

Stranger and Intimate Stalking: Psychological and Psychophysiological Responses in Victims during Direct and Indirect Threat

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Statement

I declare that this thesis is my own work and that, to the best of my knowledge and belief, it does not contain material from published sources without proper acknowledgement, nor does it contain material which has been accepted for the award of any other higher degree or graduate diploma in any university.

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Literature Review

A Review of Stalking Behaviours and the Effects of Stalking on Victims

Abstract

A review of the literature in the area of stalking and victims of stalking was undertaken. Stalking is defined as a course of conduct in which one individual inflicts on another repeated unwanted intrusions and communications, to such an extent that the victim fears for their safety (Pathè & Mullen, 1997). Some psychological research has removed the criteria of a fear response in the victim for participant inclusion. Demographic data indicate risk groups for being stalked are females, young adults, college students and health professionals. Research into motivation of stalkers found that most stalkers act out of a desire to initiate or re-establish an intimate relationship with the target. A small minority of stalkers are motivated by revenge, a desire to invoke fear or a desire for sexual gratification. Research on effects of stalking on victims has documented that somatic complaints, depressive symptoms, heightened anxiety and PTSD has been found in victims of stalking. Research into stalking is still at an early stage, and further empirically based research is needed to clarify and consolidate these findings.

1. Introduction and Overview

When new areas of social concern such as stalking are identified, initial research often focuses on understanding issues such as prevalence and characteristics associated with the behaviour of concern (Haugaard & Seri, 2003). This initial research allows the concern to be clearly defined and operationalised for future research. In order for treatment interventions for stalking to be developed, research into the behaviour must be directed to provide information and education on defining stalking, motivation to stalk, and victims responses to stalking. As stated by Petch (2005), the development of an understanding of stalking, perpetrators of stalking, and likely reactions and risks to the victim will help the health professional minimise the disruption and sense of threat that may ensue.

As indicated by Petch (2005), health professionals must be able to accurately recognise the signs of stalking. To do so it is necessary to identify the point beyond which 'dating' or pursuing behaviours become stalking behaviours. In order to evaluate this, literature on conceptualizations and definitions of stalking will be reviewed. The demographics in relation to stalking behaviour and the victims of stalking will be explored in order to identify which groups are most at risk of experiencing stalking.

As defining stalking often has focused the intent of the stalker or, at the very least, the degree of threat and fear perceived by the victim, literature on classifications of stalkers may have significant implications for legal professions. The five classifications of people who stalk will be reviewed. In order to develop strategies to limit the effects of stalking, the effects of stalking on victims must be understood. Research examining the behavioural, emotional and mental health

consequences of stalking on the victims will be explored. The review will conclude with clinical implications and identifications of further research.

2. Definitions of stalking

As outlined previously, before those who stalk or their victims can be identified or treated, stalking as a concept must first be understood and conceptualised (Petch, 2005). Definitions drawn from psychological research may help define and distinguish when pursuing behaviours or behaviours in isolation become stalking. Legal definitions must be understood in order to implement legal protection orders or utilise anti-stalking legislation. Therefore, both legal and research definitions will be explored and contrasted in the following section.

Pathè and Mullen (1997) described stalking as a course of conduct in which one individual inflicts on another repeated unwanted intrusions and communications, to such an extent that the victim fears for their safety. Westrup and Fremouw (1998) provided a similar definition of stalking as one or more of a constellation of behaviours ranging from conducting surveillance to letter writing, where behaviours are repeatedly directed toward a specific individual, are unwelcome and intrusive, and induce fear or concern in the target. These definitions of stalking have been supported, with the wording of behaviours as unwanted and intrusive eliminating the possibility that dating or courtship behaviours could be included, whereas the need only for feelings of fear or concern by the target allowing for early identification of stalking prior to actual or threatened violence occurring (Spence-Diehl, 2003).

Despite the recommendations in the literature that stalking must invoke fear or concern in the target, many empirical studies do not include the fear component in their working definitions for inclusion into research on stalking. Some definitions

used for participant inclusion are restricted to repeated harassing behaviours and do not require the participant to report fear (Davis, Ace, & Andra, 2002; Del Ben & Fremouw, 2002; Fremouw, Westrup, & Pennypacker, 1997; Jagessar & Sheridan, 2004; Haugaard & Seri, 2003, 2004; Romans, Hays, & White, 1996; Slashinski, Coker, & Davis, 2003; Westrup, Fremouw, Thompson, & Lewis, 1999). Furthermore, some empirical researchers have acknowledged that definitions that exclude a fear component do not reflect stalking, and they have coined terms such as intrusive contact (Haugaard & Seri, 2004), and harassment (Finn, 2004) to describe this behaviour. Research completed by Cupach and Spitzberg (2000) investigates the phenomenon of “obsessional relational intrusion”, which refers to “repeated and unwanted pursuit and invasion of one’s sense of physical or symbolic privacy by another person, either stranger or acquaintance, who desires or presumes an intimate relationship”. This definition allows for exploration of stalking behaviours restricted to the context of a perpetrator motivation for a relationship.

It is acknowledged that victims of stalking, similar to victims of trauma, may respond with a variety of reactions not necessarily including or restricted to fear. Emotional numbing as a result of the stalking behaviours may be present (Pathè, 2002). Subsequently research that does not utilise a requirement that victims respond with fear may still be valid contributors to the literature on stalking and victims.

Never the less, due to the varying definitions used, the potential for confounding results in research is great. As stated by O’Connor and Rosenfeld (2004), empirical research on stalking has suffered from the reliance on varying definitions and different conceptualisations of researchers, thus hindering growth in the knowledge and understanding of the topic.

Stalking legislation in Australia differs across the states, and consistently includes acts engaged on at least two occasions, the expectation that these acts would arouse the other person's apprehension or fear, and the offenders' intent to cause apprehension or fear (Ogilvie, 2000). In Tasmania, legislation states stalking is defined as:

“acts engaged which could be reasonably expected to arouse the other person's apprehension, or fear of physical or mental harm. Furthermore, the offender must intend to cause fear, apprehension, or physical or mental harm or have known that their acts would create fear or apprehension (criminal code act 1924, s192; cited in Ogilvie, 2000).

Not only does this legal definition include a fear component, but it goes further than the research definitions in that the perpetrator must have intended to cause fear. Researchers investigating stalking and considering its legal and psychological research definitions have considered that there is a mismatch between the two definitions due to the intent to cause fear in the legislation (Ogilvie, 2000; Purcell, Pathè, & Mullen, 2004). Specifically, it has been argued that legislation is overly stringent in its definitions and focuses on extreme examples of behaviour (Ogilvie, 2000). Furthermore, legislation relies on subjective understandings of the offenders' intent to cause harm. It has been argued that the inclusion of intent to cause apprehension or fear is at odds with the offence of stalking as the motivation to stalk often arises from a desire to initiate or maintain a relationship with the victim, rather than to harm or cause fear in the victim (Ogilvie, 2000; Purcell et al., 2004). Pathè (2002) supported this argument by stating that it is not the intentions of the stalker that defines a stalking incident but the reaction of the individual that is targeted. Interestingly, more research has focused on the perpetrator of stalking (e.g.,

Bjerregaard, 2002; Lamberg, 2001; Mullen, Pathè, Purcell & Stuart, 1999) than on the responses of victims of stalking (e.g., Blauuw, Winkel, & Arensman, 2000; Pathè & Mullen, 1997).

Currently, all Australian jurisdictions explicitly specify activities within the law that constitute stalking. These include following, loitering outside residence or a place frequented by the victim, surveillance of the victim, entering or interfering with the victim's property, giving or leaving offensive material, approaching or confronting the victim, and telephoning, sending letters or electronic messages to the victim (Currie, 2000; Purcell et al., 2004).

In summary, psychological literature tends to recommend stalking definitions must include repeated unwanted intrusive behaviours that induce fear in the target. However, psychological research has varied in the definitions used for inclusion of participants, with some researchers including the criteria that the victim has responded with fear, while other research does not mandate the victim's response to stalking behaviours. This may have adverse consequences for the systematic growth and understanding of the implications of stalking. Legal definitions add the additional criterion that the offender must *intend* to cause fear in the victim. Despite the incongruity between definitions, empirical studies on public perceptions of what constitutes stalking have indicated a consensus opinion (Jagessar & Sheridan, 2004; Phillips, Quirk, Rosenfeld & O'Connor, 2004). Data have indicated fairly consistent perceptions of what constitutes stalking across gender, race and prior experience to stalking (Phillips et al., 2004). Unfortunately, this research has not conceptualised a working definition of stalking based on the perceptions of their participants, thus, is unable to comment on the accuracy of the psychological and legal descriptions explored previously.

In light of previous research the definition of stalking for use in the current empirical research should include repeated unwanted intrusions invoking fear in the target, such as Pathè & Mullen's (1997) definition of a course of conduct in which one individual inflicts on another repeated unwanted intrusions and communications, to such an extent that the victim fears for their safety.

3. Incidence of stalking

Research examining the incidence of stalking has provided an indication of the scope of the concern within the community and across age and cultural sub-groups. Such data have aided in developing an understanding of the experiences of those targeted with intrusive contact (Haugaard & Seri, 2003) and may be able to guide the development of effective clinical and legal interventions (O'Connor & Rosenfeld, 2004).

Figures on the prevalence of stalking are largely obtained through self-report surveys of the general community (e.g., Bjerregaard, 2002; Davis et al., 2002; Fremouw et al., 1997; Haugaard & Seri, 2003; Purcell, Pathè & Mullen, 2000). Due to some researchers excluding the requirement of the victim responding with fear to the intrusive behaviour/s (e.g., Bjerregaard, 2002; Davis et al., 2002; Fremouw et al., 1997; Haugaard & Seri, 2003), data in this section will be presented in terms of the definition of stalking used during data collection for those particular studies.

Australian research that included a fear response in the definition of stalking was conducted by Purcell et al., (2000). Their survey of 3700 adults drawn from the Australian electoral roll indicated the lifetime prevalence of stalking was 23.4%, with 5.8% being stalked in the 12 months prior to survey. The same research demonstrated that the experience of being stalked is significantly more common

among younger persons aged 18 to 35 years. Purcell et al. (2000) found the lifetime cumulative prevalence was 31.8% among those aged 18-35, compared to 27.6% and 14.6% for those aged 36-55 and 56 and over respectively. Moreover, the majority of those reporting stalking were female (75%) with 43% between the ages of 18 and 30 at the commencement of stalking (Purcell et al., 2000). Similar age demographics were found by Brewster (2002). Brewster (2002) completed research with women stalked by an intimate partner at some stage in their life. 37.4% of participants reported the stalking occurred between the ages of 20 and 29 years.

Purcell et al.'s (2000) findings in an Australian electoral role sample were somewhat similar to American findings, despite the fact that the research to follow did not require victims to respond with fear as part of their inclusion criteria. Numerous studies have been conducted with American college populations, with prevalence ranging from 24.7% for females and 10.9% for males (Bjerregaard, 2002) to 29% for females and 24% for males (Logan, Leukefeld & Walker, 2002). Self-report data obtained from approximately 600 male and female college students indicated that 30% of females and 17% of males had been stalked (Fremouw et al., 1997). Investigations of stalking offending behaviour indicated that 24% of students admitted to conducting six or more episodes of intrusive behaviour towards an individual (Davis et al., 2002), whereas 20% of students admitted to being the target of intrusive contact (Haugaard & Seri, 2003). Despite the variations in prevalence and definitions of the target behaviour studied, research with a student population has suggested students may be more vulnerable to being stalked than the general community. A further explanation may be that college samples are more familiar with the concept of stalking, and thus more likely to recognise and report stalking

behaviours as stalking. Clinically, this may allow health and education professionals to implement proactive strategies on campus to promote safety.

The US National Institute of Justice (Tjaden, Thonees, & Allison, 2002) commissioned a study of 16,000 males and females to examine stalking in the wider community. This research did include the criterion that the subject experienced stalking behaviours that aroused fear. Prevalence rates in this research were markedly lower than the college samples, with 8% of women and 6% of men reporting experiences meeting the definition of stalking. There was no comment made as to whether these differences were due to different definitions of stalking used in the research, or whether figures may reflect differences in the demographic variables (i.e., age) or sample differences. A researcher examining the same sample as that of Tjaden et al. (2002) commented that the prevalence of stalking in older women aged 55 or over was 3.3% and the sample of older women had similar rates of physical assaults as younger women (Jasinski & Dietz, 2003).

Spitzberg (2002) completed a meta-analysis of 108 samples of stalking across 103 studies of “stalking-related phenomena”. Spitzberg (2002) reported an average prevalence across studies of 23.5% for women, and 10.5% for men. Of the samples, the average proportion of female victims was 75%.

Researchers have also examined the prevalence of different types of contact and behaviours utilised by stalkers. Pathè (2002) listed 16 ways stalkers communicate with their victims. Among the more common were phone calls, letters and cards, following the victim, and the initiation of legal action against the victim in order to facilitate contact with the victim. Other behaviours included sending facsimiles to victims’ workplaces, communication via the Internet and electronic mail, graffiti on victims’ homes, sending gifts or ordering services on the behalf

victims (e.g., pizza deliveries), approaching and maintaining surveillance, spreading rumours, and threats and assaults (Mullen, Pathè, & Purcell, 2000; Pathè, 2002). Recent research into communication with victims via electronic mail and internet has led rise to the term cyberstalking, which refers to stalking experiences limited to these behaviours (Bocij, Bocij, & McFarlane, 2003; Finn, 2004).

Researchers examining the frequency of behaviours constituting stalking have found the majority of victims are exposed to both intrusive behaviours (phone calls, letters, following) and violent behaviours (threats, assaults). Research considering the features of stalking behaviour have found unwanted phone calls and verbal assaults and threats to be the most common stalking behaviours (Bjerregaard, 2002; Blaauw et al., 2000; Brewster, 2002; Cupach & Spitzberg, 2002; Logan et al., 2002; Romans et al., 1996; Westrup et al., 1999).

Blaauw and colleagues (2000) completed a comparison of findings from American, Dutch, English and Australian samples and concluded that stalking behaviours have similar frequencies in different countries. However, American researchers calculated 86.1% of stalking victims experienced unwanted phone calls, 75.9% were verbally threatened and 36% experienced assault by the person stalking them (Westrup et al., 1999). Australian data reported a lower incidence of violent threats and assaults, with 1 in 5 stalking victims reporting physical assault by their stalker (Purcell et al., 2000). However, estimates from forensic and clinical samples placed the incidence of physical assault between 30% and 40% (Mullen et al., 2000; Pathè, 2002). Spitzberg's (2002) meta-analysis of 42 studies placed the average physical violence incidence at 33%, while the average sexual violence incidence was 10% across 17 studies. Threats of physical and/or sexual violence have been reported by 45% of victims of stalking (Pathè & Mullen, 1997). The high incidence

of threatened and actual violence reported by this research has prompted further investigation into predictors of risk for violence in stalking cases. Clinically, this information is especially useful in estimating risk to the victim, and may guide decisions as to which safety procedures to implement with victims. To this end risk for violence will be explored in a later section.

Data on the duration of stalking has indicated many victims are subjected to intrusive and unwanted behaviours for an extended period of time, often years. Purcell et al. (2000) found the duration of stalking to vary from 1 day to 40 years, with 10% of victims subjected to multiple intrusions persisting for at least four weeks. Bjerregaard (2002) reported an average stalking duration of 83 days for female college students, however, the large standard deviation (89.1 days) supported Purcell et al.'s (2000) finding of great variation in duration. The data on duration of stalking behaviours have informed the clinician that the area of concern is not of individual behaviours in isolation but rather a cumulative effect of ongoing fear and threats to personal safety that have been presented over an extended period of time. As stated by Purcell and colleagues (2004), when considered individually, the constellation of behaviours associated with stalking may seem inoffensive. However, when repeated over time such actions become more ominous for the target. Thus, it is seen how by establishing demographic data on stalking, further research opportunities into the effects of stalking on victims can be identified.

Research into characteristics of stalking and victims of stalking have revealed a caution to health professionals. Mullen et al. (2000) and Pathè (2002) have suggested that health care providers, such as psychologists, social workers and general practitioners are especially vulnerable to stalking, as the empathy and attention given to clients is easily misinterpreted by some clients as romantic interest.

Research into prevalence of stalking in counselling centres have supported this through the finding that 5.6% of staff had been stalked, and 64% had experienced some type of harassing behaviour from a client or former client (Romans et al., 1996). Data from an Australian clinic specialising in stalking illustrated a high proportion of stalking victims (36%) were employed in professions such as medicine, teaching and the law at the onset of stalking (Pathè & Mullen, 1997). Research in America support this latter finding, indicating 36.8% of health clinicians had been stalked, with 33% of victims stalked by a stranger, and 33% by a patient/client (Smoyak, 2003). It has been recommended that individuals in these professions may implement proactive strategies to protect their safety, such as using a post office box for correspondence and a silent telephone number (Baldini, 2000; Pathè, 2002)

In summary, this section explored the demographics of stalking such as gender and age of victims, as well as types and incidence of stalking behaviours. From these demographics it is seen how at risk groups such as females, young adults, college students and health professionals have been identified. This has paved the way for future research into reactive and proactive strategies to prevent and limit the impact of stalking on these at risk groups.

4. Typology of stalkers

In order to ascertain which interventions may be effective in reducing the occurrence of stalking, the motivation behind stalking must first be understood. Westrup and Fremouw (1998) stated that the evaluation of factors precipitating and motivating stalking behaviour may provide valuable treatment information for both the reform of the stalker and alternate responses from the victim.

The main contributor to the evaluation of intent and motivation in stalking is Mullen and colleagues (Mullen et al., 1999; Mullen et al., 2000; Pathè, 2002; Purcell et al., 2000) who have based their formulations on clinical and forensic practice in Australia. Further contributions are made through a small number of studies that evaluate motivation of the stalker based on self-report of the victim (Bjerregaard, 2002; Brewster, 2003; Kamphuis, Emmelkamp & de Vries, 2004) or of the health professional involved in the case (Meloy & Boyd, 2003; Rosenfeld, 2003; Ryan, Kucharski, & Kunkle, 2003). The final contribution to literature in the area consists of reviews, commentaries and meta-analysis based on the above mentioned literature (Lamberg, 2001; McCann, 2003; Roberts & Dziegielewski, 1996; Schwartz-Watts & Rowell, 2003; Spitzberg, 2003, Westrup & Fremouw, 1998).

The consensus in stalking literature is that there are at least two types of stalkers, the first being the partner/ex-partner of the victim, who is motivated by the desire to continue or re-establish the domestic relationship (Dziegielewski & Roberts, 1995). The typology of the stalker as a previous intimate of the victim accounts for the majority of stalkers (Bjerregaard, 2002; Mullen et al., 2000; Pathè, 2002; Spitzberg, 2002). Research examining the stalker and victim relationship has indicated 47% of stalkers were ex-partners of their victims (Fremouw et al., 1997). Further, researchers have placed this figure at 33% (Rosenfeld, 2003) and 41% (Bjerregaard, 2002). Based on meta-analysis of 103 studies, Spitzberg (2002) found an average of 49% of stalking cases originated from a romantic relationship. Mullen et al. (2000) and Pathè (2002) labelled this type of stalker as the rejected stalker, and most commonly the rejected partner began stalking their partner after the partner attempted to end the relationship. The rejected stalker is fuelled by distress at the rejection, and Mullen et al. (2000) and Pathè (2002) stated that although many

stalkers concede that a campaign of harassment is unlikely to convince the partner to return, the stalking behaviours trap the victim and the stalker in a continuing relationship. Rejected stalkers have been demonstrated to have the widest range of stalking behaviours, are more likely than other types of stalkers to threaten and assault their victims, and can be the most persistent and intrusive of stalkers.

A number of empirical studies have focused exclusively on the rejected stalker, with the sample consisting entirely of rejected stalkers. Research based on a sample of victims of rejected stalkers concluded power and control were at play throughout the stalking period and the stalker appears to be attempting to regain power and control over his former intimate partner (Brewster, 2003). Further research based on self report of victims found post-intimate stalkers to score low on agreeableness and emotional stability, with insecure attachments (Kamphuis et al., 2004). Furthermore, the latter research summarised post-intimate stalkers as relatively functional people with strong sensitivities to rejection, abandonment and loss (Kamphuis et al., 2004). Although this is useful in terms of providing personality descriptions of stalkers, lack of either a control group or alternate stalker/victim relationship in the previous mentioned research limits the impact of findings. For example, it needs to be established whether those who engage in stalking have significantly different personality profiles than those who do not engage in stalking following the termination of a relationship, and to what extent are personality profiles and perceived power and control dynamics influenced by the attitude of the ex-partner completing the profile.

Research investigating intrusive contact by ex-partners in reference to a control group found no association between sex of perpetrator and initiating intrusive

contact, nor any association between personal and family characteristics of perpetrators vs. non-perpetrators of intrusive contact (Haugaard & Seri, 2004).

To summarise, the conceptualisation of stalkers as previous partners of victims is the most commonly researched profile of stalkers. As seen by the previous discussion, information is drawn from a number of sources, including clinical and forensic experience and empirical studies. However, the lack of control groups coupled with the definitions of stalking used in the research are limiting knowledge growth in this area. Moreover, there is a lack of replication of research findings. There is a need for further research into stalker-victim relationships with comparison made between characteristics of rejected stalkers, and the other identified profiles of the intimacy seeker, incompetent suitor, resentful and predatory.

The second type of stalker commonly identified in stalking literature is the delusional stalker, who meets the Diagnostic and Statistical Manual-IV-TR (DSM-IV-TR; American Psychiatric Association [APA], 2000) diagnostic criteria for Delusional Disorder, Erotomania type (Del Ben & Fremouw, 2002; Dziegielewski & Roberts, 1995; Purcell, Pathè, & Mullen, 2001). The DSM-IV-TR indicates that a diagnosis of Erotomantic sub-type applies when the central theme of the delusion is that another person is in love with the individual. The delusion often concerns idealised romantic love rather than sexual attraction. The person about whom the delusion is held is usually of a higher status (such as a celebrity), but can be a stranger. Erotomantic stalkers are driven by the need for an intimate relationship with the victim. They are convinced the victim reciprocates their love and, despite evidence to the contrary, that they are in an intimate relationship with the victim. Negative responses from the victim are reinterpreted so they are not seen as rejection, and may even be misinterpreted as encouraging (Mullen et al., 2000; Pathè,

2002). Mullen et al. (1999) found that of the one third of 145 stalkers that were intimacy seekers, over half had delusions that the individual they were pursuing was in love with them.

In Pathè's (2002) typology of stalkers, Erotomania was included under the category of 'the intimacy seeker'. This category is not exclusively Erotomania sufferers, but has been expanded to include stalkers suffering from the mental disorders of Schizophrenia, personality disorders and pathologically infatuated stalkers that do not meet the diagnostic criteria for Erotomania. Research with a sample of 82 female stalkers indicated that of a sample of 22 stalkers who could reliably be evaluated for an Axis II disorder, 10 were classified as having Borderline Personality Disorder (Meloy & Boyd, 2003). Despite the differential diagnosis evident among intimacy seekers, Pathè (2002) outlined they are all motivated by their 'love' for the victims, often endowing the object of their affection with special qualities to make them an ideal partner. The intimacy seekers are particularly persistent stalkers due to their delusions regarding the victim and the relationship. Stalking behaviours often include declarations of love, and although it is unlikely an intimacy seeker will become aggressive toward their victim, aggression towards third parties who may be blocking the stalkers' access to their victims is more likely (Mullen et al., 2000; Pathè, 2002).

Categorisation of stalkers into typologies beyond those of intimate/rejected and erotomaniac/intimacy seeker varies across the literature. Two researchers have outlined a third group of stalkers, coined the love obsessional by Zona, or non-domestic by Wright et al (cited in Del Ben & Fremouw, 2002). It has been proposed that this group consists of stalkers with no prior relationship with the victim.

Stalkers in this group may have had some initial incidental contact that triggered the stalking behaviour.

Along with the rejected and intimacy seeker typologies, Pathè (2002) has described an additional three stalker groups. Firstly, the incompetent suitor refers to would-be suitors seeking a partner by methods that are counterproductive and unwelcome. Stalkers in this category are motivated by the desire to initiate a relationship and, unlike the intimacy seeker, hold no delusions over the love of their victim. Subsequently, the duration of stalking tends to be brief. Mullen et al. (2000) and Pathè (2002) suggested these stalkers are essentially average people disabled by poor social skills, self centeredness and insensitivity to the needs of other.

Less common stalker profiles identified by Mullen et al. (2000) and Pathè (2002) through research and clinical practice were the resentful stalker and the predatory stalker. The resentful stalker is responding to a perceived insult or injury and is motivated by the desire for revenge and to cause fear and distress in the victim. Examples of stalkers in this category may be redundant employees stalking their boss or local politician. Finally, the predatory stalker makes up less than 5% of the stalker population who are motivated by sexual desire. These stalkers derive sexual gratification and control through stalking their victims, and stalking activities of surveillance are often preparatory to an assault or attack.

Ryan et al. (2003) have recently proposed a further distinct group of stalkers, judicial stalkers, who are individuals who stalk judges. Following Mullen et al. (2000) and Pathè's (2002) descriptors, this group would fall under resentful stalkers. Ryan et al. (2003) conducted research examining and comparing the clinical profiles of judicial stalkers to amorous stalkers, a group of individuals who targeted celebrities, strangers, acquaintances or former intimate partners. The main findings

were a higher incidence of psychotic disorder and greater social isolation in the judicial group compared to the amorous group. Given that judicial stalkers are most likely to have had some contact with the justice system, the finding of diagnostic differences between these groups is not surprising.

Research into gender differences among those who stalk has only been reported once. Purcell et al. (2001) found approximately 80% of stalkers referred to a forensic mental health clinic were male. Further analysis demonstrated no significant differences between males and females in the duration of stalking and frequency of violence. Males and females differed in their motivation for stalking, with females more likely to target professional contacts to establish intimacy, and less likely than males to target strangers. Females were also more likely than males to target same sex victims. Meloy and Boyd (2003) studied 82 female stalkers although no male comparison group were used. They found only 21% of female stalkers pursued strangers and, of the victims, 52% were males. These findings added support to Purcell et al.'s (2001) research.

There has been some dispute over whether there are differences in stalking behaviours between stranger stalkers and ex-intimates stalkers. Although some researchers have suggested different types of stalkers use different methods of communication (Mullen et al., 2000; Pathè, 2002; Purcell et al., 2001), other researchers have found no differences in stalking behaviour between intimate and stranger stalkers (Blaauw et al., 2000).

In summary, stalkers differ in their motivation. Most stalkers act out a desire to initiate or re-establish an intimate relationship with the target. Such motivation is evident among Mullen et al.'s (2000) and Pathè's (2002) typology of the rejected, intimacy seeker and incompetent suitor. A small minority constituting no more than

5% of stalkers are motivated by revenge, a desire to invoke fear (the resentful stalker), or a desire for sexual gratification (the predatory stalker).

5. Violence in Stalking

As detailed in the previous section, Mullen et al. (2000) and Pathè (2002) have identified that the rejected stalker, or ex-partner of the victim, is more likely to engage in threatened and actual violence than any other type of stalker. Further research has explored this finding by investigating rates of violence among people who stalk their ex-partner (Brewster, 2003; Coleman, 1997; James & Farnham, 2003; Meloy, 2003; Morrison, 2001; Rosenfeld, 2004). Findings in this area may have significant clinical implications for the health professional who is trying to ascertain risk to their client. Furthermore, consideration must be given to the victim of intimate partner stalking who has experienced violence from the partner during their relationship. Victims who have previously experienced violence from their stalker may have different emotional responses and needs than victims stalked by non-partners, or victims who have not experienced violence.

Many researchers have identified a prior intimate relationship between the victim and the stalker as a risk factor for violence (James & Farnham, 2003; Meloy, 2003; Rosenfeld, 2004). The occurrence of violence in stalking by ex-partners may be explained by the occurrence of physical and emotional abuse during the intimate relationship, which then continues via stalking following cessation of the relationship. Research has shown that males who are physically or emotionally abusive during the relationship are more likely to stalk their partner at the end of the relationship than are non-abusive males (Brewster, 2003; Coleman, 1997; Morrison,

2001; Pathè & Mullen, 1997). Of the women stalked by an ex-partner, occurrence of physical assault by those partners during the domestic relationship ranged from 81% (Mechanic, Weaver, & Resick, 2002) to 65% (Brewster, 2002). This has suggested that the higher incidence of violence perpetrated by rejected stalkers compared to other types of stalkers may be due to the increased likelihood of a prior violent relationship between the stalker and the victim. From the perspective of health professionals, exploring the incidence of violence in the victim's prior relationship with the stalker may provide an indication of risk of further violence, as research supports that past violence is a strong predictor of future violence (Elliot, 1994).

Further research has suggested a positive correlation between severity of violence in the domestic relationship and severity of stalking following the termination of the relationship. Mechanic, Uhlmansiek, Weaver and Resick (2002) surveyed 65 battered women, 35 who were stalked relentlessly by their partners (classified as experiencing six different stalking events weekly), and 30 who were stalked infrequently. Emotional abuse variables of dominance and isolation were found to significantly predict stalking severity. Higher levels of emotional, sexual and physical violence were evident in the relentlessly stalked group relative to the infrequently stalked group.

Research into stalking, intimate partner assault and femicide concluded intimate partner stalking is a risk factor for femicide and attempted femicide (McFarlane, Campbell, Wilt, Sachs, & Ulrich, 1999). Research investigated frequency and type of intimate partner stalking in the 12 months prior to 141 femicide and 65 attempted femicide incidents. The prevalence of stalking was 76% for femicide victims, and 85% for attempted femicide victims. Incidence of intimate partner assault was 67% for femicide victims and 71% for attempted femicide

victims. This research signifies the danger of assault and lethal violence to victims being stalked by intimate partners.

Rosenfeld (2004), in his literature review on violent risk factors in stalking, concluded that several risk factors unique to stalking-related violence have been identified. Risk factors for stalking violence with strong empirical evidence include prior intimate relationship with the victim, substance abuse, absence of psychosis and threats of violence.

Limited research is available on the effectiveness of interventions against stalking. Researchers using court and police data have indicated the issuing of restraining orders decreases recidivism in terms of further violence (Hakkenen, Hagelstam, & Santtila, 2003; Rosenfeld, 2003).

Research into both risk factors for violence and interventions against violence in stalking may assist professionals working with victims of stalking. As suggested by Rosenfeld (2004), further research into the area of violence in stalking is required as the small samples and idiosyncratic methods that characterise many studies limit the conclusiveness of any interpretations based on this literature.

6. Psychological effects of stalking

Literature on the effects of stalking on victims can be divided into three types; changes in the victim's behaviour, changes in the victim's personality, and the psychopathology of the victim.

Survey type research has investigated the behavioural effects of stalking by examining changes victim's make in their routines and day to day lives. An Australian self report survey collecting data from 3700 men and women indicated

63% of stalking victims alter their lifestyle in some way as a response to stalking behaviours (Purcell et al., 2000). A 1997 survey of 100 Australians who sought assistance from a specialist stalking clinic placed this figure at 90% (Pathè & Mullen, 1997).

The most common behavioural alteration made by the victim was to change daily routine to minimise intrusions from the stalker. This strategy was used by 31% of stalking victims in Purcell et al.'s (2000) survey, and was one of the most frequently used strategies by male and female college students in the United States (Fremouw et al., 1997). Pathè and Mullen (1997) reported that 53% of victims changed or ceased their employment and Purcell et al. (2000) noted a decrease in work hours and change in start and finish times.

Self-report surveys have identified further protective strategies implemented by victims in response to stalking. These included obtaining a silent (unlisted) phone number (Fremouw et al., 1997; Purcell et al., 2000; Romans et al., 1996), increasing home and work security through installation of alarms and locks (Pathè 2002; Purcell et al., 2000) and increasing personal security through carrying spray weapons (Fremouw et al., 1997).

Along with the aforementioned behavioural responses to stalking, victims have reported changes in their self-perceptions of their personality following stalking victimisation. Changes have been reported by victim self-report on checklist measures. The most prevalent change is an increase in fear and perception of vulnerability (Lamberg, 2001; Pathè, 2002). Research by Hall (1998 cited in Blauuw et al., 2000) and also Brewster (1997, cited in Blauuw et al., 2000) found approximately 40% of stalking victims reported becoming more fearful and easily frightened. Victims regarded themselves as paranoid in 36% of cases in Hall's

research, and 39% of cases in Brewster's research. Moreover, 44% of victims in Hall's research noted increases in distrustfulness and suspiciousness. Perhaps as a result of documented increases in fear and suspicion, victims reported becoming more cautious, more introverted, more aggressive and angry, less friendly and outgoing, and less able to trust (Hall, 1998, in Blauuw et al., 2000); Brewster (1997, cited in Blauuw et al., 2000); Pathè, 2002; Pathè & Mullen, 1997). These changes may be due to combinations of both the need to protect self from danger, and reflections of increased anxiety and fear. The research does not specify whether such changes are limited to the time of the stalking events, or persist beyond the cessation of the events.

Research into the psychopathology of victims of stalking has demonstrated wide ranging symptomatology consist with responses to chronic stress/trauma. The well documented psychological effects of chronic or repeated exposure to traumatic events include symptoms of posttraumatic stress disorder (intrusive recollections and flashbacks, hypervigilance, numbing of responsiveness, difficulty sleeping and concentrating), alterations in self-perception, alterations in relationships with others, somatisation, affective changes, and dissociation (Classen, Pain, Field & Woods, 2006; Herman, 1992; Roth, Newman, Pelcovitz, van der Kolk & Mandel, 1997; van der Hart, Nijenhuis & Steele, 2005).

Not suprising is that research into psychological effects of stalking has yielded similar findings, with the presence of depressive symptoms (Blauuw et al., 2000; Jason, Reichler, Easton, Neal, & Wilson, 1984; Westrup et al., 1999), heightened anxiety and associated somatic complaints (Blauuw et al., 2000; Pathè, 2002; Pathè & Mullen, 1997), and a high prevalence of Posttraumatic Stress Disorder (PTSD)

(Kamphuis, Emmelkamp & Bartak, 2003; Pathè & Mullen, 1997; Westrup et al., 1999).

Using the General Health Questionnaire, Blauuw et al. (2000) found that the anxiety and insomnia, social dysfunction and severe depression scores of the stalked group were more like those of psychiatric outpatients than the general population. Stalking victims' elevated scores on the General Health Questionnaire indicated the presence of a diagnosable psychiatric disorder in 77% of cases. Further clinical assessment utilising the SCL-90 supported elevations in depressive symptoms in victims of stalking. Westrup et al. (1999) documented greater depression and obsessive-compulsive behaviours in the stalked group than the control group. Jason et al., (1984) also reported female victims of stalking suffer depression. Suicidal thoughts were reported by 25% of Pathè and Mullen's (1997) sample, and by 31% of Blauuw et al.'s (2000) sample.

Heightened anxiety in victims of stalking has been found by a range of self-report and standardised questionnaires (Blauuw et al., 2000; Jason et al., 1984). Eighty three percent of Pathè and Mullen's (1997) sample reported increased levels of anxiety, with some victims experiencing panic attacks. Victims of stalking have reported disturbances in sleep cycles and insomnia (Pathè & Mullen, 1997). Dietary changes have been reported to occur, with 48% and 45% of victims reporting appetite disturbance and weight fluctuations respectively (Pathè & Mullen, 1997). Jason et al. (1984) documented the onset of Anorexia Nervosa as a result of stalking victimisation.

It has been accepted that the presence of anxiety may manifest through various somatic symptoms. Therefore, it is hardly surprising that 47% of stalking victims reported increased frequency and severity of headaches, while 30% reported

persistent nausea (Pathè & Mullen, 1997). Onset or aggravation of physical conditions such as asthma, psoriasis, peptic ulcers and nervous tics have all been observed in chronically stressed victims of stalking (Pathè, 2002; Pathè & Mullen, 1997)

Symptoms of posttraumatic stress have been commonly reported among victims of stalking (Pathè, 2002). Researchers have found a greater incidence and severity of PTSD symptoms in victims of stalking compared to the general population (Westrup et al., 1999). Over half of the victims of stalking reported experiencing intrusive recollections and vivid flashbacks of their stalking ordeal, whereas a third reported numbing responses and detachment from others (Pathè & Mullen, 1997). A total of 37% of stalking victims were identified as meeting the DSM-IV-TR's diagnostic criteria for PTSD (Pathè & Mullen, 1997). Research with a sample of victims of post-intimate stalkers found that 87% of victims suffered a significant level of posttraumatic stress symptoms as assessed by the Impact of Event Scale (Kamphuis et al., 2003).

Although a substantial number of stalking victims experience many of the symptoms of PTSD, Pathè (2002) reported that significantly fewer than expected victims qualify for a diagnosis of PTSD under the DSM-IV-TR diagnostic criteria. This is due to the stressor criterion, which states that a person must have experienced, witnessed, or been confronted with an event or events that constituted a threat to the physical integrity of self and others, and that this event must have evoked a response involving fear, helplessness and/or horror (APA, 2000). As discussed previously, actual or threatened violence is not a universal feature in stalking, thus, many incidents of stalking do not meet the conditions of the stressor criterion. Although it has been suggested that victims enduring violence will

demonstrate a greater posttraumatic stress response than victims not subject to violence, the aforementioned research indicated that victims not subject to actual or threatened violence still experience significant psychological distress. A similar argument has been presented by Herman (1992) who reviews the evidence for the existence of a complex form of posttraumatic stress disorder (PTSD) in survivors of prolonged, repeated trauma such as physical and sexual childhood abuse. Herman (1992) argues the stressor criterion fails to capture the protean sequelae of prolonged, repeated trauma, and that the concept of PTSD should be expanded to include a spectrum of disorders ranging from simple PTSD to the complex disorder of extreme stress that follows prolonged exposure to repeated trauma.

To date, there has been little research investigating how stalker typology or relationship of the stalker to the victim affects the victim's psychological response. Research investigating psychopathology of victims and two stalker typologies of ex-partner or other demonstrated that psychiatric symptoms were independent of stalker type (Blaauw et al., 2000). This finding was in contrast to research by Pathè and Mullen (1997) who found symptom levels to be associated with the type of stalker-victim relationship and the occurrence of physical assault. Survey data collected from 100 individuals referred to a clinic specialising in stalking indicated a trend toward more posttraumatic stress symptoms in victims exposed to violence. Ex-partner stalkers were found to use more violent stalking behaviours, thus the researchers concluded that stalking by ex-partners resulted in greater psychiatric symptoms in victims than stalking by other types of stalkers. However, further research investigating trauma arising from indirect and direct stalker behaviours in both ex-partner and stranger stalkers would be required to accurately determine the effects of stalker-victim relationship on victim symptomatology.

The aforementioned researchers also detailed effects of specific stalking behaviours on the victim's psychological symptom levels. Both Blaauw et al. (2000) and Pathè and Mullen (1997) found symptom levels to be significantly greater if victims had been subjected to following behaviours by their stalker. Blaauw et al. (2000) found further symptom elevations in victims experiencing stalking behaviours of theft and destruction of property, in victims stalked daily, and in victims experiencing recent onset of stalking behaviours. Furthermore, symptoms of psychopathology did not remit once the stalking behaviour had ceased, indicating the experience of stalking may have persisting long term effects on victims (Blaauw et al., 2000; Pathè & Mullen, 1997).

Research in the area of effects of stalking on victims has documented victims' behavioural responses of increased security measures, along with personality changes such as increased fear, suspicion and introversion. Along with somatic complaints, the presence of depressive symptoms, heightened anxiety and PTSD have been reported in victims of stalking. Further research has begun to investigate how the relationship of the stalker to the victim affects the victims psychological response, however further research is required to consolidate findings.

7. Conclusion

Current research on stalking has identified demographic data of stalkers and victims, motivation of stalkers, risk of violence for victims, as well as behaviour and psychopathology changes in victims of stalking. This research has significant implications for professionals in terms of treatment for both stalkers and their victims. Research into the psychopathology of victims of stalking indicating the

presence of depressive symptoms, heightened anxiety and posttraumatic stress symptoms provides valuable information for health professionals supporting individuals who have experienced stalking. Research investigating perpetrator-victim relationship may have useful implications for professionals working in domestic violence and relationship counselling areas. Further research investigating the effects of perpetrator-victim relationship on psychopathology of the victim may enable professionals in these areas to implement both proactive and reactive strategies for victims of stalking, and aid a more accurate identification of and understanding of psychopathology of victims.

The empirical research to follow will aim to consolidate previous research in the area of psychological effects of stalking on victims, and more specifically examine the effects of perpetrator-victim relationship on psychopathology of victims. The use of psychophysiological measures and guided imagery will aid evaluation of trauma responses in victims and further contribute to any differences in reaction between victims stalked by ex-intimates versus strangers.

References

- American Psychiatric Association (2000). *The Diagnostic and Statistical Manual of Mental Disorders*. 4th Ed. New York: Author
- Baldini, A. (2000). Stalking: Ramifications and preventative strategies for professionals. *Paper presented at the Stalking: Criminal Justice Responses Conference, Sydney*
- Bjerregaard, B. (2002). An empirical study of stalking victimisation. In K.E Davis, I.H. Frieze, & R.D. Maiuro (Eds), *Stalking: Perspectives on Victims and Perpetrators* (pp. 112-138). New York: Springer Publishing Company.
- Blauuw, E., Winkel, F.W., & Arensman, E. (2000). The toll of stalking: The relationship between features of stalking and psychopathology of victims. *Paper presented at the Stalking: Criminal Justice Responses Conference, Sydney*
- Bocij, P., Bocij, H., & McFarlane, L. (2003). Cyberstalking: A case study of serial harassment in the UK. *The British Journal of Forensic Practice*, 5, 25-32.
- Brewster, M.P. (2002). Stalking by former intimates: verbal threats and other predictors of physical violence. In K.E Davis, I.H. Frieze, & R.D. Maiuro (Eds), *Stalking: Perspectives on Victims and Perpetrators* (pp. 292-312). New York: Springer Publishing Company.
- Brewster, M.P. (2003). Power and control dynamics in prestalking and stalking situations. *Journal of Family Violence*, 18, 207-217.
- Classen, C.C., Pain, C., Field, N.P., & Woods, P. (2006). Posttraumatic personality disorder: A reformulation of complex posttraumatic stress disorder and

- borderline personality disorder. *Psychiatric Clinics of North America*, 29, 87-112.
- Coleman, F.L. (1997). Stalking behavior and the cycle of domestic violence. *Journal of Interpersonal Violence*, 12, 420-432.
- Cupach, W.R., & Spitzberg, B.H. (2002). Obsessional relational intrusion: Incidence, perceived severity and coping. In K.E Davis, I.H. Frieze, & R.D. Maiuro (Eds., *Stalking: Perspectives on Victims and Perpetrators* (pp.138-163). New York: Springer Publishing Company.
- Cupach, W.R., & Spitzberg, B.H. (2002). Obsessional relational intrusion: Incidence, perceived severity and coping. *Violence and Victims*, 15, 357-372.
- Currie, S. (2000). Stalking and domestic violence: views of queensland magistrates. *Paper presented at the Stalking: Criminal Justice Responses Conference, Sydney.*
- Davis, K., Ace, A., & Andra, M. (2002). Stalking perpetrators and psychological maltreatment of partners: anger-jealously, attachment insecurity, need for control and break up context. In K.E Davis, I.H. Frieze, & R.D. Maiuro (Eds). *Stalking: Perspectives on Victims and Perpetrators* (pp. 237-265). New York: Springer Publishing Company.
- Del Ben, K., & Fremouw, W. (2002). Stalking: Developing an empirical typology to classify stalkers. *Journal of Forensic Sciences*, 47, 152-158.
- Dziegielewski, S.F., & Roberts, A.R. (1995). Stalking victims and survivors. In A.R. Roberts (Ed), *Crisis Intervention and Time-limited Cognitive Treatment* (pp. 73-90). California: Sage Publications.
- Elliot, D. (1994). Serious violent offenders: Onset, developmental course, and termination. *Criminology*, 32, 1-21.

- Finn, J. (2004). A survey of online harassment a university campus. *Journal of Interpersonal Violence, 19*, 468-483.
- Fremouw, W.J., Westrup, D., & Pennypacker, J. (1997). Stalking on campus: The prevalence and strategies for coping with stalking. *Journal of Forensic Science, 42*, 666-669.
- Hakkanen, H., Hagelstam, C., & Santtila, P. (2003). Stalking actions, prior offender-victim relationships and issuing of restraining orders in a Finnish sample of stalkers. *Legal and Criminological Psychology, 8*, 189-206.
- Haugaard, J., & Seri, L. (2003). Stalking and other forms of intrusive contact among adolescents and young adults from the perspective of the person initiating the intrusive contact. *Criminal Justice and Behaviour, 31*, 37-54.
- Haugaard, J., & Seri, L. (2004). Stalking and other forms of intrusive contact after the dissolution of adolescent dating or romantic relationships. *Violence and Victims, 18*, 279-297.
- Herman, J. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress, 5*, 377-391.
- Jagessar, J.D.H., & Sheridan, L.P. (2004). Stalking perceptions and experiences across two cultures. *Criminal Justice and Behavior, 31*, 97-119.
- James, D.V., & Farnham, F.R. (2003). Stalking and serious violence. *The Journal of the American Academy of Psychiatry and the Law, 31*, 432-439.
- Jasinski, J., & Dietz, T.L. (2003). Domestic violence and stalking among older adults: An assessment of risk markers. *Journal of Elder Abuse and Neglect, 15*, 3-18.

- Jason, L.A., Reichler, A., Easton, J., Neal, A., & Wilson, M. (1984). Female harassment after ending a relationship: A preliminary study. *Alternative Lifestyles*, 6, 259-269.
- Kamphuis, J., Emmelkamp, P., & Bartak, A. (2003). Individual differences in post-traumatic stress following post-intimate stalking: Stalking severity and psychosocial variables. *The British Journal of Clinical Psychology*, 42, 145-152.
- Kamphuis, J., Emmelkamp, P., & deVries, V. (2004). Informant personality descriptions of postintimate stalkers using the five factor profile. *Journal of Personality Assessment*, 82, 169-178.
- Lamberg, L. (2001). Stalking disrupts lives, leaves emotional scars: Perpetrators are often mentally ill. *The Journal of the American Medical Association*, 286, 519-523.
- Logan, T., Leukefeld, C., & Walker, B. (2002). Stalking as a variant of intimate violence: implications from a young adult sample. In K.E Davis, I.H. Frieze, & R.D. Maiuro (Eds), *Stalking: Perspectives on Victims and Perpetrators* (pp. 265-292). New York: Springer Publishing Company.
- McCann, J. (2003). Stalking and obsessional forms of harassment in children and adolescents. *Psychiatric Annals*, 33, 637-640.
- McFarlane, J.M., Campbell, J.C., Wilt, S., Sachs, S., & Ulrich, Y. (1999). Stalking and intimate partner femicide. *Homicide Studies*, 3, 300-316.
- Mechanic, M.B., Uhlmansiek, M.H., Weaver, T.L., & Resick, P.L. (2002). The impact of severe stalking experienced by acutely battered women: an examination of violence, psychological symptoms and strategic responding. In K.E Davis, I.H. Frieze, & R.D. Maiuro (Eds), *Stalking: Perspectives on*

- Victims and Perpetrators* (pp.89-112). New York: Springer Publishing Company.
- Mechanic, M.B., Weaver, T.L., & Resick, P.L. (2002). Intimate partner violence and stalking behaviour: exploration of patterns and correlates in a sample of acutely battered women. In K.E Davis, I.H. Frieze, & R.D. Maiuro (Eds), *Stalking: Perspectives on Victims and Perpetrators* (pp.62-89). New York: Springer Publishing Company.
- Meloy, J.R. (2003). When stalkers become violent: The threat to public figures and private lives. *Psychiatric Annals*, 33, 659-665.
- Meloy, J.R., & Boyd, C. (2003). Female stalkers and their victims. *The Journal of the American Academy of Psychiatry and the Law*, 31, 211-219.
- Morrison, K.A. (2001). Predicting violent behaviors in stalkers: a preliminary investigation of Canadian cases in criminal harassment. *Journal of Forensic Sciences*, 46, 1403-1410.
- Mullen, P., Pathè M., Purcell, R., & Stuart, G. (1999). Study of stalkers. *American Journal of Psychiatry*, 156, 1244-1249.
- Mullen, P., Pathè, M., & Purcell, R. (2000). *Stalkers and their Victims*. Cambridge: Cambridge University Press.
- O'Connor, M., & Rosenfeld, B. (2004). Introduction to the special issue on stalking. *Criminal Justice and Behavior*, 31, 3-8.
- Ogilvie, E. (2000). Stalking: criminal justice responses in Australia. *Paper presented at the Stalking: Criminal Justice Responses Conference, Sydney*
- Pathè, M. (2002). *Surviving Stalking*. Cambridge: Cambridge University Press.
- Pathè, M., & Mullen, P. (1997). The impact of stalkers on their victims. *British Journal of Psychiatry*, 170, 12-17.

- Petch, E. (2005). Dealing with effects of stalking. *GP London*, 25, 54-55.
- Phillips, L., Quirk, R., Rosenfeld, B., & O'Connor, M. (2004). Is it stalking? Perceptions among college undergraduates. *Criminal Justice and Behavior*, 31, 73-96.
- Purcell, R., Pathè, M., & Mullen, P. (2000). The incidence and nature of stalking victimisation. *Paper presented at the Stalking: Criminal Justice Responses Conference, Sydney*.
- Purcell, R., Pathè, M., & Mullen, P. (2001). A study of women who stalk. *The American Journal of Psychiatry*, 158, 2056-2060.
- Purcell, R., Pathè, M., & Mullen, P. (2004). Stalking: Defining and prosecuting a new category of offending. *International Journal of Law and Psychiatry*, 27, 157-169.
- Roberts, A.R., & Dziegielewski, S.F. (1996). Assessment typology and intervention with the survivors of stalking. *Aggression and Violent Behavior*, 1, 359-368.
- Romans, J.S., Hays, J.R., & White, T.K. (1996). Stalking and related behaviors experienced by counseling center staff members from current or former clients. *Professional Psychology Research and Practice*, 27, 595-599.
- Rosenfeld, B. (2003). Recidivism in stalking and obsessional harassment. *Law and Human Behavior*, 27, 251-265.
- Rosenfeld, B. (2004). Violence risk factors in stalking and obsessional harassment. *Criminal Justice and Behavior*, 31, 9-36.
- Roth, S., Newman, E., Pelcovitz, D., van der Kolk, B., & Mandel, F. (1997). Complex PTSD in victims exposed to sexual and physical abuse: Results from the DSM-IV field trial for posttraumatic stress disorder. *Journal of Traumatic Stress*, 10, 539-555.

- Ryan, W., Kucharski, L.T., & Kunkle, C.D. (2003). Judicial and amorous stalkers: an analysis of Rorschach, MMPI-2 and clinical findings. *American Journal of Forensic Psychology, 21*, 5-30.
- Schwartz-Watts, D.M., & Rowell, C.N. (2003). Commentary: Update on assessing risk for violence among stalkers, *The Journal of the American Academy of Psychiatry and the Law, 31*, 440-443.
- Slashinski, M., Coker, A., & Davis, K. (2003). Physical aggression, forced sex, and stalking victimisation by a dating partner: An analysis of the national violence against women survey. *Violence and Victims, 18*, 595-617.
- Smoyak, S. (2003). Perspectives of mental health clinicians on stalking continue to evolve. *Psychiatric Annals, 33*, 641-648.
- Spence-Diehl, E. (2003). Stalking and technology: the double-edged sword. *Journal of Technology in Human Services 22*, 5-18.
- Spitzberg, B.H. (2002). The tactical topography of stalking victimisation and management. *Trauma, Violence & Abuse, 3*, 261-288.
- Tjaden, T., Thonnes, N., & Allison, C. (2002). Comparing stalking victimization from legal and victim perspectives. In K.E Davis, I.H. Frieze, & R.D. Maiuro (Eds), *Stalking: Perspectives on Victims and Perpetrators* (pp. 9-31). New York: Springer Publishing Company.
- Van der Hart, O., Nijenhuis, E., & Steele, K. (2005). Dissociation: An insufficiently recognised major feature of complex posttraumatic stress disorder. *Journal of Traumatic Stress, 18*, 413-423.
- Westrup, D., & Fremouw, W.J. (1998). Stalking behavior: A literature review and suggested functional analytic assessment technology. *Aggression and Violent Behavior, 3*, 255-274.

Westrup, D., Fremouw, W.J., Thompson, R.N., & Lewis, S.F. (1999). The psychological impact of stalking on female undergraduates. *Journal of Forensic Science*, 44, 554-557.

Empirical Study

Stranger and Intimate Stalking: Psychological and Psychophysiological Responses in Victims during Direct and Indirect Threat

Abstract

The purpose of this study was to examine the psychophysiological and psychological responses of victims of stranger and intimate stalkers to direct and indirect stalking behaviour. Twenty female members of the community were interviewed about a direct threat and indirect threat stalking experience, as well as an emotionally neutral experience. Psychological status was assessed via self-report clinical questionnaires. Psychophysiological responses were measured while personalised, staged imagery scripts were read to participants, and subjective emotional and cognitive responses to the stalking experiences were recorded using visual analogue scales. Results indicated both the direct and indirect threat stalking scripts elicited heart rate and respiration elevations consistent with a peri-traumatic response. Elevated emotional reactions (fearful, threatened, anxious, angry) and cognitive reactions (harm, control, self-blame and helplessness) to the events were present. Psychopathology results indicated that victims of intimate stalkers scored significantly higher on sub-scales of borderline personality, bipolar/mania, thought disorder and delusional disorder than did the stranger group. It was concluded that tightening the definition of the two types of stalking perpetrators used in the current research, and evaluating individual psychopathology in addition to group effects may more accurately map the psychological trauma responses of victims.

Stalking is defined as a course of conduct in which one individual inflicts on another repeated unwanted intrusions and communications, to such an extent that the victim fears for their safety (Pathè & Mullen, 1997). Research examining stalking has begun to investigate the motivations of those who stalk, and the effects of stalking on victims. The present research aimed to integrate both these areas by investigating the psychological and psychophysiological responses to direct and indirect stalking behaviours of victims stalked by strangers and victims stalked by ex-partners.

Initial research examining stalking aimed to define and operationalise the behaviour for further research (Haugaard & Seri, 2003). Psychological literature has tended to agree that stalking definitions must include repeated unwanted intrusive behaviours that induce fear in the target. This is consistent with stalking legislation, which has referred to acts that have occurred on at least two occasions, the expectation that these acts would arouse the other person's apprehension or fear, and the offenders' intent to cause apprehension or fear (Ogilvie, 2000).

Despite the consensus between law and psychology that stalking must invoke fear or concern in the target, many empirical studies have not included a fear component in working definitions for inclusion into research on stalking. Some definitions used for participant inclusion have been restricted to repeated harassing behaviours and have not required the participant to report fear (Davis, Ace, & Andra, 2002; Del Ben & Fremouw, 2002; Fremouw, Westrup, & Pennypacker, 1997; Haugaard & Seri, 2003, 2004; Jagessar & Sheridan, 2004; Romans, Hays, & White, 1996; Slashinski, Coker & Davis, 2003; Westrup, Fremouw, Thompson, & Lewis, 1999). Therefore, empirical research to date has suffered from the reliance on varying definitions and different conceptualisations of stalking used by researchers

(O'Connor & Rosenfeld, 2004). The present study will use a definition of stalking requiring victims to have responded with fear in order to increase the validity of findings, and subsequent clinical implications, by aligning the definition with legal definitions and ensuring victims responded with negative emotion to stalking behaviours.

Research has demonstrated females, young adults (Fremouw et al., 1997; Purcell, Pathè, & Mullen, 2000; Tjaden, Thonees, & Allison, 2002), college students (Bjerregaard, 2002; Logan, Leukefeld & Walker, 2002) and health professionals (Pathè & Mullen, 1997; Romans et al., 1996; Smoyak, 2003) to be most at risk of being stalked. In an Australian survey of 3700 adults, of the 23.4% who reported being stalked, 75% were female with 43% between the ages of 18 and 30 years at the commencement of stalking (Purcell et al., 2000).

Research investigating subjective rating of distress in male and female victims of stalking found women perceived most stalking behaviours to be more distressing than did men (Cupach & Spitzberg, 2002). Specifically, women reported higher distress than men from violation behaviours (such as breaking into the victims home), threat behaviours (verbal threats and assault and physical assaults) and hyperintimacy (false claims from the stalker about their relationship with the victim). Due to the small number of males who experience stalking and the aforementioned gender difference in fear and distress from stalking behaviours, the current study will use a female sample.

Although a variety of categories of stalking or types of stalking have been postulated (Mullen, Pathè, & Purcell, 2000; Purcell, Pathè, & Mullen, 2001), the consensus in stalking literature is that there are at least two types of stalkers. The ex-partner/ex-intimate of the victim is motivated by the desire to continue or re-establish

the domestic relationship (Dziegielewski & Roberts, 1995), and is referred to as the 'rejected stalker' (Mullen, Pathè, Purcell, & Stuart, 1999; Mullen et al., 2000; Pathè, 2002). The description of the stalker as a previous intimate of the victim is the most common type of stalker (Bjerregaard, 2002; Fremouw, et al., 1997), with Purcell et al. (2000) indicating that 57% of victims reported that the pursuer was known to them, with 13% being a prior intimate partner of the victim.

The second type of stalker commonly identified is the delusional stalker, who meets the Diagnostic and Statistical Manual-IV-TR (DSM-IV-TR) (APA, 2000) diagnostic criteria for Delusional Disorder, Erotomania type (Del Ben & Fremouw, 2002; Dziegielewski & Roberts, 1995; Mullen et al., 1999; Purcell et al., 2001). Erotomaniac stalkers are driven by the need for an intimate relationship with the victim, and are convinced that they are in a reciprocated intimate relationship with the victim despite evidence to the contrary (Pathè, 2002). Due to the high incidence of ex-intimate stalkers, the present research will distinguish two distinct groups of stalking victims, those stalked by an ex-partner/previous intimate and those stalked by a non-intimate. Resource limitations prevent distinguishing type of stalker beyond that of ex-partner and stranger.

A number of empirical studies have focused exclusively on the ex-intimate stalker, investigating personality profiles of those who stalk (Brewster, 2003; Kamphuis, Emmelkamp, & de Vries, 2004) and the occurrence of violence in stalking by previous intimates of the victim (James & Farnham, 2003; Mechanic, Uhlmansiek, Weaver, & Resick, 2002; Meloy, 2003). The incidence of threats of violence during stalking by previous intimates was 73%, and actual physical violence 46% (Brewster, 2002). Although Brewster's (2002) research lacked a control group or alternate stalker-victim relationship for comparison purposes, Australian research

with victims of all types of stalkers indicated that 45% reported threats of violence (Pathè & Mullen, 1997) and 20% reported physical assault (Purcell et al., 2000).

The greater reported incidence of violence in stalking by ex-partners may cause different psychological responses in victims of stalking by intimates and victims stalked by strangers. Research investigating psychopathology of victims and the two stalker typologies of ex-partner or other indicated psychiatric symptoms were independent of stalker type (Blauuw, Winkel, & Arensman, 2000). This finding was in contrast to that of Pathè and Mullen's (1997) results that demonstrated that symptom levels were associated with the type of stalker-victim relationship and the occurrence of physical assault. Key findings were that ex-partners exhibited a greater number of violent stalking behaviours than other stalkers, and that victims stalked by an ex-partner tended to have more posttraumatic stress symptoms than victims of other types of stalkers (Pathè & Mullen, 1997).

To date there has been minimal research empirically examining the effects on the victim of people who stalk. Research in this area has examined three types of effects stalking may have; changes in the victims' behaviour, changes in the victims' personality and the psychopathology of victims. Research has documented victims' behavioural responses of increased security measures (Fremouw et al., 1997; Pathè, 2002; Purcell et al., 2000), along with personality changes such as increased fear, suspicion and introversion (Hall, 1998, in Blauuw et al., 2000; Brewster, 1997, cited in Blauuw et al., 2000; Pathè, 2002; Pathè & Mullen, 1997).

Research into the psychopathology of victims of stalking has indicated a range of deleterious psychological effects. Using the General Health Questionnaire, Blauuw et al. (2000) found that 77% of the stalked group met the criteria for a diagnosable disorder. Research has demonstrated victims of stalking to have

clinically significant depressive symptoms (Blauuw et al., 2000; Jason, Reichler, Easton, Neal, & Wilson, 1984; Westrup et al., 1999). In terms of anxiety, researchers have documented the presence of increased levels of anxiety and insomnia (Blauuw et al., 2000; Pathè & Mullen, 1997) and greater obsessive-compulsive behaviours in victims of stalking compared to control groups (Westrup et al., 1999). Victims of stalking have reported panic attacks (Pathè & Mullen, 1997) and Jason et al. (1984) documented the onset of Anorexia Nervosa as a result of stalking victimisation.

Pathè and Mullen (1997) and Blauuw et al. (2000) documented the presence of somatic complaints such as headaches and nausea. Onset or aggravation of physical conditions such as asthma, psoriasis, peptic ulcers and nervous tics have all been observed in chronically stressed victims of stalking (Pathè, 2002; Pathè & Mullen, 1997)

Research has repeatedly identified a heightened incidence of posttraumatic stress responses among victims of stalking. Westrup et al. (1999) found a greater incidence and a greater severity of posttraumatic stress symptoms in victims of stalking than the general population. Over half of the victims of stalking in Pathè and Mullen's (1997) research reported experiencing intrusive recollections and vivid flashbacks of their stalking ordeal, whereas a third reported numbing responses and detachment from others (Pathè & Mullen, 1997). A total of 37% of stalking victims were identified as meeting the DSM-IV-TR's diagnostic criteria for Posttraumatic Stress Disorder (PTSD) (Pathè & Mullen, 1997). Research with a sample of victims of post-intimate stalkers found 87% of victims suffered a significant level of posttraumatic stress symptoms as assessed by the Impact of Event Scale (Kamphuis, Emmelkamp & Bartak, 2003).

Although a substantial number of stalking victims experience many of the symptoms of PTSD, Pathè (2002) reported that significantly few victims qualify for a diagnosis of PTSD under the DSM-IV-TR diagnostic criteria. This is due to the stressor criterion, which states that a person must have experienced, witnessed, or been confronted with an event or events that constituted a threat to the physical integrity of self and others, and that this event must have evoked a response involving fear, helplessness and/or horror (APA, 2000). Although research has been conducted on the psychopathology of the stalking victim, it has not differentiated between the type of threat constituted. Thus, direct threats, such as the stalker being present, may result in the development of different or more severe symptomatology than indirect threats where evidence of the stalker exists but no immediate contact is likely to occur. Furthermore, no research has specifically examined the emotions and cognitions of helplessness, fear and horror mandated by the PTSD stressor criterion. The present research aims to examine the emotional and cognitive responses of fear and helplessness listed in the stressor criterion, as well as to examine the effect of direct and indirect threat situations on victims' psychophysiological response.

As victims of stalking experience both direct and indirect threat behaviours, psychopathological symptoms in victims will be to stalking in general, and will not differentiate symptoms arising from direct versus indirect threat experiences. Therefore, in order to examine victims' responses to direct and indirect threat stalking experiences, a staged presentation of guided imagery to a direct and an indirect threat situation and measurement of the victims' psychophysiological responses will be used.

The guided imagery methodology is based on the knowledge that psychophysiological responses to an image or memory of an event can simulate responses experienced during the actual event itself (Lang, 1979). In addition, guided imagery focusing on an active response to the event rather than solely stimulus material has been shown to elicit greater psychophysiological activity (Hirota & Hirai, 1986). Personally relevant imagery has been demonstrated to be superior to standard imagery in eliciting realistic psychophysiological responses (Pitman et al., 1987). In terms of evaluating trauma responses, guided imagery has been used successfully to examine PTSD (Pitman & Orr, 1995; Pitman, Orr, & Lasko, 1993), and to detect malingering of posttraumatic stress symptoms (Haines, Williams, & Holmes, 2000). Thus, the use of guided imagery will enable evaluation of any differences in peri-traumatic responses to direct and indirect threat stalking experiences. This will provide data on the victims' trauma responses and cognitions at the time of the event. The development of symptoms as a general result of being stalked (i.e., experiencing both direct and indirect threat stalking behaviours) will be evaluated by psychological assessment.

The aim of the present research is twofold. Firstly, the aim is to investigate the psychological and psychophysiological responses of stalking victims, and to chart any differences in responses between victims of stranger and intimate stalkers. Secondly, the aim is to investigate the previously uncharted areas of direct and indirect stalker threat on the victims' responses, and the victims' cognitive interpretations of helplessness, control, fear and self-blame, and to relate these findings to the PTSD stressor criterion. Consistent with previous findings, it is predicted that:

- 1) Victims of stalking will have clinically significant PTSD symptomatology.

- 2) Victims of stalking will have clinically significant depressive, obsessive-compulsive and somatic symptoms.
- 3) The psychophysiological and psychological response in victims of intimate stalkers will be greater than in victims stalked by strangers.
- 4) Psychophysiological and psychological responses to the direct threat stalking behaviour will be greater than responses to the indirect threat stalking behaviour.
- 5) Both stalking behaviours will elicit a greater psychophysiological and psychology response than an emotionally neutral event.

Method

Participants

Participants were 20 females, 14 of whom were studying psychology at the University of Tasmania. The remaining six participants were members of the general community. Participants were recruited via advertisement in the School of Psychology at the Hobart and Launceston campuses of the University of Tasmania, by advertisement in local Health and Women's Centres, and through media publicity on the research. Participants were aged between 18 and 46 years, with a median age of 26 years. Participants consisted of 10 females who were stalked by ex-intimate partners (intimate group), and 10 females stalked by strangers (identity remains unknown) or acquaintances formed the 'stranger' group. Six additional participants began the experimental process but did not complete, these results have not been included. Written informed consent was obtained from all participants prior to the commencement of the experiment. Participants met the definition of stalking as

having experienced more than one occasion of behaviour that was unwanted or unwelcome and that caused fear or concern (adapted from Westrup & Fremouw, 1998). A copy of the consent form and information sheet is presented in Appendix A.

Apparatus

Psychophysiological measurements were obtained using Chart 4.1 software using a PowerLab data acquisition system and personal computer, and using a portable PowerLab with laptop computer. Heart rate was measured via Ag/AgCl electrodes in standard right rib-left rib placement, with mastoid earth. A Pneumotrace respiratory belt transducer positioned around the upper chest recorded respiration rate (RR). Skin conductance level (SCL) was measured by two finger electrodes secured to the middle phalanx of the first and third fingers of the non-dominant hand.

Materials

Psychopathology was assessed by the Symptom Checklist 90-Revised (SCL90-R; Derogatis, 1983). The SCL90-R consists of 90 symptoms and yields mean scores on nine symptom dimensions (somatization, obsessive-compulsive, interpersonal sensitivity, anxiety, depression, hostility, phobic anxiety, paranoia and psychoticism) and 3 global indices including the global severity index. The SCL-90-R is a self-report questionnaire in which individuals rate to what extent they were distressed by the symptom in the last 7 days (ranging from not at all to extremely).

The SCL90-R is more reliable for non-clinical than clinical populations and provides an index of distress.

PTSD symptomatology was examined using the Impact of Event Scale-Revised (IES-R; Zilberg, Weiss & Horowitz, 1982), which provides a measure of intrusive and avoidant thoughts, avoidant behaviours and hyperarousal. The IES-R is a 22 item self-report questionnaire in which individuals respond to what extent they were distressed (on a five point scale) by the symptom in the 7 days following the traumatic event. Participants were asked to respond to the questions with their stalking experience in mind.

Finally, the Millon Clinical Multiaxial Inventory–Third Edition (MCMI-III; Millon, Davis, & Millon, 1997) is an assessment tool based on the DSM psychiatric disorders, and is more suited to a clinical than non-clinical population. The MCMI-III is a 175 item self report questionnaire in which individuals respond as to whether the item is true or false of them. The MCMI-III provides measures of the DSM axis I and axis II disorders and features validity scales and score adjustments.

Imagery scripts were presented to each participant on three separate episodes (personalised direct threat stalking event, personalised indirect threat stalking event, and a personalised neutral event) that detailed the scene and context in which the event occurred, as well as the participant's thoughts feelings and psychophysiological reactions during the events. Each script contained as much detail as possible recalled by participants, using only elements reported by the individual, and in wording as close as possible to that used by the participant.

Imagery scripts were comprised of four distinct event stages: setting the scene (a description of the environment in which the incident occurred and the context of the situation), approach (description of events immediately preceding the incident,

the incident (details of event itself), and immediate consequences (what followed after the incident). Due to the unique nature of the stalking experiences of participants, an example of a neutral script only may be seen in Appendix B due to confidentiality reasons.

Visual analogue scales (VASs, McCormack, de Horne, & Sheather, 1988) were given to each participant to determine accuracy and effectiveness of the scripts. VASs were used to evaluate emotional reactions to the events (fearful, threatened, anxious, angry) and cognitive reactions to the event ('I will be harmed', 'I am out of control', 'I am to blame' and 'I am helpless'). VASs were scored by measuring the distance of the participants mark from the positive emotion/statement (e.g., not afraid). A score out of 100 was obtained. VASs may be viewed in Appendix C.

Procedure

Participants were tested individually. The experimental procedure was explained using standard instructions and informed consent was obtained. Each participant was interviewed to obtain information for personalised guided imagery for three events, a direct threat event (where the stalker was present either in a face to face or telephone confrontation), an indirect threat script (evidence the stalker exists such as receiving letters, phone messages or having property vandalised), and a neutral script (such as making a cup of tea). Personalised imagery scripts were then developed according to the aforementioned four stages of setting the scene, approach, incident and consequence. Participants completed the MCMI-III, SCL-90-R and IES-R at their homes after the interview and before the psychophysiological recording session.

Participants attended a separate recording session during which the physiological recording equipment was attached using standard laboratory procedures. Participants were given instructions to close their eyes and visualise the scripts occurring as they were read. The three scripts were then presented verbally in a counterbalanced order to the participant while their psychophysiological responses were recorded. Each script was preceded by a one minute baseline, and included a ten second pause after each script stage. At the conclusion of each script presentation, participants were asked to complete VASs to assess psychological responses, the accuracy of the information included in the script and the level of concentration achieved in imagining the scene. The key elements of the script were re-read to facilitate these ratings. Participants were debriefed at the conclusion of the study.

Design

The design is a 2 x 3 x 4 factorial design with repeated measures. The between subjects factor is stalker type (stranger or intimate). The within subjects factors are script type (neutral, direct threat, indirect threat) and stage (scene, approach, incident, consequence). Psychological dependent variables are the scores on the VASs. Psychophysiological dependent variables are HR, RR, and SCL.

The current study does not include a control group of non-stalked participants as the imagery methodology requires that you have experienced the event to be able to participate. Earlier studies (Haines et al., 1995) have demonstrated that there is no valid benefit in including a group who are administered a standard script of an event that they have never experienced. You are then not recording a response to a

memory of an event but a fictitious event outside the persons experience, which adds little.

Transformation and scoring of psychophysiological data

A 30 second period was scored for each stage of the script. The selected scoring period most commonly began 15-20 seconds from the commencement of recording of each script stage. Numerous studies have documented the validity of this scoring technique (Brain, Haines, & Williams, 1998; Haines, Williams, Brain, & Wilson, 1995; Wells, Haines, Williams, & Brain, 1999). Data relating to HR (in beats per minute) and SCL (in uS) represented mean levels over the scoring period. Psychophysiological responses for RR was scored in breaths per minute.

Results

Median age of participants was 26 years, and stalking duration ranged from three weeks to eight years. Participants reported experiencing stalking behaviours consisting of unwanted phone calls, text messages, written correspondence and electronic mail, following, surveillance and confrontation. Less common behaviours reported by participants included threats of assault, actual physical assault, entering the victims' residences, and harming victims' pets.

Overview of the response to imagery

Repeated measures ANOVAs with the Huyhn-Feldt corrections being applied were performed on each of the psychophysiological measures and subjective measures for all three scripts. A significance criteria of 0.05 was adopted for all

analyses. Although the number of ANOVAs was large, the ratio of participants to dependent variables prevented the use of the multivariate ANOVAs (Tabachnick & Fidell, 1989).

Psychophysiological response to imagery

Means and standard deviations for each stage of each script for the two groups for the three psychophysiological measures are presented in Appendix D.

Heart rate

There was no significant script by stage by group interaction for heart rate. There was a significant main effect for script, $F(2,36) = 11.00$, $MSE = 324.28$, $p < .0002$. This effect is shown in Figure 1. Post hoc analyses demonstrated that the direct script elicited a higher heart rate than did the indirect and neutral scripts, with the indirect script also eliciting a higher heart rate than the neutral script (Fisher LSD = 1.8, $p < .05$).

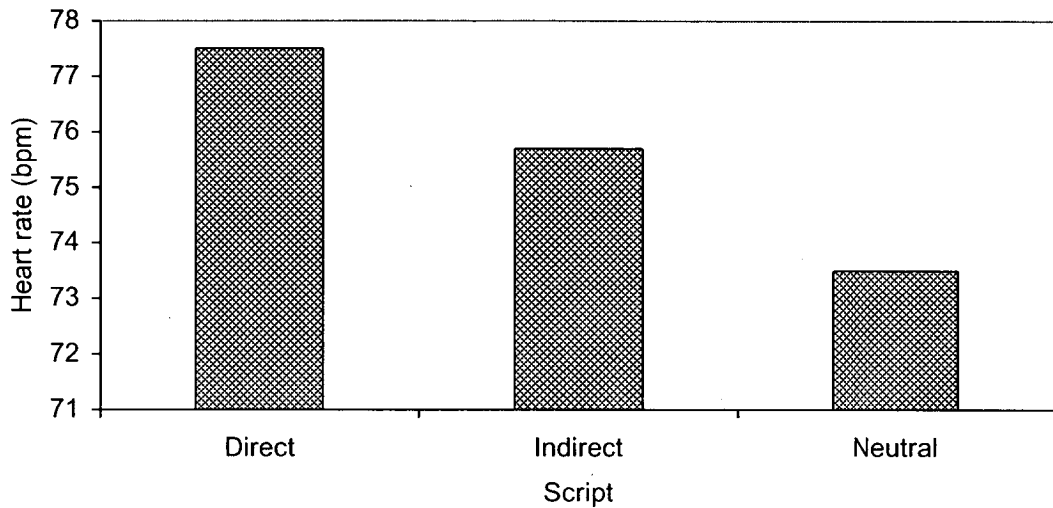


Figure 1. *The mean heart rate for each script.*

Respiration

There was no significant script by stage by group interaction for respiration. There was a significant script by stage interaction, $F(6,108) = 3.68$, $MSE = 10.80$, $p < .003$. This interaction is presented in Figure 2.

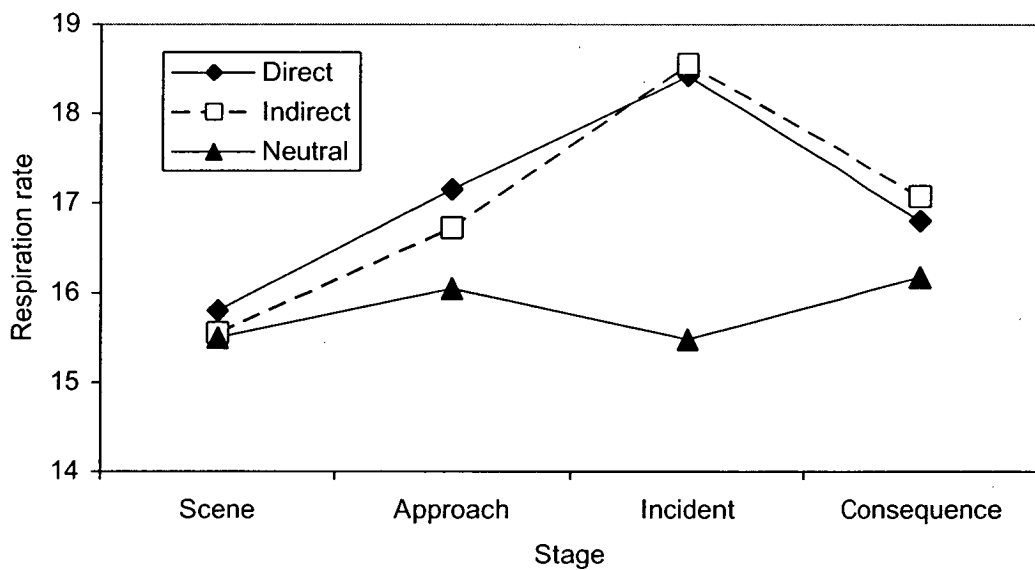


Figure 2. *The mean respiration rate for each stage of each script.*

Post hoc analyses considered between script differences at each stage. These results are presented in Table 1. At the incident stage, both the direct and indirect scripts elicited a higher respiration rate than did the neutral script.

Table 1. The post hoc analysis results for the between script differences at each stage for respiration rate.

Stage	F	df	MSE	p	Fisher	Difference
Scene	0.2	2,38	0.5	ns		
Approach	1.6	2,38	6.2	ns		
Incident	8.7	2,38	60.6	.0008	1.7	D,I>N
Consequence	0.9	2,38	4.3	ns		

Across stage changes were considered. The results of these post hoc analyses are presented in Table 2. When consecutive stage changes were examined, it was evident that there was an increase in respiration rate from stage 1 to stage 2 of the direct script followed by a decrease from stage 3 to stage 4. In response to the indirect script, there was an increase in respiration rate from stage 2 to stage 3 with a decrease from stage 3 to stage 4.

Table 2. The post hoc analysis results for the across stage changes for each script for respiration rate.

Script	F	df	MSE	p	Fisher	Difference
Direct	5.4	3,57	23.5	.003	1.3	1<2,3;3>4
Indirect	6.7	3,57	30.6	.0006	1.4	1<3,4;2<3;3>4
Neutral	1.2	3,57	2.7	ns		

Skin conductance level

There were no significant main effects or interactions for skin conductance level.

Cognitive and emotional responses to imagery

The means and standard deviations for each stage of each script for the two groups for each of the VASs are presented in Appendix D.

There were no significant script by stage by group interactions although there was a trend for harm, $F(6,108) = 2.13$, $MSE = 320.01$, $p = .055$. There were significant script by stage interactions for harm, $F(6,108) = 9.36$, $MSE = 1403.96$, $p < .0001$; control, $F(6,108) = 9.75$, $MSE = 2294.38$, $p < .0001$; blame, $F(6,108) = 6.20$, $MSE = 1164.28$, $p < .0001$; helplessness, $F(6,108) = 9.07$, $MSE = 2266.61$, $p < .0001$; fear, $F(6,108) = 9.12$, $MSE = 2119.33$, $p < .0001$; threat, $F(6,108) = 9.31$, $MSE = 2926.30$, $p < .0001$; anxiety, $F(6,108) = 17.09$, $MSE = 4180.86$, $p < .0001$;

and anger, $F(6,108) = 2.95$, $MSE = 10296.43$, $p < .02$. Figure 3 presents these interactions.

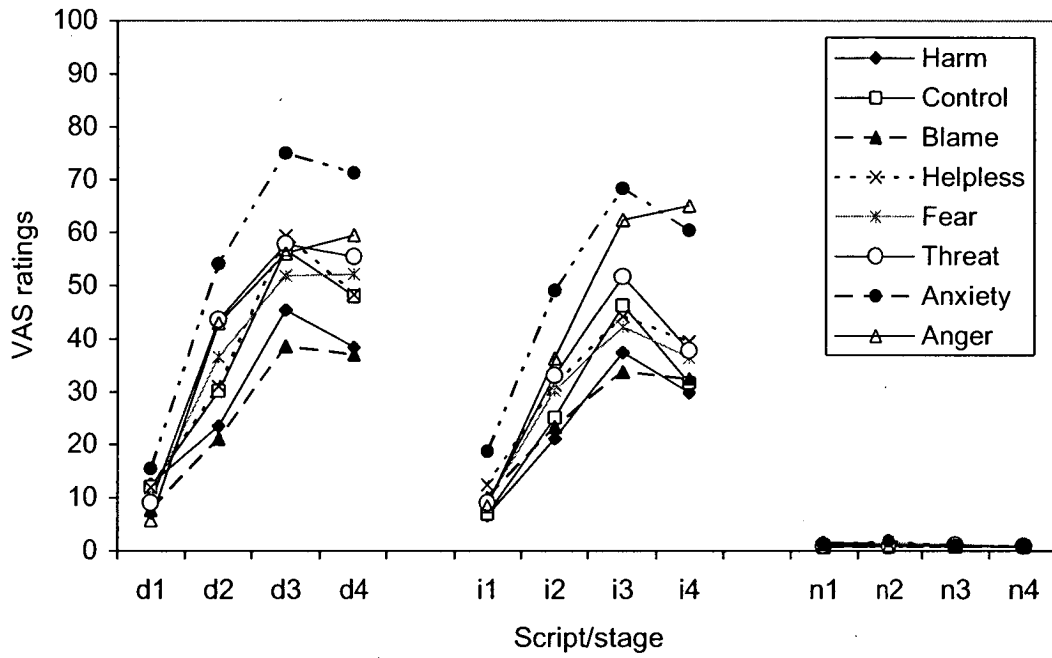


Figure 3. The mean VAS ratings for each stage of each script for all of the VAS measures.

Consideration was given to between script differences at each stage. Table 3 presents the post hoc analysis results. At stage 1 (scene), both the direct and indirect stalking scripts elicited higher ratings than the neutral script for the VASs measuring fear and helplessness. The direct script elicited higher ratings than the neutral script for the VASs measuring harm and control. The indirect script, in comparison with the direct script elicited higher ratings in relation to blame. No significant differences between scripts were noted in relation to threat or anger.

At stage 2 (approach), both the direct and indirect scripts elicited higher ratings than did the neutral script for all VAS measures. The same pattern of response was

evident at stage 3 (incident) for all VAS measures except helplessness. In the case of helplessness, both the direct and indirect scripts did elicit higher ratings than the neutral script but the direct script also was associated with higher ratings than the indirect stalking script.

Finally, at stage 4 (consequence), both the direct and indirect scripts elicited higher ratings than the neutral script in response to the harm, blame, helplessness, anxiety and anger VASs. This was also the case for the VASs measuring control, fear and threat and these scales also were associated with higher ratings for the direct stalking script in comparison with the indirect stalking script.

Table 3. *The post hoc analysis results for between script differences at each stage for the VASs ratings.*

VAS	Stage	F	MSE	p	Fisher	Difference
Harm	Scene	4.2	606.1	.03	7.7	D>N
	Appr.	11.9	2929.4	.0001	10.1	D,I>N
	Incid.	21.7	11291.6	.0001	14.6	D,I>N
	Conseq.	15.8	7784.6	.0001	14.2	D,I>N
Control	Scene	5.5	645.3	.008	6.9	D>N
	Appr.	12.2	4819.4	.0001	12.7	D,I>N
	Incid.	43.6	17687.8	.0001	12.9	D,I>N
	Conseq.	23.0	11468.4	.0001	14.3	D>I,N;I>N
Blame	Scene	3.5	463.8	.05	7.4	I>N
	Appr.	7.8	3071.2	.002	12.7	D,I>N
	Incid.	18.1	8474.5	.0001	13.9	D,I>N
	Conseq.	15.2	7798.9	.0001	14.5	D,I>N

Helplessness	Scene	3.6	882.9	.04	10.1	D,I>N
	Appr.	14.2	6151.2	.0001	13.3	D,I>N
	Incid.	40.3	18461.2	.0001	13.7	D>I,N;I>N
	Conseq.	9.8	12781.2	.0001	16.3	D,I>N
Fear	Scene	3.5	510.7	.04	7.7	D,I>N
	Appr.	13.2	6976.3	.0001	14.7	D,I>N
	Incid.	32.0	14526.3	.0001	13.6	D,I>N
	Conseq.	24.0	13876.5	.0001	15.4	D>I,N;I>N
Threat	Scene	3.2	432.1	ns		
	Appr.	16.7	9933.5	.0001	15.6	D,I>N
	Incid.	38.0	19389.7	.0001	14.5	D,I>N
	Conseq.	28.3	15526.6	.0001	15.0	D>I,N;I>N
Anxiety	Scene	3.8	1722.3	.04	13.7	D,I>N
	Appr.	33.6	16644.5	.0001	14.3	D,I>N
	Incid.	96.0	33062.9	.0001	11.9	D,I>N
	Conseq.	65.7	28804.1	.0001	13.4	D,I>N
Anger	Scene	2.6	258.1	ns		
	Appr.	18.1	10150.9	.0001	15.2	D,I>N
	Incid.	45.9	22857.7	.0001	14.3	D,I>N
	Conseq.	38.6	25430.6	.0001	16.4	D,I>N

Key: D = direct threat script

I = indirect threat script

N = neutral event script

Across stage changes were examined. The post hoc analysis results are presented in Table 4. In response to the direct stalking script, consecutive stages were noted with increases in negative response from scene to approach for control, blame, helplessness, fear, threat, anxiety and anger, and from approach to incident

for harm, control, blame, helplessness, fear and anxiety. There were no reductions in negative response from incident to consequence.

For the indirect stalking script, increase in negative responses from scene to approach were noted for harm, control, blame, helplessness, fear, threat, anxiety and anger. Increases from approach to incident were evident for harm, control, helplessness, fear, threat, anxiety and anger. Reductions in negative response from incident to consequence were apparent for the VASs measuring control and threat.

Table 4. *The post hoc analysis results for across stage changes for each script for the VAS measures.*

VAS	Script	F	MSE	p	Fisher	Differences
Harm	Direct	13.9	4360.2	.0001	11.2	1<3,4;2<3,4
	Indirect	12.5	3495.5	.0001	10.6	1<2,3,4;2<3
	Neutral	1.3	3.3	ns		
Control	Direct	14.0	7866.3	.0001	15.0	1<2,3,4;2<3,4
	Indirect	13.4	5350.7	.0001	12.6	1<2,3,4;2<3;3>4
	Neutral	0.8	0.3	ns		
Blame	Direct	10.9	4278.1	.0001	12.5	1<2,3,4;2<3,4
	Indirect	7.4	2408.2	.0003	11.4	1<2,3,4
	Neutral	0.4	0.1	ns		
Helplessness	Direct	15.2	8586.4	.0001	15.0	1<2,3,4;2<3,4
	Indirect	11.1	3910.2	.0001	11.9	1<2,3,4;2<3
	Neutral	0.2	0.1	ns		
Fear	Direct	17.5	7787.5	.0001	13.3	1<2,3,4;2<3,4
	Indirect	12.2	4184.4	.0001	11.7	1<2,3,4;2<3
	Neutral	0.7	2.0	ns		
Threat	Direct	15.8	10128.9	.0001	16.0	1<2,3,4
	Indirect	15.7	6302.1	.0001	12.7	1<2,3,4;2<3;3>4
	Neutral	1.0	0.5	ns		
Anxiety	Direct	30.0	14580.7	.0001	14.0	1<2,3,4;2<3,4
	Indirect	26.2	9482.8	.0001	12.0	1<2,3,4;2<3
	Neutral	1.8	3.9	ns		
Anger	Direct	26.5	12098.2	.0001	13.5	1<2,3,4;2<4

Indirect	28.4	14045.4	.0001	14.1	1<2,3,4;2<3,4
Neutral	0.9	1.0	ns		

Key: 1 = scene

2 = approach

3 = incident

4 = consequence

Symptomatology

Significant group interactions were present for the MCMI-III, with the intimate group scoring significantly higher than the stranger group for the following sub-scales; Debasement, $t(18) = 2.5, p < .03$; Borderline personality, $t(18) = 2.3, p < .04$; Bipolar/Mania, $t(18) = 3.0, p < .007$; Thought disorder, $t(18) = 3.3, p < .004$; Delusional disorder, $t(18) = 2.4, p < .03$. There was a strong trend for disclosure to be higher in the intimate group than the stranger group, $t(18) = 2.1, p = .053$. The mean scores for the stranger and intimate group on the MCMI-III subscales can be seen in Table 5.

Table 5. *Mean scores and standard deviations (sd) for stranger and intimate group on MCMI-III sub-scales.*

	Stranger		Intimate	
	mean	sd	mean	sd
Disclosure	42.6	18.5	59.2	17.3
Desirability	54.6	18.0	60.6	23.3
Debasement	35.9	28.9	62.5	17.8
Schizoid	34.5	21.6	46.4	29.3
Avoidant	32.4	24.1	42.2	31.4
Depressive	33.9	33.5	48.0	32.7
Dependent	29.7	22.4	49.4	29.7
Histrionic	72.3	16.9	59.8	26.8
Narcissistic	45.8	12.8	42.2	17.1
Antisocial	56.1	16.6	51.8	23.4
Aggressive (sadistic)	54.6	13.4	57.1	15.8
Compulsive	50.4	8.7	46.6	21.4
Passive-aggressive	33.0	21.2	56.8	33.7
Self-defeating	31.8	29.7	44.7	35.1
Schizotypal	27.2	19.5	43.6	30.4
Borderline	33.0	23.6	60.8	31.0
Paranoid	29.4	25.0	48.3	27.9
Anxiety	31.1	32.1	57.6	31.9
Somatoform	23.9	26.7	42.8	25.1
Bipolar: manic	37.4	27.2	72.9	25.0
Dysthymia	21.7	28.3	45.0	41.8
Alcohol dependence	45.5	20.9	58.9	21.2
Drug dependence	52.2	16.6	55.1	16.2
Posttraumatic stress disorder	27.2	29.7	47.0	33.4
Thought disorder	19.8	21.3	49.8	20.0
Major depression	28.9	33.0	54.3	41.6
Delusional disorder	9.0	11.2	36.8	34.3

There were no significant results for the SCL-90-R or IES-R. Mean scores and standard deviations for both groups on each sub-scale may be seen in Table 6.

Table 6. *Mean scores and standard deviations (sd) for stranger and intimate group on SCL-90-R subscales and IES-R.*

	Stranger		Intimate	
	mean	sd	mean	sd
SCL-90-R				
Somatization	58.2	10.2	48.8	27.3
Obsessive-compulsive	56.7	21.7	55.7	22.5
Interpersonal sensitivity	58.0	22.2	58.7	23.3
Depression	54.7	21.9	58.4	24.2
Anxiety	57.4	23.3	56.9	22.8
Hostility	44.0	31.2	58.3	21.7
Phobic anxiety	54.6	29.5	47.2	33.8
Paranoia	48.7	27.7	53.0	28.8
Psychoticism	36.6	32.7	54.6	29.1
Global severity index	59.4	13.7	58.1	23.3
IES-R				
Total score	38.3	21.5	47.2	16.6

Discussion

The pattern of responses in the present study was consistent with the original formulated hypothesis of elevated PTSD symptomatology in the threat scripts and greater psychophysiological and psychological responses to the two threat scripts than the neutral script. Results supported the hypothesis of greater symptomatology

in the intimate group than the stranger group. The profile of results was not consistent with the hypothesis of clinically significant depressive, obsessive and somatic scales.

The hypothesis that the two threat scripts would elicit significantly greater psychophysiological and psychological response than the neutral script was supported by the results. Both heart rate and respiration were found to be significantly elevated in response to the threat scripts compared to the neutral script. The VASs further indicated cognitions and emotions to be more strongly endorsed in response to the threat scripts compared to the neutral scripts. This suggests the threat scripts effectively induced an emotional reaction and triggered a psychophysiological response. Literature examining the clinical significance of psychophysiological changes has indicated a peak in response at incident stage is sufficient to indicate an identifiable response to imagery (Haines et al., 2001). Blanchard, in his trauma research using imagery, says elevations in heart rate of 2-3 beats per minute, or changes that are 10% of baseline measures, indicate clinical significance. The prediction that the direct threat script would produce a stronger response than the indirect threat script was also supported by the psychophysiological measure of heart rate and psychological responses on the VASs.

It is noted that no significant result for skin conductance was found. There is some evidence that the use of SCL in a staged methodology produces few significant results because it takes longer for a SCL to return to baseline than it does a heart rate or respiration response. Therefore, there is a lag between stages that can not be overcome. An alternative psychophysiological measure in place of SCL may be recommended for future research.

Despite SCL limitations, the psychophysiological profile obtained from heart and respiration rate during the direct and indirect threat script is consistent with a trauma response (Pitman & Orr, 1995; Pitman, Orr, & Lasko, 1993). It is evident in the literature that a peritraumatic response (a response indicative of a normal stress response) to the event may occur, however, not everyone will develop a posttraumatic stress response. The pattern of results for the VAS ratings further support the presence of a peritraumatic response to both the direct and indirect threat stalking behaviour.

The symptomatology of participants, as assessed using clinical questionnaires, demonstrated no clinical significance on PTSD scales, nor on the IES-R. Despite the fact that participants were asked to complete questionnaires in reference to the time of the stalking events, it must be acknowledged that cumulative trauma reactions, poor memories of the events and current stress levels may all have impacted on the validity of the responses. The possibility of participants seeking to avoid thinking about the trauma may also have negatively impacted their ratings on the questionnaire measures by minimising symptoms. Thus these results must be interpreted with caution.

Current findings of no PTSD clinical significance are in contrast to previous research (Kamphuis et al., 2003; Pathè & Mullen, 1997; Westrup et al., 1999). It must be noted that there was a high standard deviation in the current research, indicating a range of individual scores. On an individual basis, a minority of participants in each group reported severe posttraumatic stress symptoms, including intrusive thoughts, avoidance and hyperarousal. A minority of participants continued to experience mental health problems including depression and anxiety a number of years after their stalking experience. Thus, although mean scores in this study did

not support a general trend for victims of stalking to suffer adverse psychological effects, nor did it suggest that there were no psychological consequences of stalking. It may be that elevations in the symptomatology of victims is dependent on the type and duration of stalking behaviours experienced and individual differences in coping.

The present research did not support previous findings of elevated depressive, obsessive-compulsive and somatic symptoms in victims of stalking (Blauuw et al., 2000; Pathè & Mullen 1997; Westrup et al., 1999). As discussed previously, the high standard deviation of scores suggests participants ranged considerably in terms of psychological consequences of stalking. On an individual basis, a small number of participants disclosed seeking psychological intervention for depressive symptoms following their stalking experience.

The pattern of results in the present research indicated that the symptomatology of the victim may be associated with the type of stalker-victim relationship. This is consistent with previous research that victims of intimate stalkers exhibit greater posttraumatic stress symptomatology than victims of other stalkers (Pathè & Mullen 1997). The present research found that the intimate group scored significantly higher on the MCMI-III sub-scales of borderline personality, bipolar/mania, thought disorder and delusional disorder than did the stranger group although none of the scores obtained were clinically significant. The closest to clinical significant was the score obtained by the Intimate group on the bipolar/mania subscale. In general, elevations on these scales have not been previously documented in the stalking literature. This may be due to the fact that the small number of empirical studies on general symptomatology of victims of stalking do not distinguish intimate from stranger stalkers in their analyses (Blauuw et al., 2002; Westrup et al., 1999).

Results for the thought disorder and delusional disorder scale may be explained by the inherent nature of stalking behaviours. That is, individual items said to tap the presence of delusions may actually relate to the stalking experience, rather than the individual's state of mind. For example, items such as "many people have been spying into my private life for years", "when I'm alone I often feel the strong presence of someone nearby who can't be seen" and "there are people who are supposed to be my friends who would like to do me harm" may often be true for victims of stalking experiencing surveillance and threats by their stalker. The difference between the intimate and stranger group in the current research on the thought and delusional subscale may also be related to types of behaviours intimate and stranger stalkers exhibit. As intimate stalkers are more likely to use threatening and violent behaviours (Pathè & Mullen, 1997), victims stalked by a previous intimate may have been more likely to respond in the affirmative to the above statements.

A further aim of the current research was to examine how well victims' stalking experiences met the stressor criterion for PTSD. The DSM-IV-TR stressor criterion states that a person must have experienced, witnessed, or been confronted with an event or events that constituted a threat to the physical integrity of self and others, and that this event must have evoked a response involving fear, helplessness and/or horror (APA, 2000). Psychophysiological data supported the presence of a peritraumatic response in victims to the direct and indirect threat stalking behaviour. Therefore, participants would meet the stressor criterion in that the event evoked a stress response. Symptomatology results in the current study show no clinically significant results for PTSD symptomatology in this sample as a whole, although if evaluated individually a minority of participants reported posttraumatic stress

symptomatology. For the majority of participants, however, despite the presence of a peritraumatic response at the time of the event/s, participants did not go on to develop PTSD.

VASs supported the psychophysiological trauma response through detecting a strong presence of fear and helplessness in both the direct and indirect scripts. This meets the stressor criterion in that the event evoked a response of fear and helplessness. At all stages of the direct and indirect script fear and helplessness were significantly higher than in the neutral script. Greater helplessness was experienced during the incident and consequence stage of the direct script than the indirect script. Fear was also greater during the consequence stage of the direct script than the indirect script. Thus, it may be concluded that although direct threats (stalker being present) evoke a greater fear and helplessness response in victims, indirect threats (evidence the stalker exists) are also capable of producing such responses.

The VASs and psychophysiological results from the indirect script indicated that it is not necessary to be confronted with a “threat to the physical integrity of self and others” in order to respond to an event with “fear, helplessness and/or horror” (DSM-IV-TR stressor criterion for PTSD, APA, 2000). The fear and helplessness reported by victims in the current study has shown indirect stalking behaviours are perceived by victims as a high risk event. As it is well established in the trauma literature that it is the perception of threat rather than the actual or objective threat that is important in determining a posttraumatic stress response (Herman, 1992), indirect stalking behaviours may have the capacity to stress or traumatise an individual due to the perception of threat.

The current research is a valuable addition to the literature on stalking in that it analyses victim psychopathology with stalker-victim relationship as an

independent variable. The use of psychophysiological data to evaluate peritraumatic stress response to both direct and indirect threat stalking behaviours is also a valuable addition to stalking research. Despite these strengths, the current research is not without limitations. Along with the aforementioned limitation of confounding effects of time since stalking event and current stress levels impacting questionnaire measures, the current research did not evaluate demographics of stalking behaviour. Standardised collection of information on how long ago the stalking occurred, specific stalking behaviours, occurrence of threatened and actual violence may assisted in aiding explanation of the pattern of results. This is acknowledged as a limitation which may be addressed in future research.

The convenience sample of largely a University student population is acknowledged as potentially impacting the generalisation of results to the wider community. The small sample size is likely to have contributed to little differences being found between intimate and stranger groups. Further, the lack of definition of the 'stranger' group is a weakness of the current study, as it included various typologies of stalkers that did not classify as intimate stalkers. It became evident from victim's reports during the research that some people classified into the stranger group suffered from psychosis and delusional disorders. Other stalkers were motivated by a desire for revenge, while the remainder fit Pathè's (2002) typology of the incompetent suitor. Finally, due to the time taken for SCL to return to baseline levels, SCL was not a valid indicator of the psychophysiological response to trauma events.

The evaluation of group effects in the current research may have reduced findings of psychopathology of victims due to the high standard deviation of scores. Existing research in the area has taken a case by case approach, reporting

percentages of participants who reported particular posttraumatic symptoms (Pathè & Mullen 1997). This may be a consideration for future research design.

Conclusion

Psychophysiological data revealed the presence of a peritraumatic response during exposure to guided imagery of direct and indirect threat stalking events. This research was unable to support previous findings of PTSD, elevated depression, somatic and obsessive compulsive symptoms. However the high standard deviations of scores evident on all psychological measures as well as individual participant scores signify some individuals experienced deleterious psychological effects. The psychopathology of victims indicated greater responses in victims of intimate stalkers than stranger stalkers on scales of borderline personality, bipolar/mania, thought disorder and delusional disorder. It was suggested results on the latter two scales may reflect the inherent nature of stalking experiences rather than victim symptomatology. This research has made a valuable contribution to the literature by including a fear response in definitions and charting areas of peritraumatic response and effect of stalker-victim relationship on victim psychopathology. Future research may benefit from tightening the definition of the two types of stalking perpetrators used in the current research, and evaluating individual psychopathology in addition to group effects.

References

- American Psychiatric Association (2000). *The Diagnostic and Statistical Manual of Mental Disorders*. 4th Ed. New York: Author
- Bjerregaard, B. (2002). An empirical study of stalking victimisation. In K.E Davis, I.H. Frieze, R.D. Maiuro (Eds). *Stalking: Perspectives on Victims and Perpetrators* (pp. 112-138). New York: Springer Publishing Company.
- Blauuw, E., Winkel, F.W., & Arensman, E. (2000). The toll of stalking: The relationship between features of stalking and psychopathology of victims. *Paper presented at the Stalking: Criminal Justice Responses Conference, Sydney*
- Brain, K.L., Haines, J., & Williams, C.L. (1998). The psychophysiology of self-mutilative behaviour: Evidence of tension reduction. *Archives of Suicide Research*, 4, 227-242.
- Brewster, M.P. (2002). Stalking by former intimates: verbal threats and other predictors of physical violence. In K.E Davis, I.H. Frieze, R.D. Maiuro (Eds). *Stalking: Perspectives on Victims and Perpetrators* (pp. 292-312). New York: Springer Publishing Company.
- Brewster, M.P. (2003). Power and control dynamics in prestalking and stalking situations. *Journal of Family Violence*, 18, 207-217.
- Cupach, W.R., & Spitzberg, B.H. (2002). Obsessional relational intrusion: incidence, perceived severity and coping. In K.E Davis, I.H. Frieze, R.D. Maiuro (Eds). *Stalking: Perspectives on Victims and Perpetrators* (pp.138-163). New York: Springer Publishing Company.

- Davis, K., Ace, A., & Andra, M. (2002). Stalking perpetrators and psychological maltreatment of partners: anger-jealously, attachment insecurity, need for control and break up context. In K.E Davis, I.H. Frieze, R.D. Maiuro (Eds). *Stalking: Perspectives on Victims and Perpetrators* (pp. 237-265). New York: Springer Publishing Company.
- Del Ben, K., & Fremouw, W. (2002). Stalking: Developing an empirical typology to classify stalkers. *Journal of Forensic Sciences*, 47, 152-158.
- Derogatis, L.R.(1983). *SCL-90-R manual*. Towson: Clinical Psychometric Research.
- Dziegielewski, S.F., & Roberts, A.R. (1995). Stalking victims and survivors. In A.R. Roberts (Ed). *Crisis Intervention and Time-limited Cognitive Treatment*. California: Sage Publications.
- Fremouw, W.J., Westrup, D., & Pennypacker, J. (1997). Stalking on campus: The prevalence and strategies for coping with stalking. *Journal of Forensic Science*, 42, 666-669.
- Haines, J., Williams, C.L., Brain, K.L., & Wilson, G.V. (1995). The psychology of self-mutilation. *Journal of Abnormal Psychology*, 104, 171-489.
- Haines, J., Williams, C., & Holmes, G. (2000). The detection of malingering of posttrauma responses: The use of guided imagery. *Paper presented at the European Conference on Traumatic Stress, Edinburgh, Scotland*.
- Haugaard, J., & Seri, L. (2003). Stalking and other forms of intrusive contact among adolescents and young adults from the perspective of the person initiating the intrusive contact. *Criminal Justice and Behaviour*, 31, 37-54.
- Haugaard, J., & Seri, L. (2004). Stalking and other forms of intrusive contact after the dissolution of adolescent dating or romantic relationships. *Violence and Victims*, 18, 279-297.

- Herman, J. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress, 5*, 377-391.
- Hirota, A., & Hirai, H. (1986). Effects of stimulus or response-oriented training on psychophysiological responses and the propositional structure of imagery. *Japanese Psychological Research, 28*, 186-195.
- Jagessar, J.D.H., & Sheridan, L.P. (2004). Stalking perceptions and experiences across two cultures. *Criminal Justice and Behavior, 31*, 97-119.
- James, D.V., & Farnham, F.R. (2003). Stalking and serious violence. *The Journal of the American Academy of Psychiatry and the Law, 31*, 432-439.
- Jason, L.A., Reichler, A., Easton, J., Neal, A., & Wilson, M. (1984). Female harassment after ending a relationship: A preliminary study. *Alternative Lifestyles, 6*, 259-269.
- Kamphuis, J., Emmelkamp, P., & Bartak, A. (2003). Individual differences in post-traumatic stress following post-intimate stalking: Stalking severity and psychosocial variables. *The British Journal of Clinical Psychology, 42*, 145-152.
- Kamphuis, J., Emmelkamp, P., & deVries, V. (2004). Informant personality descriptions of postintimate stalkers using the five factor profile. *Journal of Personality Assessment, 82*, 169-178.
- Lang, P. (1979). A bio-informational theory of emotional imagery. *Psychophysiology, 16*, 495-512.
- Logan, T., Leukefeld, C., & Walker, B. (2002). Stalking as a variant of intimate violence: implications from a young adult sample. In K.E Davis, I.H. Frieze, R.D. Maiuro (Eds). *Stalking: Perspectives on Victims and Perpetrators* (pp. 265-292). New York: Springer Publishing Company.

- McCormack, H., Horne, D., & Sheather, S. (1988). Clinical applications of visual analogue scales: A critical review. *Psychological Medicine*, 18, 1007-1019.
- Mechanic, M.B., Uhlmansiek, M.H., Weaver, T.L., & Resick, P.L. (2002). The impact of severe stalking experienced by acutely battered women: an examination of violence, psychological symptoms and strategic responding. In K.E Davis, I.H. Frieze, R.D. Maiuro (Eds). *Stalking: Perspectives on Victims and Perpetrators* (pp.89-112). New York: Springer Publishing Company.
- Meloy, J.R. (2003). When stalkers become violent: The threat to public figures and private lives. *Psychiatric Annals*, 33, 659-665.
- Millon, T., Davis, R., & Millon, C. (1997). *MCMI-III manual*. Minneapolis: NCS.
- Mullen, P., Pathè, M., & Purcell, R. (2000). *Stalkers and their Victims*. Cambridge: Cambridge University Press.
- Mullen, P., Pathè M., Purcell, R., & Stuart, G. (1999). Study of stalkers. *American Journal of Psychiatry*, 156, 1244-1249.
- O'Connor, M., & Rosenfeld, B. (2004). Introduction to the special issue on stalking. *Criminal Justice and Behavior*, 31, 3-8.
- Ogilvie, E. (2000). Stalking: criminal justice responses in Australia. *Paper presented at the Stalking: Criminal Justice Responses Conference, Sydney*
- Pathè, M. (2002). *Surviving Stalking*. Cambridge: Cambridge University Press.
- Pathè, M., & Mullen, P. (1997). The impact of stalkers on their victims. *British Journal of Psychiatry*, 170, 12-17.
- Pitman, R.K., & Orr, S.P. (1995). Psychophysiology of emotional and memory networks in posttraumatic stress disorder. In J.L McGough, N.M Weinberger

- (Eds). et al. *Brain and Memory: Modulation and Mediation of Neuroplasticity*. New York: Oxford University Press.
- Pitman, R., Orr, S., Forgue, D., Altman, B., de Jong, J., & Claiborn, J. (1987). Psychophysiologic assessment of posttraumatic stress disorder imagery in Vietnam combat veterans. *Archives of General Psychiatry*, 44, 970-975.
- Pitman, R.K., Orr, S.P., & Lasko, N.B. (1993). Effects of intranasal vasopressin and oxytocin on physiological responding during personal combat imagery in Vietnam veterans with posttraumatic stress disorder. *Psychiatric Research*, 48, 107-117.
- Purcell, R., Pathè, M., & Mullen, P. (2000). The incidence and nature of stalking victimisation. *Paper presented at the Stalking: Criminal Justice Responses Conference, Sydney*.
- Purcell, R., Pathè, M., & Mullen, P. (2001). A study of women who stalk. *The American Journal of Psychiatry*, 158, 2056-2060.
- Romans, J.S., Hays, J. R., & White, T.K. (1996). Stalking and related behaviors experienced by counselling centre staff members from current or former clients. *Professional Psychology Research and Practice*, 27, 595-599.
- Slashinski, M., Coker, A., & Davis, K. (2003). Physical aggression, forced sex, and stalking victimisation by a dating partner: An analysis of the national violence against women survey. *Violence and Victims*, 18, 595-617.
- Smoyak, S. (2003). Perspectives of mental health clinicians on stalking continue to evolve. *Psychiatric Annals*, 33, 641-648.
- Tabachnick, B.G., & Fidell, L.S. (1989). *Using multivariate statistics*. New York: Harper Collins.

- Tjaden, T., Thonnes, N., & Allison, C. (2002). Comparing stalking victimization from legal and victim perspectives. In K.E Davis, I.H. Frieze, R.D. Maiuro (Eds). *Stalking: Perspectives on Victims and Perpetrators* (pp. 9-31). New York: Springer Publishing Company.
- Wells, J.H., Haines, J., Williams, C.L., & Brain, K.L. (1999). The self-mutilative nature of severe onychophagia: A comparison with self-cutting. *Canadian Journal of Psychiatry*, 44, 40-47.
- Westrup, D., & Fremouw, W.J. (1998). Stalking behavior: A literature review and suggested functional analytic assessment technology. *Aggression and Violent Behavior*, 3, 255-274.
- Westrup, D., Fremouw, W.J., Thompson, R.N., & Lewis, S.F. (1999). The psychological impact of stalking on female undergraduates. *Journal of Forensic Science*, 44, 554-557.
- Zilberg, N.J., Weiss, D.S., & Horowitz, M.J. (1982). Impact of event scale: A cross-validation study and some empirical evidence supporting a conceptual model of stress response syndromes. *Journal of Consulting and Clinical Psychology*, 50, 407-414.

Appendix A

Information Sheet

Consent Form

Stranger and intimate stalking: Psychological and psychophysiological responses in victims during direct and indirect threat.

The above project is being conducted by Dr Janet Haines, Dr Christopher Williams and Ms Lauren Sculthorpe of the School of Psychology at the University of Tasmania. The purpose of this study is to examine the nature of people's responses to being stalked by known and unknown perpetrators when the threat is direct and indirect. The results of this project may contribute to the understanding of the way in which people respond to traumatic events and may be used in the development of appropriate management strategies for people who have been stalked. This project is being undertaken as part of a Master of Psychology (Clinical) degree.

We are interested in comparing the reactions of people to stalking events. In particular, we are interested in comparing the psychological and psychophysiological reactions of people who have experienced being stalked by something they know with the reactions of people who have been stalked by strangers. We are also learning whether the reaction to direct threat (when the stalker is seen) is different from the responses to indirect threat (when the stalker is not present such as when a message is left on an answering machine or a letter is received).

If you agree to participate, your reactions to the stalking events will be discussed with you. In addition, you will be interviewed about an emotionally neutral event such as making a cup of coffee that will be used for comparison purposes. This interview will be recorded on audio cassette. The information from the interview will be used to devise imagery scripts that will be used to guide you through the memory of the events. An imagery script is a structured, written account of the story provided by you during interview. You will be required to attend the laboratory and have electrodes and measurement instruments applied to your torso and finger tips so that measures of heart rate, respiration, skin conductance and muscle tension can be taken. The administration of these electrodes and measurements instruments do not cause discomfort although it should be noted that there is a very small risk of skin rash. Please let us know if you have any allergies.

These measurements will be taken while you are guided through imagery of the stalking events and the emotionally neutral event of your choosing. You will be asked to rate your psychological response to the content of the imagery scripts. In addition, you will be interviewed about your reactions to the stalking events and you will be asked to complete a range of questionnaires and rating scales that are designed to elicit information about stalking experiences and the psychological symptoms that may develop as a consequence of experiencing a stalking event. The interview will take approximately one hour of your time and the laboratory session will also take one hour.

We wish to emphasise that the information you share with us will be treated in a confidential manner. All written information, computer data files and audio cassettes

will be stored with a participation number rather than your name. The data will be secured in a locked cabinet.

Participation in this study is completely voluntary. If you agree to participate in the study but then change your mind and wish to withdraw, you may do so at any time without prejudice. If you are receiving counselling or psychological support, you may wish to discuss participation in this project with your counsellor or psychologist prior to commencement. If you wish to have someone accompany you to the sessions and then escort you home, please feel free to bring that support person with you.

Some people may find that talking about their traumatic experiences is difficult and causes anxiety. If this is the case for you, we recommend that you do not participate in this project because we will require people to discuss the nature of their reactions to their experiences. In addition, if you agree to participate but then find it causes you undue anxiety to talk about the issues, please let us know. We will assist you with your anxiety and provide you with the opportunity to withdraw from the study. We do not wish for participation in the project to be distressing for you.

If you wish to discuss the project, before, during or after participation, please contact Dr Janet Haines on (03) 6226 7124 or at J.Haines@utas.edu.au or Dr Christopher Williams on (03) 6226 2245 or at Chris.Williams@utas.edu.au. This project has been approved by the Southern Tasmania Social Sciences Human Research Ethics Committee. If you have any concerns or complaints regarding the ethical nature of the project, you may contact the Chair or Executive Officer of the Southern Tasmania Social Sciences Human Research Ethics Committee. The contact numbers are as follows: A/Prof Gino DalPont, Chair, (03) 6226 2078; Ms Amanda McAully, Executive Officer, (03) 6226 2763.

If you would like to discuss your psychological reactions to the abusive event, we would suggest that students contact Student Counselling (telephone 6226 2697) at the University and others contact Victims of Crime Service (telephone 6228 7628). You may also wish to discuss your reaction with your general practitioner. The services provided by Student Counselling and Victims of Crime Service are free of charge. If you require immediate assistance, please let us know as we would be happy to provide support.

We wish to make you aware that the results of this project are for research use only and are unavailable for use in any legal proceedings.

We would be happy to discuss your individual results with you. Overall results will be available in hard copy or electronic form on the School of Psychology website at the completion of the project if you are interested (www.scieng.utas.edu.au/psychol/). If you decide to withdraw from the project, we

would welcome the opportunity to discuss with you any concerns you have about the project and your participation in it.

Please keep this information sheet and, if necessary, refer to the information it contains. In addition, if you agree to participate, you will be asked to sign a statement of informed consent. A copy of this statement will be supplied to you.

Thank you.

STATEMENT OF INFORMED CONSENT

I have read and understood the 'Information Sheet' for this study. The nature and possible effects of the study have been explained to me.

I understand that the study involves:

- Discussing stalking events I have experienced;
- Discussing an emotionally neutral event of my choosing;
- These discussions will be recorded on audiotape to facilitate the preparation of imagery scripts;
- Attending a recording session and having electrodes and measurement instruments fitted so that recordings of my heart rate, respiration, skin conductance level and muscle tension can be taken while I am being asked to image aspects of the events;
- Rating my psychological responses to each of these events;
- Completing questionnaires about the nature of my psychological responses to the events.
- The duration of the interview and the laboratory session is one hour each.

I understand the data collected from this study will be kept in the School of Psychology for at least 5 years.

I understand that all research data will be treated as confidential and that my name will not be attached to the data that are collected. Any questions that I have asked have been answered to my satisfaction. I agree to participate in this study and understand that I may withdraw at any time without prejudice. I agree that research data gathered for the study may be published. I am aware that I will not be able to be identified in published material.

Name of participant:

.....

Signature of participant:

.....

Date:

I have explained this project and the implications for participation in it to this volunteer and I believe that the consent is informed and that s/he understands the implications of participation.

Name of investigator:

.....

Signature of investigator:

.....

Date:

Appendix B

Example Imagery Script

Neutral Imagery Script

1. Setting the scene

It is early morning and you are in your kitchen. Really see the sunlight glaring through the cream lace curtains above the sink in front of you. See your cream breakfast bar to your right. See your oven and fridge to your left. Concentrate on this. Now see your white jug to the left of the sink in front of you. Feel your hand on the handle of the jug and feel its weight as you pick it up to check it has water in it. Notice that it feels heavy and must be half full. Focus on this. Hear the click as you place the jug back on its base. Really see yourself flick the button on the side of the jug to turn it on. See the red light on the jug come on. Take a moment to concentrate on this. Now open your eyes and turn this scene off.

2. Approach

It is morning and you have just turned the jug on in your kitchen. Really see yourself cross the kitchen to the mug shelf. Picture the drinking glasses and mugs on the wooden shelf. Feel yourself reach for your ladybug mug. See the little red bugs on the outside of the mug. Feel your hand wrapped around the mug as you carry it back to the jug, and place it on the bench. Concentrate on this. Hear the sound of the jug as it heats up. Really picture yourself getting a tea bag from the small round metal dish next to the kettle. See the blue tag on the bag as you pull it from the tea bag. Really feel yourself placing the teabag in your mug. See the blue tag hanging over the side. Focus on this. Hear the sound of the jug as it starts to boil. Really see the steam coming from the jug. Hear the jug switch off, and really see the red light turn off. Concentrate on this. Now open your eyes and turn this scene off.

3. Incident

The jug has just boiled. See yourself reaching for the jug and picking it up. Feel the vibrations of the jug in your hand as the boiling stops. Feel the weight of the jug as you pour the water into your mug. See the colour of the water change as it hits the tea bag. See the steam rising. Concentrate on this. Now feel yourself placing the jug back on its stand. Really picture yourself taking a couple of side steps to your

right to your little white fridge. Feel yourself opening the fridge door. See the yellow carton of milk as you get it out of the fridge and flip open the top. Concentrate on this. Picture yourself holding the fridge door wide open with one foot while you stretch over to add some milk to your mug. Really picture this. See yourself close the carton and place it back in the fridge. Picture yourself closing the fridge door. Focus on this. Now open your eyes and turn that scene off.

4. Consequence

You have just added milk to your tea. Really picture yourself standing in front of your ladybug mug on the cream bench. See the blue tea bag tag in your left hand. Picture yourself jiggling the tea bag up and down. See the colour of the tea change as the milk gets mixed in by the jiggling. Concentrate on this. Feel the steam on your hand. Notice your tea darken to the dark strong colour you like. Picture yourself swinging the tea bag onto the edges of your mug to wring it out. Now really feel the hot wet teabag as you quickly squeeze it with the fingertips of your right hand. Concentrate on this. See yourself crossing quickly to the rubbish bin at the doorway to the kitchen. See yourself push open the blue swing lid with your right hand and see yourself drop in the tea bag. Focus on this. Now picture yourself walking back to get your cup of tea. Concentrate on this. Now open your eyes and turn this scene off.

Appendix C

Visual Analogue Scales

VISUAL ANALOGUE SCALES

Participant No.: _____


Script: _____

Stage: _____

How did you feel?

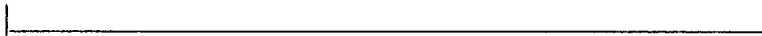
Not afraid

Afraid



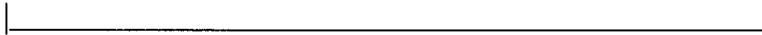
Not threatened

Threatened



Not anxious

Anxious



Not angry

Angry



What were you thinking?


I will not be harmed

I will be harmed



I am in control

I am out of control



I am not to blame

I am to blame



I do not feel helpless

I feel helpless



Appendix D

Means and standard deviations for psychophysiological measures and VAS

Table 7. *The mean scores and standard deviations for each group for each stage of each script for the psychophysiological and VAS measures.*

Measure	Script	Stage	Stranger		Intimate	
			M	SD	M	SD
Heart rate	Direct	Scene	78.6	9.1	72.5	8.6
		Approach	80.7	11.4	75.0	8.4
		Incident	81.7	10.9	76.1	8.7
		Consequence	79.7	9.5	76.0	8.7
	Indirect	Scene	75.5	9.7	74.1	9.1
		Approach	79.0	8.6	74.6	9.3
		Incident	77.7	8.1	74.6	8.3
		Consequence	76.5	7.5	73.8	8.4
	Neutral	Scene	75.2	8.7	70.6	8.1
		Approach	73.9	8.7	72.0	10.5
		Incident	75.4	9.9	73.3	11.3
		Consequence	74.7	8.8	73.2	10.3
Respiration	Direct	Scene	15.5	4.8	16.1	3.4
		Approach	16.9	4.7	17.3	3.1
		Incident	18.5	5.1	18.3	5.6
		Consequence	17.0	4.7	16.6	4.2
	Indirect	Scene	15.2	4.6	15.9	4.2
		Approach	16.5	4.8	16.9	4.2
		Incident	18.0	5.7	19.0	4.3
		Consequence	16.1	4.1	18.0	5.1
	Neutral	Scene	15.5	5.2	15.4	3.8

		Approach	15.6	5.5	16.5	3.8
		Incident	15.8	5.1	15.1	3.2
		Consequence	15.6	5.0	16.7	3.7
Skin Conductance	Direct	Scene	1.9	5.2	4.1	4.2
		Approach	1.7	4.7	3.3	4.5
		Incident	1.6	5.0	3.0	4.5
		Consequence	1.1	4.6	2.1	5.3
	Indirect	Scene	1.5	2.8	4.5	4.4
		Approach	1.2	2.7	4.2	4.4
		Incident	1.1	2.8	3.7	4.8
		Consequence	0.8	2.6	3.2	5.4
	Neutral	Scene	2.2	4.1	3.0	3.8
		Approach	1.8	4.0	3.0	3.6
		Incident	1.5	3.8	3.0	3.9
		Consequence	0.8	3.8	2.4	4.1
Harm	Direct	Scene	10.2	15.5	14.9	24.3
		Approach	25.5	21.5	21.7	27.3
		Incident	38.6	32.4	52.2	43.1
		Consequence	38.6	33.7	38.3	39.3
	Indirect	Scene	9.1	16.9	4.2	10.3
		Approach	18.0	20.0	24.2	28.4
		Incident	35.2	24.1	39.7	33.6
		Consequence	19.5	22.2	40.2	34.4
	Neutral	Scene	2.5	3.6	0.6	1.3
		Approach	1.9	3.1	1.1	1.8
		Incident	1.1	1.4	0.6	1.3
		Consequence	1.0	1.3	0.6	1.3
Control	Direct	Scene	13.5	19.6	10.7	16.2

Blame		Approach	30.2	24.8	29.9	33.9
		Incident	54.9	27.0	58.7	36.8
		Consequence	50.0	26.2	45.9	41.3
	Indirect	Scene	10.0	12.8	3.7	6.5
		Approach	26.5	24.1	23.8	28.4
		Incident	42.5	24.4	50.1	39.1
		Consequence	26.2	22.7	37.1	40.6
	Neutral	Scene	0.9	1.2	0.6	1.3
		Approach	1.0	1.3	1.1	1.8
		Incident	1.1	1.4	0.6	1.3
		Consequence	1.0	1.3	0.6	1.3
	Direct	Scene	7.7	15.6	7.7	13.1
		Approach	24.0	31.9	18.3	18.6
		Incident	34.8	36.1	42.6	32.1
		Consequence	31.4	34.5	42.7	38.3
	Indirect	Scene	12.5	20.9	7.5	16.6
		Approach	17.4	23.0	29.4	33.9
		Incident	23.4	34.9	44.2	38.1
		Consequence	23.7	33.1	41.3	38.4
	Neutral	Scene	0.9	1.2	0.6	1.3
		Approach	1.2	1.7	0.6	1.3
		Incident	1.1	1.4	0.6	1.3
		Consequence	1.0	1.3	0.6	1.3
Helplessness	Direct	Scene	12.0	17.8	12.0	21.9
		Approach	27.6	24.0	34.5	35.7
		Incident	50.8	25.1	68.0	35.4
		Consequence	48.6	29.0	48.0	42.3
	Indirect	Scene	18.2	26.2	6.8	14.2

Fear		Approach	30.1	25.7	32.5	35.3
		Incident	40.4	27.6	48.0	40.6
		Consequence	28.9	27.8	50.2	38.7
	Neutral	Scene	0.9	1.2	0.6	1.3
		Approach	1.0	1.3	0.6	1.3
		Incident	1.1	1.4	0.6	1.3
		Consequence	1.0	1.3	0.6	1.3
	Direct	Scene	6.2	9.2	14.3	25.7
		Approach	32.3	24.8	40.8	33.9
		Incident	46.2	31.7	57.7	36.0
		Consequence	46.8	38.2	57.6	40.0
	Indirect	Scene	6.5	9.3	11.8	21.1
		Approach	27.0	27.6	33.7	36.0
		Incident	38.3	31.5	46.3	36.1
		Consequence	29.3	33.0	43.7	37.3
	Neutral	Scene	1.2	1.8	0.8	1.8
		Approach	2.5	4.6	0.6	1.3
		Incident	1.8	2.3	0.6	1.3
		Consequence	1.0	1.3	0.6	1.3
Threat	Direct	Scene	6.0	9.3	12.0	22.1
		Approach	39.4	32.5	47.7	33.2
		Incident	50.8	32.0	64.8	36.1
		Consequence	54.3	36.5	56.5	36.4
	Indirect	Scene	11.2	16.7	7.0	11.6
		Approach	37.1	32.2	29.1	36.3
		Incident	49.0	33.5	54.5	38.5
		Consequence	37.5	32.1	38.0	34.9
	Neutral	Scene	1.2	1.8	0.8	1.8
		Approach				
		Incident				
		Consequence				

Anxiety		Approach	1.0	1.3	0.6	1.3
		Incident	1.6	1.8	0.6	1.3
		Consequence	1.0	1.3	0.6	1.3
	Direct	Scene	11.7	16.4	19.2	33.3
		Approach	51.5	39.2	56.7	37.0
		Incident	73.9	19.4	74.2	38.4
		Consequence	69.3	25.0	73.3	35.4
	Indirect	Scene	25.4	32.7	12.0	16.9
		Approach	50.5	27.8	47.6	33.1
		Incident	65.1	28.6	71.6	35.6
		Consequence	53.8	29.2	67.0	37.7
	Neutral	Scene	1.2	1.8	1.3	2.2
		Approach	2.5	3.1	1.1	1.9
		Incident	1.1	1.4	0.8	1.3
		Consequence	1.0	1.3	0.6	1.3
Anger	Direct	Scene	3.0	5.0	8.7	17.3
		Approach	31.4	35.4	54.5	34.7
		Incident	38.0	32.3	74.3	30.3
		Consequence	39.7	35.2	79.5	26.7
	Indirect	Scene	13.2	17.4	3.7	9.4
		Approach	28.5	32.0	44.2	35.3
		Incident	46.6	36.8	78.3	28.4
		Consequence	54.8	33.7	75.5	28.9
	Neutral	Scene	1.2	1.8	1.5	2.6
		Approach	1.0	1.3	1.1	1.9
		Incident	1.1	1.4	0.9	1.4
		Consequence	1.0	1.3	0.6	1.3
