteen to sixty-one) were located through university counselling centres and word of mouth. Time since the rape ranged from two months to ten years, and eighteen (51 per cent) involved perpetrators who were strangers to the survivor. All of the rapes were completed.

Materials and procedure

A Rape Survivors Questionnaire (RSQ) was designed for this study. It consisted of thirty-one forced-choice and checklist items inquiring about:

- demographic information;
- exposure to violence during childhood and adulthood;
- pre- and post-assault attitudes and beliefs about rape;
- physical experiences and bodily sensations during the rape; and
- activities and changes made immediately after, and in the year following, the rape.

A packet consisting of a consent form, area rape crisis counselling information and the RSQ was delivered to each participant. An anonymous mail-back procedure insured confidentiality.

Results

The thirty-five participants were categorised into one of three mobility groups, based upon their responses to two questions. On a 7–point Likert scale, subjects rated the degree to which they froze and felt paralysed during the assault, *and* were unable to move even though not restrained. Participants scoring six or higher on *both* questions were classified as demonstrating the immobility response (Immobile Group). Participants scoring five were classified as Intermediate, and those scoring four or less comprised the Mobile Group. Thirteen subjects (37 per cent) clearly indicated Immobility during the rape. Eight subjects (23 per cent) were classified as Intermediate and fourteen (40 per cent) were included in the Mobile category.

Participants also reported (on a three-point intensity scale) the degree to which they had several specific experiences during the assault. These were selected to parallel behaviours observed during tonic immobility states in animals and included:

- degree of motor inhibition;
- tremors;
- eye closures;
- increased breathing; and
- coldness.

A one-way, randomised ANOVA revealed those classified as Immobile experienced these specific sensations to a greater degree ($\overline{X}$ = 2.0) than the Intermediate ($\overline{X}$ = 1.2) or Mobile Groups ($\overline{X}$ = 1.1), $F_{(2,32)} = 4.08$, $p<0.05$.

To explore possible psychosocial correlates of the immobility response, Chi-square analyses were performed on the obtained frequency of several variables across the three immobility categories. No significant relationships were obtained between the incidence of the immobility response and:

- exposure to violence during childhood or adulthood;
- prior beliefs about resisting an assailant;
- the presence of a weapon;
- the number of injuries suffered;
- whether the assailant was a stranger or not;
- relationship between the victim and a known assailant (distant or intimate); or
- how soon assistance was sought after the assault.

Although no significant relationship between the incidence of immobility and whether or not someone asked the victim if they resisted the attack was found, professionals (N = 35) asked this question more often to all victims compared to friends (N = 14) or family (N = 26).

A Chi-square analysis found a significant relationship between the frequency of life changes following the assault and immobility, $X^2(2, N = 35) = 31.55$, $p<0.05$. More changes were made in the Mobile Group (N = 62) than the Immobile Group (N = 48).

A 2x2 ANOVA revealed a significant main effect of the victim's belief that greater resistance would have stopped the assault (Immobile Group, $\overline{X}$ = 4.0; Mobile Group, $\overline{X}$ = 2.2), $F_{(2,64)} = 4.67$, $p<0.05$. A significant main effect of their belief that greater resistance would have led to more people believing they were raped was also found, (Immobile Group, $\overline{X}$ = 3.8, Mobile Group, $\overline{X}$ = 2.8), $F_{(2,64)} = 3.83$, $p<0.05$).

Several behavioural measures of fear were obtained to determine if the incidence of immobility was related to the amount of fear experienced by the victim. A one-way ANOVA showed no significant differences in the degree of fear experienced across the three immobility groups.

Discussion

The results of the present study provide a clearer picture of the immobility response during sexual assault than has previously been obtained. Like others (for example, Burgess & Holmstrom 1976), a substantial percentage of our sample (37 per cent) clearly reported the experience of being immobile or paralysed during the assault. It is interesting to note the sample was almost equally divided in terms of the number of women who reported immobility (37 per cent) and those who did not (40 per cent). This may be evidence of the involuntary nature of the immobility response. An involuntary response, unlike a learned response, would be more likely to be displayed or not, with few instances of partial responding. Other evidence for the involuntary basis of the response comes from the insignificant relationships between the frequency of reported immobility and various aspects of the history of the victim. Finding that factors such as prior experience or belief are independent of immobility may be interpreted as indirect evidence that the response is involuntary and not a result of experience (that is, learned). This interpretation could also explain why the immobility response is not gender-specific (McGowan 1991).

Behavioural measures of fear were found to be unrelated to the immobility response. However, the questionnaire assessed only objective measures of fear (hair standing on end, sweating, and so on) without asking subjects the degree to which they 'felt' afraid. Future studies should obtain a more direct and valid measure of fear to determine its relationship to the immobility response.

For the first time in the literature, empirical comparisons between the paralysis reported by rape survivors and specific features of tonic immobility in animals have been made. The degree of tonic immobility-like behaviours was significantly higher in the Immobile Group than the other two categories. This is the first empirical evidence that the Immobility Response experienced during sexual assault may be similar to tonic immobility in animals.

The role of the immobility response in the aftermath of rape can also be seen in the post-assault measures. The importance of the amount of resistance reported by the victim can be found in the mere frequency with which professionals asked the victim if she resisted the assailant. These findings support previous research (for example, Galton 1975) which stress how commonly resistance is used to assess whether rape has occurred.

Compared to the Mobile Group, the Immobile Group indicated a significantly stronger belief that greater resistance on their part would have stopped the rape and that greater resistance would have led to people being more likely to believe they were raped. Both of these beliefs could be directly tied to recovery for the victim. The finding that the Mobile Group immediately sought more sources of help than the Immobile Group, supports previous research (for example, Stewart et al. 1987) showing that passivity during the assault may affect victim willingness to seek help. Finally, the Mobile Group made significantly more changes in their lives following the assault. These combined findings show how immobility during the assault may significantly affect the victim and how she deals with the rape.

This study provides important information about immobility during sexual assault, and its role in the aftermath of rape. It should be stressed that this study was only preliminary in nature. Sample size was small and may not be representative of all rape survivors. Additionally, nearly half of the sample was raped ten or more years ago which could effect their recall of specific aspects of the rape. Continued investigation into the phenomenon of this immobility response is necessary before definitive conclusions that tonic immobility occurs during rape can be made. However, this study does show that immobility/paralysis is commonly experienced during sexual assault *and* that this paralysis involves responses similar to tonic immobility seen in non-human animals. With continued research into the nature of the immobility response, paralysis during sexual assault may come to be viewed as an involuntary nervous system response (tonic immobility). This view could have significant applications in the post-assault treatment of the victim by medical personnel, the legal system, family and friends, helping professionals and the survivor herself. At the very least, given our current knowledge of immobility during assault, all those involved in rape should be more aware that immobility does occur in women. It should be stressed that immobility may be involuntary paralysis, *not* a sign of the woman choosing not to resist or as an indication of consent on her part.

Additionally, this study raises many new questions for additional research. Researchers in the area of trauma and post-traumatic stress disease have noted the freezing and behavioural shutdown that occurs with fear-induced noradrenergic activation (van der Kolk 1987). Is this an instance of tonic immobility? What are the specific personal and situational predictor variables for the occurrence of the immobility response? None were revealed here. Is there a way to mediate the occurrence of the immobility response, and how can this be applied in self-defence training? How can the helping professional most helpfully respond to victims who experienced immobility, both during the crisis period and during long-term treatment? What is the impact of the immobility response on post-assault self-esteem, self-efficacy, and reactions to future traumas? What is the relationship between the immobility response and dissociation? All these questions remain, and more.

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