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Resilience Determinants in Women Exposed to Various Degrees of
Intimate Partner Violence

by

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Abstract

The experience of intimate partner violence is traumatising for many of the women who are subjected to it; however, many people who experience a traumatic event display little or no psychological distress and there is evidence that some people may even thrive despite these experiences. The aim of the present study was to examine the intrapersonal mechanisms that may promote resilient responses in women exposed to various degrees of intimate partner violence. A community drawn sample of women (N=184), comprising both abused and non-abused participants, completed the survey-based study. Participants completed questionnaires assessing resilience, event cognitions, appraisals, personality, coping, and psychopathology. A series of correlational, ANOVA, and regression analyses were then completed to assess the relationships between these constructs. Overall, the results of the present study suggest that resilience was independent of exposure to abuse and women reporting higher levels of resilience experienced lower levels of negative symptoms (e.g., negative event cognitions, appraisals, and psychopathology). Regression analyses indicated that higher levels of resilience were predicted by personality factors, primarily emotional stability, and coping variables, planning, denial, and positive reframing. Resilience was depleted by self-blame, depression, and negative self-view. Further, the results suggest that resilience may be both a trait and a process. Clinically, this outcome implies that resilient traits (e.g., personality factors) can be translated into resilient processes (e.g., coping style) which can be taught and strengthened within a therapeutic context.

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Chapter 1: Introduction and Overview

Despite prevention efforts and a robust line of research on its antecedents, correlates, and consequences (Baldry, 2003; Garcia-Moreno, Jansen, Heise, & Watts, 2006; World Health Organization, 2005), violence and abuse perpetrated by intimate partners is now widely recognised as one of the most common forms of violence against women and is becoming increasingly recognised as an important public health issue worldwide. Previously, cultural acceptance of the abuse of women by intimate partners prevented recognition that such behaviour and experiences could produce significant and deleterious psychological consequences (Dutton, 1992). As social perceptions of intimate partner violence began to change, the thorough investigation of the psychological correlates of intimate partner violence commenced in earnest in the 1970's (e.g., Straus, 1976; 1979). As a result, social learning theory and feminist theories have been the two most prominent theories to have influenced research examining the aetiology of intimate partner violence (Rothman, Butchart, & Cerda, 2003).

Although there is evidence to suggest men are also exposed to intimate partner violence, the most recent estimates suggest women continue to represent 85% of those abused by intimate partners (Black et al., 2011). Therefore, the focus of this study is on women's experience of intimate partner violence and resilience.

The relationship between the experience of intimate partner violence and poor mental health outcomes has now been firmly established (e.g., Arias & Pape, 1999; Bifulco, Moran, Baines, Bunn, & Stanford, 2002;

Briere & Runtz, 1988; Chapman et al., 2004; Coker et al., 2002; Ford-Gilboe et al., 2009; Golding, 1999; Spertus, Yehuda, Wong, Halligan, & Seremetis, 2003; Strauchler et al., 2004; Street & Arias, 2001). It is also evident that intimate partner violence comes at a high cost to both the victim (e.g., physical harm, poor mental health) and society (e.g., cost of medical services, decreased productivity in the workforce) (Australian Bureau of Statistics, 2005). In contrast, there is a considerable body of research which clearly shows that most people will experience a traumatic event or major life stressor (e.g., intimate partner violence, death of a spouse, motor vehicle accident, etc.) within their lifetime and will not go on to develop poor mental health or psychopathology (e.g., Bonanno, 2004, 2005; Bonanno & Mancini, 2008). Moreover, there is some evidence to suggest that some people may thrive despite experiencing such difficulties (Bonanno & Mancini, 2010). Despite prolific research into resilience over the last several years, there is presently a dearth of research examining resilient responses to intimate partner violence. The documented impacts of intimate partner violence suggests further examination of the factors that may moderate the severity of psychological disturbance and influence resilient outcomes for women exposed to this type of trauma is warranted.

1.1. Definition and manifestation of types of intimate partner violence

One of the key challenges in defining and examining intimate partner violence lies in the complexity of the behavioural acts, relationships and situations that can be considered within the bounds of intimate partner violence (Pink, 2009). Despite some definitional advances, a consensus on what constitutes intimate partner violence remains somewhat elusive and

there remains a need for improved operational definitions (Herman, 1992; Pink 2009). At the present time there is no single nationally or internationally agreed upon definition as to what constitutes ‘intimate partner violence’, ‘domestic violence’, ‘spousal abuse’ or any similar, related term. The definition of intimate partner violence for the purposes of this study accords with the most common definition identified in the studies reviewed by Laing and Bobic (2002):

“The definitions throughout Australian literature reflect a contemporary recognition that violence, whether defined as domestic or family includes a range of violent behaviours: physical violence, sexual, verbal, psychological and emotional abuse, as well as social isolation and economic or financial abuse” (Laing & Bobic, p. 14).

As identified in the above definition, intimate partner violence comprises a range of behaviours, which for the purposes of this study will be defined further below.

1.1.1. Physical Abuse

Physical abuse is defined as physical assault, and threatened or attempted physical assault (ABS, 2005). Physical abuse encompasses, but is not limited to, a continuum of acts that range from slapping to killing (Intimate Partner Abuse and Relationship Violence Working Group [IPARVWG], 2002). Physical abuse can include pushing, shoving, hitting, punching, kicking, choking, assault with a weapon, tying down or restraining, leaving the person in a dangerous place, denial of sleep, warmth, or nutrition, denial of needed medical or personal care,

disablement, and murder (Australian Public Health Association [APHA], 1990; IPARVWG, 2002).

1.1.2. Sexual Abuse

Sexual abuse may manifest as a continuum from forcible rape to nonphysical forms of pressure that compel individuals to engage in sexual acts against their will (IPARVWG, 2002). Sexual abuse takes many forms within relationships, including marital, date, and acquaintance rape. Sexual abuse can include acts such as sexual degradation, intentionally hurting someone during sex, assaults upon the genitals (including use of objects intra-vaginally, orally, or anally), or pursuing sex when someone is not fully conscious or afraid to refuse. It may also include forcing a person to take their clothes off or remain naked against their will, making a person pose for pornography, or forcing a person to watch pornography or sexual activities, and coercing an individual to have sex without protection against pregnancy or sexually transmitted diseases (APHA, 1990; IPARVWG, 2002).

1.1.3. Psychological Abuse

The innate subtleties of psychological abuse render it the most problematic to define, primarily because the consequences are not physical and immediately visible and the very private nature of abuse results in tangential and unclear indicators of its presence (Harper & Arias, 2004). Additionally, the effects of psychological abuse tend to be non-specific, and incidents are difficult to discreetly categorise into single episodes, each with a definite beginning and end (O'Hagan, 1995). Unlike physical or sexual

abuse, it is unlikely that single instances of psychological abuse are directly harmful (Claussen & Crittenden, 1991) despite being potentially upsetting. Therefore, the crucial feature of psychological abuse appears to be the cumulative effect of its sustained and repetitive nature (O'Hagan, 1995), representing a relationship or interpersonal style that has a pervasive influence and insidious effect on the psychological adjustment of the individual.

Psychological abuse is considered to consist of severe, hostile actions that are persistent, repetitive patterns of verbal and nonverbal (but non-physical) intentional behaviours that harm the victim, having a detrimental impact on the victim's self-perception and well-being (Keashly & Harvey, 2005). Psychological abuse may manifest in acts such as degradation, humiliation, intimidation and threats of harm, intense criticizing, insulting, belittling, ridiculing, and name calling that have the effect of making a person believe they are not worthwhile and keep them under the control of the abuser. It may also include behaviours such as verbal threats of abuse, harm, or torture directed at an individual, the family, children, or friends, physical and social isolation, extreme jealousy and possessiveness, accusations of infidelity, repeated threats of abandonment, divorce, or initiating an affair if the individual fails to comply with the abuser's wishes. Monitoring movements, restricting access to money (economic abuse), driving fast and recklessly to frighten someone, actual or threatened harassment or stalking, such as constant phone calls to a workplace or home, or repeated visits to a workplace or home, and cyber-stalking are also considered to be psychologically abusive behaviours (APHA, 1990;

Ferguson & Dacey, 1997; Gervis & Dunn, 2004; IPARVWG, 2002; Lutgen-Sandvik, 2003; Mash & Wolfe, 2002; Straus & Field, 2003).

Within the literature, the term psychological abuse is often used interchangeably with the term emotional abuse; however, emotional abuse is often separated from social and economic abuse and harassment and stalking, whereas psychological abuse is often utilised in a broader capacity to compass all of the abovementioned behaviours. Therefore, the term ‘psychological abuse’ will be used for the purpose of this thesis.

1.2. Terminology: victim or survivor?

A review of the psychological literature in which intimate partner violence is examined indicates that most authors have referred to the women who constituted this sample group as “victims”. In more recent years, fuelled by a feminist empowerment framework, this terminology has been questioned and some authors have advocated for the term ‘victim’ to be replaced by ‘survivor’ in order to effectively capture women’s resistance and sense of self-agency (e.g., Lamb, 1999). However, anecdotal evidence from clinical practice would suggest that women do not necessarily identify with either term. This supposition is supported by qualitative data included in the study undertaken by Werner-Wilson, Zimmerman, and Whalen (2000). When interviewed about their awareness of their husband’s abusive behaviour, the women reported *“I didn’t really feel like I was abused like the people you see on TV that are all black and blue and totally beaten up”* and *“I was never purple and black, I never had any broken bones to justify*

that I was being abused. Therefore, I didn't even know that I was being abused" (pg., 175).

These statements suggest women are not necessarily aware that their experiences constitute exposure to abuse and violence, and therefore they would not necessarily identify themselves as either a victim or a survivor. More importantly, these statements capture the insidious nature of psychological abuse, insofar as there is no *physical evidence* to support allegations or complaints of abusive behaviour but merely the woman's subjective report of her experience. In turn, women are often led to believe that any disclosures they may make about the abuse would be discredited and they would only be bringing shame upon themselves and their family (Gore- Felton, Gill, Koopman, & Spiegel, 1999).

However, there is the possibility that aside from a lack of physical evidence, exposure to abusive behaviour has become normalised for some women, insofar as there is evidence to suggest an intergenerational transmission family violence, and prior abuse history is also a risk factor for further victimisation. For example, a study by VicHealth (2009) found that adults who had been exposed to violence as children could be classified into two 'attitudinal categories'—those who were significantly more tolerant than average of relationship violence and those who were significantly less tolerant than average of relationship violence. Anecdotal reports from clinical experience suggest women come to believe this is 'what life is' and they do not deserve any better. This perspective is substantiated by empirical evidence regarding self-blame, and will be reviewed in further detail in Chapter 4, section 4.4. These are important factors to consider in

the examination of resilience to intimate partner violence, as understanding the means with which women adapt or change to negative life circumstances in an intimate relationship will help to extrapolate clinical frameworks for intervention.

The American Psychological Association Dictionary of Psychology (2007) defines a victim as “an individual who is the target of another person’s violent, discriminatory, harassing, or assaultive behaviours” and survivorship as “the state of having a typical life and life span after overcoming severe diseases (e.g., cancer), traumatic life events (e.g., child abuse), or environmental disaster (e.g., earthquake). It is arguable then that both of these terms are relevant to women who have been abused by their intimate partners. As the women who constitute this group do not appear to automatically identify with either term, the general term “women” will be used to refer to the participants of this study.

1.3. Prevalence and cost of intimate partner violence

The process of estimating the prevalence of intimate partner violence has proven difficult for many reasons, including reluctance to disclose abuse because of fear of retaliation from the perpetrator, social stigma, and that it often takes place in the private domain (Bachman, 1999; Pink, 2009). Other issues that limit attempts to measure and define the nature of intimate partner violence include the following: under-reporting; hidden reporting (where a victim seeks services, or reports an incident, but does not disclose that intimate partner violence was the reason for the contact); under-recording and misclassification; counting or recording rules (for example,

differences between jurisdictions may result in inflated figures as some Family Violence Orders also cover non-family violence-related matters, or vice versa (e.g., Apprehended Violence Orders). As a result of these issues, estimates of current and lifetime prevalence vary in the literature, ranging from 10 to 77% for physical and/or sexual abuse (e.g., Heise & Garcia-Moreno, 2002; Garcia-Moreno et al., 2006) and between 12 and 23% for psychological abuse (Coker et al., 2002; Coker, Weston, Creson, Justice, & Blakeney, 2005). The lower prevalence rate of psychological abuse may be the result of the high rate of co-occurrence with other forms of abuse, problems in assessment and measurement because of the complexity of psychological abusive behaviours, or alternatively, may reflect that some women subjected to psychological abuse may not recognise these behaviours as abusive.

In Australia, an estimated 1.3 million women aged 18 years and over have ever experienced intimate partner violence, equivalent to 17% of all adult women in 2005 (Personal Safety Survey, 2005). Additional data from the Personal Safety Survey (2005) showed that the vast majority (90%) of women who had experienced violence from an intimate partner in the five years prior to the interview had experienced physical violence. Most (79%) had been physically assaulted, and 21% had been physically threatened. Approximately 22% of women who had experienced intimate partner violence during the five years prior to interview had experienced sexual violence, with 18% having been sexually assaulted and six percent experiencing threatened sexual assault. Notably, 63.2% of women who reported experiencing physical violence at the hand of a male partner

(current or previous) or boyfriend in the previous twelve months did not report it to the police (ABS, 2006).

Unfortunately the definitions and measurement of intimate partner violence for the purpose of the Personal Safety Survey (2005) did not include a measure of psychological abuse. Failing to measure this form of abuse results in an underestimation of the general prevalence of intimate partner violence and a disparity in the estimated frequency of psychological abuse occurring in isolation from other forms of abuse.

The Australian component of the International Violence Against Women Survey (IVAWS) found higher figures of abuse, with over one third of women (34%) who had a current or former intimate partner reporting experience of physical and/or sexual violence since the age of 16 (Mouzos & Makkai 2004). Of those in a current relationship, 9-11% reported experiencing physical or sexual violence from their partner at some point in their lifetime (IVAWS, 2004). In addition, 37%-40% reported experiencing at least one type of controlling behaviour, most commonly name calling, insults, put downs or behaviour that made the woman feel bad. Lastly, the worst possible outcome of intimate partner violence is homicide. Of the 134 domestic homicides that occurred in the 2007-08 period, 80 were intimate partner homicides (Virueda & Payne 2010).

Within the broader empirical literature, the disparity in estimates of prevalence is likely to be the result of discrepancies in operational definitions, research methodologies, differences in samples sizes, and an emphasis on different types of intimate partner violence. In an attempt to

address this disparity, the World Health Organisation commissioned a study to examine the prevalence of intimate partner violence (Garcia-Moreno et al., 2006). A total of 24,097 women were interviewed across 15 sites in 10 countries. The reported lifetime prevalence of physical or sexual intimate partner violence, or both, varied from 15% to 71%. A primary limitation of the study was that it only assessed controlling behaviours as opposed to the variety of behaviours that constitute psychological abuse. Given the scope of psychologically abusive behaviours, and the limited assessment included in the study conducted by Garcia-Moreno et al., (2006), these estimates are also likely to be an under-representation of the true prevalence of intimate partner violence.

In light of the identified issues, it must be acknowledged that it is unlikely that the 'real number' of incidents of intimate partner violence will ever be known. However, data that are currently available suggest that violence perpetrated by an intimate partner is a common experience for women of all nationalities and comes at a significant cost to the victim and society. Access Economics (2003) estimated the total annual cost of intimate partner violence in Australia to be \$8.1 billion, with the largest contributor being pain, suffering, and premature mortality at \$3.5 billion. Furthermore, the total lifetime cost of intimate partner violence was estimated to be \$224,470 per victim, and the annual cost per victim who has ever suffered intimate partner violence is estimated to be \$4,570. In a more recent study commissioned by the Commonwealth of Australia in 2009, the economic cost of domestic violence and sexual assault perpetrated against women had reached a cost of \$13.6 billion each year (KPMG, 2009). By

2021, the figure is expected to rise to \$15.6 billion if there is no effective intervention introduced.

In the US, the National Centre for Injury Prevention and Control (NCIPC, 2003) estimated the costs of intimate partner violence to exceed \$5.8 billion each year, nearly \$4.1 billion of which is for direct medical and mental health care services. The authors of the report note that this figure is likely to be an underestimate of the problem of intimate partner violence in the U.S as data relating to several cost components were unavailable (e.g., certain medical services, social services, criminal justice services). However, it is clear from both Australian and American data that intimate partner violence is a serious public health issue that results in significant cost on both an individual and societal level.

1.4. Outlining the problem

Despite the disparity in prevalence estimates, it is evident that intimate partner violence against women is a widespread and common experience that is of significant cost, both to the victim and the community. It is therefore valuable to examine the factors that may influence resilient and adaptive responses in women exposed to intimate partner violence and, thus, serve to protect them from repeated abuse and the development of psychopathology.

To date, considerable research has been directed at identifying victim and perpetrator typologies (e.g., Caetano, Vaeth, & Ramisetty-Mikler, 2008; Pittman & Lee, 2004) and the negative long-term sequelae for victims (e.g., Margolin, John, & Foo, 1998; Spertus et al., 2003). An

extensive research base has established a clear conceptualisation of the 'battered woman syndrome' (e.g., Walker, 1979, 1984) and a strong link between intimate partner violence and Posttraumatic Stress Disorder (PTSD) (e.g., Basile, Arias, Desai, & Thompson, 2004; Walker, 1979, 1984). Considerably less research has examined the mechanisms by which the experience of intimate partner violence leads to the development of psychopathology (Cukor & McGinn, 2006). Moreover, even less research exists that investigates the mechanisms that protect women who have experienced intimate partner violence from developing psychopathology (Iwaniec, Larkin, & Higgins, 2006) and/or promote positive adaptation to the trauma experience. Furthermore, given that some (or perhaps many) women do not recognise that they have been exposed to abusive behaviour, particularly with regard to psychological abuse, it is worth examining women's responses to different degrees of intimate partner violence in terms of frequency, severity, and type of abuse.

1.5. Overview of thesis

Trauma research indicates the majority of people who experience a traumatic event often display little or no psychological difficulties (e.g., Shalev, 2002). It is therefore plausible that a proportion of women who experience intimate partner violence display fewer psychological difficulties than others; yet this area of research has been significantly neglected (Humphreys, 2003). Hence, one of the issues integral to the study of intimate partner violence is the need to better understand why some women suffer more psychopathology than others after exposure to such abuse and what mechanisms promote resilient responses to intimate

partner violence. In this study I will review the resilience literature in terms of conceptualisation and the possibility that resilience may be both a process and an outcome of trauma adaptation. Consideration will then be given to theories and models of resilience and trauma adaptation and how these apply to intimate partner violence. A detailed rationale for the current study will then be provided, followed by a summary of the main results and conclusions that can be drawn from the findings.

Chapter 2: Conceptualising Resilience

2.1. Defining Resilience

It is evident that a considerable amount of psychological research to date has focused almost exclusively on understanding human functioning within a disease-focused medical model (Seligman & Csikszentmihalyi, 2000). It is from this pathological view point that researchers, theorists, and practitioners have considered violent or life-threatening events to be antecedents to psychological dysfunction (Lamprecht & Sack, 2002); hence the heavy focus on pathogenic outcomes, such as PTSD, in the empirical literature. However, epidemiological studies indicate that most adults will experience at least one potentially traumatic event during the course of their life (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Ozer, Best, Lipsey, & Weiss, 2003), and aside from a relatively limited subset of people who experience extreme distress, most people cope with such events remarkably well (Bonanno, 2004; 2005). As a result, researchers advocate an alternative approach to trauma research that emphasises the need to study the heterogeneity of stress responses to include positive adaptation (e.g., Bonanno & Mancini, 2010; Mancini, Bonanno, & Clark, 2009), thereby enhancing our understanding of normal and abnormal development and informing prevention and intervention strategies.

Rutter (1985) initially defined resilience as the ability to recover or cope successfully despite substantial adversity. He defined resilience to be a combination of innate personality traits and environmental influences that serve to protect individuals from the harmful psychological effects of

trauma or severe stress enabling them to lead satisfying and productive lives (Rutter, 1987).

At a later date, Werner (1995) referred to three general uses of the term resilience: good developmental outcomes despite high risk status; sustained competence under stress; and recovery from trauma. These tenets are encapsulated in the growing consensus that resilience is better characterised as adaptability than as stability (Adger, 2000), such that it is a process of ‘bouncing back’ from harm rather than immunity from harm (Garmezy, 1993; Layne, Warren, Watson & Shalev, 2007).

However, the term ‘resilience’ continues to be used as a broad conceptual umbrella and there remains little consensus on operational definitions of resilience (Masten & Obradovic, 2006). As such, controversy remains as to how best to operationalise resilience. Debates range from whether resilience is best defined as a trait, a process, an outcome, or a pattern of life course development, whether it is uni-dimensional or multi-faceted, and whether resilience should encompass recovery as well as resistance (Luthar, 2006; Masten, 1999; 2007). Broad definitions have been offered, such as “a pattern of positive adaptation in the face of significant adversity or risk” (Masten & Reed, 2002, p. 75) or the ability to resist, cope with, recover from, and succeed in the face of adverse life experiences (Masten & Powell, 2003).

Recent research has consistently shown that resilience is not rare but often the most common response to potential trauma (Bonanno, 2004, 2005; Bonanno & Mancini, 2008). Within this body of research there is evidence

to suggest that whilst some individuals may endure lasting psychological difficulties, the majority of people facing extreme adversity will recover a semblance of normal functioning within a period of months to years after the event, and some may only experience transient disruptions in functioning (Bonanno & Mancini, 2010). This suggests that individuals may be resilient and simultaneously show signs of psychopathology. In light of this, the definition and measurement of resilience must extend beyond the mere absence of psychopathology (Bonanno, 2004; Masten, 2001). However, in much of the empirical literature to date, definitions of resilience have been interpreted and methodologically operationalised from a uni-dimensional perspective to infer the absence of psychopathology (e.g., Bonanno, Galea, Bucciarelli, & Vlahov, 2006; Bonanno, Galea, Bucciarelli, & Vlahov, 2007; Bonanno, Rennieke, & Dekel, 2005; Yehuda, 2004)

In a concerted effort to provide an operational definition, Bonanno (2004) proposed adult resilience to be:

“the ability of adults in otherwise normal circumstances who are exposed to an isolated and potentially highly disruptive event such as the death of a close relation or violent or life-threatening situation to maintain relatively stable, healthy levels of psychological and physiological functioning... as well as the capacity for generative experiences and positive emotions” (pp. 20-21).

Bonanno’s definition highlights that those individuals demonstrating resilience may very well experience some short term emotional lability and dysregulation but these reactions tend to be brief and do not usually significantly impede the individual’s ability to function. The problem with

this definition is that it relates to acute or discrete stressors that occur *in otherwise normal circumstances*. This therefore renders it somewhat inapplicable to chronic, ongoing stressors as it would be arguable that ongoing threat, as is the case for most women exposed to intimate partner violence, requires a different process of adaptation. However, any additional light on what the differences may be has yet to be established.

Given the confusion in the literature regarding an operational definition of resilience (e.g., Humphreys, 2003; Masten, 2007), the chronic, ongoing nature of intimate partner violence (Coker, Smith, McKeown, & King, 2000), and the emerging evidence that an individual may be resilient and show signs of psychopathology simultaneously (Bonanno & Mancini, 2010), Masten and Reed's (2001) definition of resilience as "a pattern of positive adaptation in the face of significant adversity or risk" (p. 75) will be used for the purpose of this study.

2.2. Resilience: a trait or a process?

Theories of resilience originated in the 1970s, primarily from the field of developmental psychology. Researchers in this discipline pioneered investigations into resilience by examining children who were able to survive despite growing up in the most adverse circumstances, and demonstrated that these children experienced healthy developmental trajectories despite all odds (e.g., Werner & Smith, 1982). Early examinations of resilience initially focused on the personal qualities of 'resilient children', and then expanded to include multiple adverse conditions such as socioeconomic disadvantage and associated risks (e.g., Garmezy, 1974; 1991; Rutter, 1979; 1985; 1987; Werner & Smith, 1982).

Table 1 summarises these protective factors and demonstrated that characteristics of resilience such as humour, high expectations, positive relationships, positive social orientation, and effective communication skills were identified in all studies.

This early research generated terms such as ‘invulnerable’ and ‘invincible’ to describe a positive outcome after facing considerable adversity (Lansford et al., 2006). As research evolved, it became clear that individuals respond to different circumstances with varying degrees of resilience and vulnerability, and the emphasis on invulnerability and invincibility was later deemed problematic as it implied that resilience is a static and intrinsic characteristic of the person that provides absolute resistance to damage (Lansford et al., 2006; Rutter, 1985). The focus of empirical research then moved away from identifying protective factors to understanding the processes underlying the observed correlates of resilience. Rutter (1985; 1987) postulated that resilience was a process, not a trait, and it was not enough to simply identify protective factors, as these do not necessarily foster resilience for all individuals. Rutter proposed resilience is demonstrated when protective factors initiate certain processes in the individual, and suggested three such processes: building a positive self-image, reducing the effect of the risk factors, and breaking a negative cycle so as to create new opportunities for the individual.

Table 1.

Protective factors characteristic of resilience (as identified by author)

Protective factors	Garmezy (1974)	Masten et al. (1988)	Rutter (1985)	Werner & Smith (1982)
1. Good natured, easy temperament		X	X	X
2. Positive relationship	X	X	X	X
3. Communicates effectively	X	X	X	X
4. Sense of personal worthiness	X	X	X	X
5. Sense of control over fate	X			
6. Positive social orientation	X	X	X	X
7. Assertiveness	X			
8. Informal social support network	X		X	X
9. Ability to have close relationships	X			X
10. Delays gratification	X		X	X
11. Internal locus of control	X		X	X
12. Flexible	X		X	X
13. Interpersonal sensitivity			X	X
14. Problem-solving ability	X		X	X
15. Decision-making ability	X			
16. Future oriented			X	X
17. Sense of humour	X	X	X	X
18. High expectations	X	X	X	X
19. Trust in others/hope for the future	X	X		
20. Productive critical thinking skills	X	X	X	X

The thrust of this next generation of research was on systematically identifying attributes of the children and their families, and the characteristics of their wider communities that served as protective factors and were implicated in the development of resilience and healthy adjustment. It became clear that the interplay between individual and environmental factors at any one time influenced resilient outcomes (Garmezy & Rutter, 1983; Masten, 2001). From this research, it also became evident that resilience can be measured simultaneously across various life domains, and “is never an across-the board phenomenon” (Luthar, 2006, p., 741). The frequently cited example is that of an academically successful youth who suffers emotional distress and social isolation, suggesting the youth may be academically resilient but not emotionally or socially resilient. Informed by this research, resilience then became conceptualised as a dynamic process of adaptation despite exposure to adversity that involves a developmental progression, such that new vulnerabilities and/or strengths often emerge with changing life circumstances (Luthar, 2006; Masten, 2001).

Research examining resilience has grown exponentially since the 1970s and a clearer understanding has been generated regarding the relationship between resilience and risk and protective factors (e.g., Garmezy, 1991; Rutter, 1987; Werner & Smith, 1982), the role of attachment and familial/social interactions (e.g., Davis & Cummings, 2007; Egeland, 2007; Masten & Schaffer, 2006), and the role of psychobiological stress reactivity and the self-regulation systems for attention, arousal, emotion and behaviour (e.g., Cicchetti & Curtis, 2006). Numerous theorists now concur

that resilience is not rare nor a sign of exceptional psychological strength, but in fact it is a fundamental feature of normal coping skills (e.g., Bonanno, 2008; Luthar, 2006).

2.3. Resilience as an outcome of potentially traumatic events

Initial evidence of resilience in adults who had faced an isolated but nonetheless highly distressing event emerged from studies of bereavement. In a prospective study of older adult widows and widowers, Bonanno and colleagues (2002) found that almost half of the bereaved participants (46%) had low levels of depression throughout the study, from pre-loss through 18 months of bereavement, and low levels of grief-specific symptoms (e.g., yearning) during bereavement. Five core patterns of bereavement were identified including common grief (low pre-loss depression participants who had a grief reaction at six months, but did not differ from their pre-loss levels at the 18-month point following bereavement) which was the most infrequent reaction and a resilient pattern (low pre-loss depression participants who showed no change at either six or 18 months following bereavement) was found to be the most frequent response. An examination of the pre-bereavement functioning of the resilient group failed to reveal signs of maladjustment on any of the measures assessed in the study and indicated they had more adequate coping resources than other groups.

A more recent study (Bonanno, Moskowitz, Papa, & Folkman, 2005) demonstrated resilience (defined as within one standard deviation of the non-bereaved mean total symptom score) in approximately half of younger bereaved samples coping with either the death of a spouse or a child.

Resilience in these studies was defined using multiple outcome measures, including self-reported adjustment, structured clinical interviews, and anonymous ratings of participants' adjustment obtained from their close friends. A key point suggested by this research is that although resilient individuals may experience an initial, brief spike in distress they nonetheless seem to resume and then continue functioning effectively at or near their normal levels.

Further to this, resilience to loss has been associated with the ability to continue fulfilling personal and social responsibilities, with the capacity for positive emotions and generative experiences (Bonanno & Keltner, 1997; Keltner & Bonanno, 1997; Bonanno et al., 2002; Tugade & Fredrickson, 2004; Bonanno et al., 2005), and with greater ability to self-regulate affective experience (Bonanno et al., 1995; Coifman et al., 2005). This research negates the widely held assumption that the absence of distress following the death of a spouse is a form of denial or inhibition of the normal grieving process (Middleton, Moylan, Raphael, Burnett, & Martinek, 1993; Rando, 1992), and contributes further to the understanding that people who experience a major life stressor do not necessarily develop poor mental health or psychopathology (e.g., Bonanno, 2004, 2005; Bonanno & Mancini, 2008).

More recently, additional evidence to support the widespread occurrence of adult resilience has been derived from studies investigating the effects of direct exposure to the September 11, 2001 terrorist attack on the World Trade Centre in New York (e.g., Bonanno et al., 2005; 2006; 2007). Bonanno and colleagues examined the prevalence of resilient

outcomes in New York City residents across a six-month period post-September 11. All of these studies utilised large-scale samples ($N = 2,752$) and reported prevalence rates of resilience to be greater than 50% across most exposure groups, and never less than one third amongst the groups with the highest levels of exposure and likelihood of PTSD. However, all of the abovementioned studies utilised a 'relatively conservative' one-dimensional definition of resilience as "either one or zero PTSD symptoms during the first six months after the attack" (Bonanno et al., 2007: pp. 672). The authors argued that a multi-faceted definition of resilience, as previously specified by Bonanno (2004), was not possible due to the large-scale nature of the studies. This directly contradicts Bonanno's own assertion that "resilience is more than the simple absence of psychopathology" (2004; pp.20). Interestingly, the measurements used in the studies targeted protective factors (e.g., sociodemographics, life stress, exposure, substance use, psychopathology) that would have arguably provided a more holistic assessment of resilience.

2.4. Resilience as an outcome of interpersonal violence

Although there is a clear link between experiencing intimate partner violence and an increased risk for psychopathology, it is becoming increasingly apparent that not all women respond in the same way to abuse, suggesting that resilience may be an important determinant of post-trauma adjustment. It is evident that the resilience literature examining adult responses to stressful life events is still in its youth and, for the most part, is yet to consider adult responses to relational trauma (i.e., interpersonal violence and maltreatment). As a result, very little is known about the

mechanisms which fuel resilience in adult victims of interpersonal violence (Humphreys, 2003). This is an important consideration as previous studies examining resilience in adults have largely investigated discrete events that are often brief in duration and unanticipated by the individual (e.g., Bonnano et al., 2005; de Rooij et al., 2010; Metzl, 2009). In contrast, women who experience intimate partner violence are often exposed to recurrent or prolonged traumas, and as a result they may have some opportunity to anticipate the next potentially traumatic event (potentially through conditioning processes) (Foa, Steketee, & Rothbaum 1989). It can be speculated that the anticipation of the abuse may have a degree of influence on the women's responses and resilience to the event, therefore potentially resulting in quite a different outcome to those individuals exposed to a discrete and unexpected event.

In contrast to the abundance of literature examining victim typologies and the negative long term sequelae of intimate partner violence, there is very little research examining resilience in women exposed to intimate partner violence. In fact, a review of the psychological literature identified a limited number of published empirical studies that have investigated resilience in women exposed to intimate partner violence.

The most pertinent is a study by Humphreys (2003) who, using a convenience sample of 50 women of mixed ethnic background sourced from women's shelters, found that women with higher levels of resilience, as measured by the Resilience Scale (Wagnild & Young, 1993), reported significantly less physical and psychological distress. Furthermore, these same women reportedly also perceived fewer symptoms of bodily

dysfunction, repeated unpleasant thoughts, cognitive impairment, depression and anxiety. Although the results of this study are limited by the small sample size (n=50) and absence of a comparison group, it serves as a notable starting point for the assessment of resilience in women who experience intimate partner violence.

As there is a dearth of research examining resilience in women exposed to intimate partner violence, it is worthwhile reviewing the literature that examines women's resilient responses to other types of interpersonal trauma. For example, in a qualitative study of 10 women who were survivors of childhood sexual abuse, Bogar and Hulse-Killacky (2006) examined the determinants and processes of resilience. They reported resilience to be determined by interpersonal skills, competency, high self-regard, spiritualism, and helpful life circumstances (based upon participant's subjective opinions of what was helpful in their own development and recovery). The resilience processes were reportedly cognitive and behavioural in nature, including behavioural coping strategies and actively seeking healing and closure (e.g., via counselling, support groups, and self-help strategies). Similar results are reported elsewhere in the literature (e.g., Bradley, Schwarz, & Kaslow, 2005).

Lam and Grossman (1997) examined resilience in a nonclinical sample of women with and without a history of childhood sexual abuse. Resilience was assessed using a broad range of protective factors such as self-efficacy, self-esteem, attachment style, and social support. Their results indicated that there was little difference in adult adaptation in women with histories of childhood sexual abuse who had higher levels of protective factors and

those without histories of abuse. The authors concluded that while protective factors were beneficial for women generally, they were crucial for women with histories of childhood sexual abuse as they serve to ameliorate the negative impacts of abuse. McClure et al. (2008) sought to identify factors that promote resilience in adult survivors of child sexual abuse in a university setting. For the purposes of their study resilience was defined in terms of wellbeing and academic competence. The authors reported family characteristics accounted for 13–22% of the variance in the well-being outcomes. In contrast, abuse-specific characteristics explained three per cent or less of the variance in the wellbeing of child sexual assault survivors. Although these results are somewhat restricted due to limited generalizability, similar results have also been reported in the literature (e.g., Spaccarelli, 1994). The few studies mentioned here suggest that the specific characteristics and nature of the interpersonal violence experiences may have little influence on the outcome for victims, and that pre-dispositional factors (e.g., self-esteem, spiritual beliefs, coping strategies) may be more influential.

A number of methodological limitations are evident in intimate partner violence research. The samples of victimised women studied largely consist of women who have sought assistance or shelter and, therefore, are unlikely to be representative of all victimised women. Jones and colleagues (2001) postulated that these samples may be the healthiest of victimised women; those who had the emotional resources to seek assistance, or they may be the most troubled of victimised women; those who sought help for their distress. However, it could be that the most troubled women are

immobilised by their distress and, therefore, not captured in these samples (Jones et al., 2001), potentially resulting in an underestimation of the consequences of intimate partner violence. Furthermore, despite evidence that intimate partner violence occurs across all levels of society, a disproportionate amount of research appears to focus on people with particular demographics and characteristics (e.g., White, low socio-economic status, history of child abuse) resulting in an over-representation of certain victim typologies in the literature (Jones et al., 2001). Failure to investigate intimate partner violence across all levels of society reinforces the common misconception that intimate partner violence only happens to particular subgroups of people and serves to reinforce the social stigma of those women outside these specific demographic characteristics who do become victims. For the most part, samples sizes are small, non-random and drawn from a single site (Jones et al., 2001). The capacity to generalise the results obtained in most studies is also limited by notable differences in assessment (e.g., range of symptoms assessed, self-report versus clinician-administered interview), and research methodology (e.g., lack of control groups, failure to control for confounding variables). As discussed previously, due to the lack of a consensus, researchers continue to utilise broad and varied definitions of what constitutes intimate partner violence which results in significant inconsistencies in the level of severity that is assessed and the nature of the violence that is examined. This is particularly the case when investigating psychological abuse, as most often researchers will select specific behavioural components to examine (e.g.,

controlling behaviours) as opposed to the gamut of behaviours that constitute psychological abuse.

2.5. Summary

Decades of research on resilience has seen the identification of risk and protective factors and the assessment of underlying processes that influence resilient outcomes in traumatised individuals. For the most part, resilience research has examined acute and/or discrete events that are seemingly beyond the control of the victim. Researchers have only recently begun to examine the relationship between interpersonal trauma and resilience. To date the majority of research has focused on retrospective reports of childhood sexual abuse or specific protective factors in relation to PTSD in adult female populations and researchers are yet to apply a model of resilience to outcomes of intimate partner violence. As has been discussed, exposure to a traumatic event or major life stressor may not always result in the development of posttraumatic symptoms. Individual differences in post-trauma responses have been attributed to multiple variables, but these variables have yet to be thoroughly examined in samples of women who have experienced intimate partner violence. In order to determine a framework for examining these variables, theoretical models of trauma adaptation are the focus of discussion in the next chapter.

Chapter 3: Theories of Resilience and Trauma Adaptation

The dominant focus on PTSD within the trauma literature to date has resulted in a relatively limited consideration of psychological resilience to trauma. With such a heavy emphasis on posttrauma symptomology, and in the absence of data on the normal distribution of trauma reactions, it was generally assumed that people who demonstrate a minimal response to a potential trauma were rare and exceptionally healthy (e.g., Osterweis, Solomon, & Greene, 1984; Tucker et al., 2002). More recently, investigations of posttraumatic psychological responses have become more focused on the search for an explanation as to why some individuals exposed to a traumatic event develop long term and debilitating psychiatric illnesses, whereas other individuals exposed to the same traumatic event, demonstrate few, if any, adverse effects (Bonanno & Mancini, 2008).

The link between thoughts, emotions, actions, and bodily responses has been the basis of many models attempting to explain the complex nature of post-trauma psychological responses (e.g., Beck, 1970; Foa et al., 1989). The most relevant theories will be briefly reviewed in this chapter in order to identify a model within which to structure this investigation.

Aetiological theories of the development of PTSD have been included in the overview below in light of the heavy emphasis on PTSD in the literature and the supposition that one must be exposed to a traumatic event in order to develop/enhance resilience.

3.1. Behavioural theories

Theories of classical and operant conditioning have been proposed by several authors to explain how stimuli associated with traumatic events can come to elicit and maintain maladaptive posttraumatic responses through a process of learning and reinforcement (e.g., Keane, Zimmerling, & Caddell, 1985; Pitman, 1989a, 1989b). Drawing on Mowrer's (1960) two-factor learning theory, Keane et al. (1985) produced a model of PTSD symptom development. According to this model, a traumatic event can act as an unconditioned aversive stimulus that elicits extreme levels of autonomic arousal. Consequently, previously neutral stimuli that accompanied the occurrence of the traumatic event, either directly or indirectly, may become conditioned stimuli capable of eliciting psychological and physiological distress similar to that associated with the original trauma through the process of classical conditioning and stimulus generalisation. Keane et al. (1985) proposed that avoidance behaviours are learned in order to escape or prevent the conditioned response. Thus, repeated negative reinforcement of avoidance makes it very resistant to extinction, and thereby explains the persistence of anxiety symptoms despite a reduction in other symptoms. Kilpatrick, Veronen, and Resick (1979) used similar explanations for rape-related PTSD symptoms.

Behavioural learning theories of PTSD have contributed to an understanding and recognition of the influence of cognitive and behavioural conditioning on posttraumatic psychological responses. However, a number of criticisms of the application of such theories to trauma responses have been made. Foa et al. (1989) acknowledged that learning theory can

account for the acquisition and maintenance of fear and avoidance of previously neutral stimuli, and partially explain the generalisation of fear responses. However, they suggest that learning theory does not adequately explain the intensity and complexity of the post-trauma responses, symptoms of re-experiencing, or the fact that the event itself does not necessarily predict the development of posttraumatic stress symptoms.

Furthermore, behavioural learning theories assert that behaviours are learned throughout our lives through our interactions with others. These interactions teach individuals what behaviour is, and is not appropriate, as well as what rewards and consequences will be brought about due to these actions (Mihalic & Elliot, 1997). These theories therefore explain the manner in which women can become conditioned to respond to abusive partners, and more so if they have a history of childhood abuse. However, these theories do not appear to apply to resilient responses; for example, it does not explain how a woman may be able to break the cycle of intimate partner violence despite potentially many years of conditioning.

3.2. Cognitive theories

Cognitive theories have generally proposed that individuals enter situations with pre-existing schemata, which are created by a person's past experience, beliefs, assumptions and expectations regarding future events (Beck, 1970). Cognitive theory suggests that new information is usually processed and integrated in accordance with how it matches with existing schemata. A traumatic experience is argued to promote the creation of a memory network that is not compatible with existing views of the world

and the self (Creamer, 1993), and this therefore generates psychological distress until the traumatic experience can be assimilated.

3.2.1. *Theory of Shattered Assumptions*

Janoff-Bulman's (1992) theory of shattered assumptions uses a mix of cognitive and dynamically-oriented theories to discuss how trauma becomes traumatizing. The three common assumptions Janoff-Bulman (1992) regarded as the most significant in influencing response to trauma are that the world is benevolent, the world is meaningful, and the self is worthy. These three assumptions allow people to walk through a world without constant fear for one's safety, as well as aid them in organizing what would otherwise be a vast and confusing array of input from the external world. Janoff-Bulman utilises a substantial field in social psychology research to explain how individuals use attentional biases, self-fulfilling prophecies, and primacy effects to shape external input in ways that are consistent with internal assumptions about how the world can, does and should operate. Generally speaking, these assumptions are resistant to change.

Traumatic events challenge the assumptive world that an individual builds, uses, and perpetuates because the trauma-related information is highly contradictory to these principles. Janoff-Bulman contends that it is the traumatic events that most threaten survival of the self because one's inner world can no longer depend on assumptions that have become unreliable; the assumptions can no longer make meaning of the world, confer a sense of safety or promote the self as worthy. Janoff-Bulman (1992) also argues that the way in which one's assumptive world

disintegrates often corresponds to specific traumas, such that interpersonal trauma comes with its own set of psychological matters with which to wrestle, such as the concept of evil, thoughts of another having done something horrible *to me*, and questions of the trustworthiness of others. In addition, for individuals with interpersonal trauma, randomness and controllability are reframed in terms of human intent.

According to the theory of shattered assumptions, those expected to be most affected by traumatic events would be those people who hold the most positive assumptions, and who have therefore had the most positive life experiences. However, having a history of previous trauma is a major risk factor for developing PTSD (Brewin, Andrews, & Valentine, 2000), which conflicts with the theory as people who have already had a traumatic experience should have lost at least some of their protective assumptions about the world (Brewin & Holmes, 2003). Janoff-Bulman (1992) has suggested two possible resolutions to this conflict. The first was that people with the most positive assumptions have the greatest initial distress but recover more easily; however, this has not been tested empirically. Her other suggestion was that previous trauma would be a risk factor to the extent that the individual had not re-established a stable and secure inner world.

The theory of shattered assumptions is significant as it plays an important role in identifying common themes in schema change. As such, it allows for the possibility of positive reframing of the trauma and of posttraumatic growth. However, the strength of the theory lies more in its description of longer term adjustment after a trauma rather than the

specification of how trauma impacts on the individual in the short term or how trauma is represented in memory.

3.2.2. *Stress response theory*

Horowitz (1976; 1986) has been dubbed a pioneer in the PTSD field and his information-processing model of PTSD has arguably been one of the most influential. Horowitz (1976; 1986) was one of the first theorists to emphasize the impact of trauma on wider beliefs about the self, the world, and the future and to consider how recovery might involve extensive cognitive change (Brewin & Holmes, 2003). The model proposed by Horowitz is an extension of psychoanalytic concepts of trauma, building upon classical and contemporary theories whilst strongly emphasising information processing and the cognitive elements of emotion. He argues that when faced with trauma, the large amount of internal and external information generated often cannot be assimilated with the person's prior knowledge due to the fact it lies outside the realm of normal experience. At this point, the person experiences information overload (ideas, images, affect) which cannot be integrated with the self and the way in which meaning was represented before the trauma. Psychological defence mechanisms (e.g., denial, numbing) are used by the person to avoid the trauma memories and manage the degree to which it is recalled. However, due to the fundamental psychological need to integrate new and old information, trauma information does break into conscious awareness (e.g., intrusions, nightmares, and flashbacks), thereby providing the person with opportunities to process the trauma information and reconcile it with pre-trauma conceptualisations. Horowitz suggests that intrusive psychic

material will continue to enter the person's conscious awareness and influence their psychological equilibrium until the information generated from the traumatic experience can be matched to a current cognitive model; that is, the person will oscillate between avoidance and intrusions of the trauma prior to the traumatic information becoming fully integrated and processed.

This theory is limited as it does not address the difference between flashbacks and ordinary memories of trauma, individual variations in trauma response, peri-traumatic reactions, the role of environmental factors such as trauma cues and social support, and how to distinguish remission of symptoms due to successful recovery from remission due to successful avoidance (e.g., Brewin & Holmes, 2003; Litz, 1992). However, it does emphasize that posttraumatic stress reactions are signs of incomplete processing. This would suggest that if an individual demonstrates a resilient response, as would be evidenced by less disruption to functioning with quicker recovery, processing of the traumatic event occurs in a more complete manner and at a faster rate than those individuals who experience more significant posttraumatic stress reactions.

3.2.3. *Bio-informational theory of emotional imagery*

Lang's (1979) bio-informational theory of emotional imagery is founded on an understanding of fear conditioning and phobic responding, reformulating behaviouristic models of fear conditioning and the learned associations between stimuli and responses. He postulated that fear is represented in memory as structures that consist of three types of

propositional information: stimulus information about the traumatic event, information about the person's emotional and physical response to the event, and meaning information, predominantly about the degree of threat.

Lang's theory proposed that cognition and affect are incorporated into an overall response structure designed to avoid danger. Lang proposed that individuals who experience anxiety disorders have unusually coherent and stable fear memories that are easily activated by stimuli that bear some similarity to the contents of the memory. He proposed that when this fear network is activated, the person experiences the same physiological reactions and has a tendency to make meaning judgements that accord with the original memory. Hence, anxiety disorders, including PTSD, are thought to develop when the fear network contains faulty connections and information that does not truly represent the state of the world. Foa and Kozak (1986) have proposed that when compared to other anxiety disorders, the size of the fear network in PTSD is larger, the networks are more easily activated, and the affective and physiological response elements of the network are more intense.

Vrana, Cuthbert and Lang (1986) examined the impact of imagined and silently repeated fearful and neutral sentences in a paradigm designed to allow for self-initiation of sentence processing on a sample of undergraduate students. Heart rate accelerated more during fear imagery than during neutral imagery or silent repetition of either type of sentence and was interpreted as consistent with Lang's (1979) proposal that imagery of an event accesses a memory network containing both semantic and response information. Similar results supporting Lang's theory have been

reported in relation to respiratory responses (e.g., Diest et al., 2001), startle responses (e.g., Miller, Patrick, & Levenston, 2002), and anxiety disorders (e.g., Cuthbert et al., 2003).

Whilst there is empirical evidence to support Lang's theory, the theory itself does not offer any suggestions or rationale as to why some individuals develop strong and stable fear networks whilst others do not. It may be inferred from the theory that the fear network in the memory of resilient individuals may be less easily activated, that they experience decreased physiological reactivity than was experienced at the time the memory was made, and they have the ability to make meaning judgements based on current, relevant information. However, a review of the literature suggests that there is no empirical research to date that has applied Lang's theory to resilience.

3.2.4. *Emotional processing theory*

Foa and Kozak (1985, 1986) build on Lang's (1979) theory, as previously described, and propose an information-processing theory of PTSD that centres on the formation of a fear network in memory. This network is said to consist of stimulus information about the traumatic event: information about the cognitive, behavioural and physiological reactions to the event, and interoceptive information that links the stimulus information to the responses. Reminders of the trauma activate this fear network in memory which then causes the information in the network to enter conscious awareness (intrusive symptoms). Attempts to suppress activation of the fear network lead to avoidance symptoms (e.g., dissociation).

Foa and Kozak (1986) proposed that two conditions are necessary for emotional processing to occur: (1) activation of the fear structure and, (2) incorporation of new information that is incompatible with the pathological elements of the fear structure. Activation occurs when an individual encounters stimuli or produces responses that are represented in the fear structure and that therefore are associated with interpretations of danger. In general, the greater the match between the fear-evoking experience and the person's pathological fear structure, the greater the activation.

Emotional processing theory posits that although activation is a necessary condition for emotional processing, it is not a sufficient condition, and that emotional processing requires the presence of information that disconfirms the erroneous elements in the structure. When such information is unavailable because the individual avoids or escapes the situation, the fear structure remains unchanged. Moreover, if the evocative situation contains information that confirms the person's feared consequences, the fear structure does not change and may even be strengthened. Even when contradictory information is present during the evocative experience, emotional processing occurs only when it is encoded and incorporated into existing knowledge, that is, when new learning has occurred.

The clinical treatment method associated with emotional processing theory, prolonged exposure, is well established as a highly effective treatment for PTSD (Foa, Feske, Murdock, Kozak, & McCarthy, 1991; Foa, Ehlers, Clark, Tolin, & Orsillo, 1999) and has been successful for treatment of distress in rape/sexual assault victims (Jaycox, Foa, & Morral, 1998;

Foa et al., 2005; Resick, Nishith, Weaver, Astin, & Feuer, 2002). However, similar to other theories of PTSD, this theory does not account for individual variation in severity and duration of posttrauma presentations. It may be possible that resilient individuals are independently able to facilitate sufficient cognition restructuring of the event and/or have more adequate coping resources when their fear structure is activated so they do not avoid the stimuli.

3.3. Psychosocial theories

Garmezy and colleagues (1984) conducted the Minnesota Risk Research Project, and undertook Project Competence, which was a longitudinal investigation (1971-1982) of children's vulnerability to psychopathology as a result of parental schizophrenia. The team found most of the children grew into warm, competent adults, as opposed to maladaptive people. Garmezy's 'competent' criteria were effectiveness, humour, critical thinking skills, high expectancies, positive outlook, internal locus of control, self-discipline, self-esteem, and good problem solving skills.

Garmezy et al.'s (1984) theory of resilience comprised a triad of personality disposition, a supportive family environment, and an external support system, and from this basis they outlined three explanatory models of resilience. These include a compensatory, a challenge and, finally, the "immunity-versus-vulnerability model" (Garmezy et al., 1984, p. 102). The compensatory model was described as an additive model in which the combination of stress and individual qualities predicts competence.

Alternatively, the challenge model revolves around the supposition that the experience of moderate amounts of stress may serve to increase competence. The final model described by Garmezy et al. takes into account both personal strengths and weakness in relationship to stress. Thus, in this paradigm the impact of stress is made stronger or weaker on the basis of personal attributes (e.g., protective or vulnerability factors).

This theory generated numerous studies and has received empirical support (e.g., Fergusson, Horwood, & Lynskey, 1994; Luthar, 1999). For example, Masten et al. (1988) examined the associations of stress exposure to various aspects of school-based competence in a normative sample of 205 children aged 8-13 years. The results suggested the relationship of stress exposure to competence varies as a function of individual differences as well as the competence criterion, as consistent with Garmezy et al.'s theory. Meanwhile, Luthar (1991) examined factors that allow children to maintain socially competent behaviours despite stress. Consistent with Garmezy et al.'s model, Luthar (1991) reported ego development was compensatory for stress, internality and social skills proved to be protective factors, while intelligence and positive events were involved in vulnerability processes.

3.4. Combined theoretical models

3.4.1. Richardson's resiliency model (2002)

Richardson proposed the “metatheory of resilience and resiliency”, which is based on the early resilience research, mentioned above, but in short: i) identification of the characteristics of people who effectively cope

with and grow through disruptions (e.g., Werner & Smith, 1992); ii) the processes by which people acquire these characteristics (e.g., Flach, 1988, 1997); and, iii) the recognition of innate resilience and an individual's capacity to grow and develop (e.g., Masten, 2001). From these areas of research, Richardson conceptualised resilience as “a force within everyone that drives them to seek self-actualisation, altruism, wisdom, and be in harmony with a spiritual source of strength” (2002; p. 313). A core supposition of this theory is the idea of a biopsychospiritual balance (homeostasis), which is said to be a point in time where individuals have adapted to current life circumstances whether good or bad. Richardson postulates that biopsychospiritual homeostasis is regularly bombarded with internal and external stressors, adversity, opportunities, and other forms of change, and an individual's ability to adapt and cope with such life events is influenced by resilience qualities and previous resilient reintegrations. Resilient reintegration refers to the coping process which results in growth, knowledge, self-understanding, and further results in the identification and/or strengthening of resilient qualities (Richardson, 2002). The reintegration process is proposed to lead to one of four outcomes: 1) resilient reintegration, where adaptation leads to a higher level of homeostasis; 2) return to baseline homeostasis; 3) recovery with loss, establishing a lower level of homeostasis than the pre-trauma state; and, 4) a dysfunctional state, where maladaptive strategies are used to cope. This model is represented below in Figure 1.

Limited empirical investigation of this model has occurred to date, primarily using structural equation modelling on samples of married

women (Dunn, 1994), adult children of alcoholics (Walker, 1996), and university students (Neiger, 1991). These analyses provided empirical support for the metatheory of resilience; however, additional investigation is required to test this theory on other populations (e.g. high risk trauma groups).

Resilience theories such as this have been criticized for its positivist research paradigm to date, with consequential bias towards linear explanatory models based on predictable, hierarchical relationships between protective and risk factors (Unger, 2004). This tendency may limit its utility in application to diverse populations. Furthermore, the constructs themselves have been criticized as tautological and are inconsistently defined across studies, thus limiting validity and reliability of the research, and increasing the possibility they may be misapplied in research or practice (Smith-Osborne, 2007).

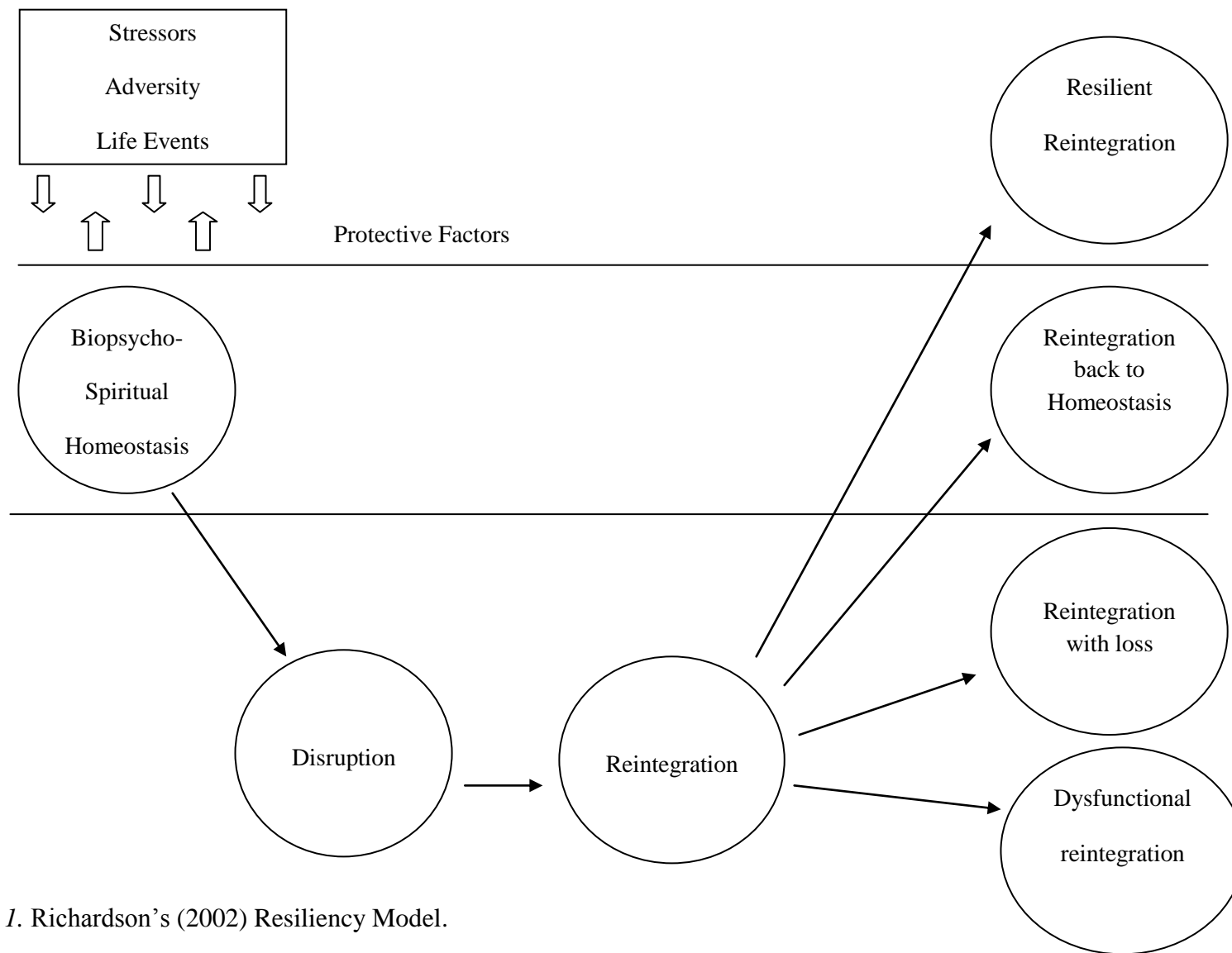


Figure 1. Richardson's (2002) Resiliency Model.

3.4.2. *Joseph, Williams, and Yule's (1995) integrative model*

Another combined theoretical model is the integrative model developed by Joseph, Williams, and Yule (1995) which incorporates cognitive, cognitive-behavioural, and psychosocial perspectives on trauma adaptation and encapsulates a number of the variables proposed to influence resiliency. The model is based on research examining the appraisal of the traumatic event and how appraisals may challenge basic assumptions (Horowitz, 1986); the emotional processing of fear (Foa & Kozak, 1986); the factors that influence emotional processing (Rachman, 1980); as well as stress and coping (e.g., Folkman & Lazarus, 1988). The model attempts to describe the processes involved in post-trauma reactions and to provide some explanation for why some individuals may experience minimal distress whereas others will endure prolonged distress. Furthermore, there is evidence within the resilience literature that the degree of exposure to traumatic events does not directly influence resilient outcomes (e.g., Joseph et al., 1995). This is in accord with the model proposed by Joseph et al. (1995), with the emphasis of adaptation based on the capacity of the individual to utilise psychological resources to adequately process the event, as opposed to the context of the event or the degree of exposure. A diagrammatic representation of the conceptual model can be seen in Figure 2.

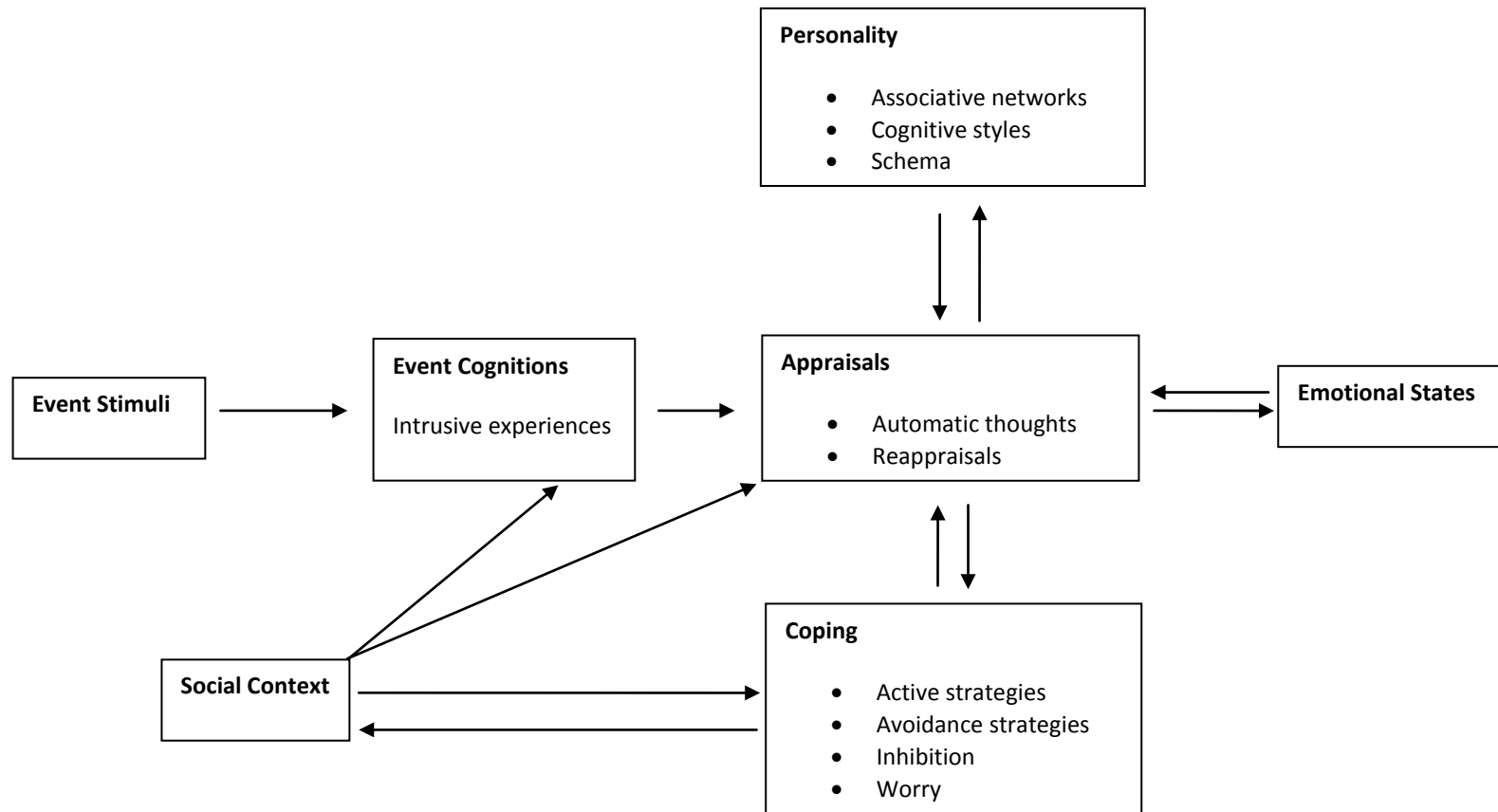


Figure 2. Joseph, Williams, & Yule's (1995) integrative model.

Joseph et al. (1995) propose that a traumatic event results in peritraumatic cognitive and sensory perceptions that are not easily processed and that generate extreme emotional arousal. Representations of these peri-traumatic perceptions are then held in memory, but as they are not easily assimilated into the individual's pre-existing beliefs about the world, these representations then form the basis for intrusive re-experiencing symptoms. The authors suggest that the parts of the events that are re-experienced represent those aspects that were most stressful for the individual. Joseph et al. (1995) therefore postulate that re-experiencing is influenced by individual factors such as personality.

The peri-traumatic perceptions are proposed to result in strong emotional reactions (e.g., fear, panic, grief, guilt, shame) that are in turn appraised by the individual, who is also influenced by personality factors. As a result of appraisal, further emotional states are triggered which then activate coping strategies (avoidance, hypervigilance). This continuous process of intrusive thinking, appraisal, activation of emotional responses and subsequent reappraisals of the event and emotional response, and engagement in coping strategies is proposed to persist until the traumatic event can be fully integrated into the individual's internal world. Thus, posttraumatic symptomology is the result of emotional processing of the traumatic event. Individual variation in response to events is proposed to result from a complex interaction between the components that may contribute to the processing of the event at different points in time and individual differences in personality and coping style (Joseph et al., 1995).

For the purposes of this thesis, a diagrammatic representation of the

proposed application of Joseph et al.'s (1995) model to resilience in women exposed to intimate partner violence is presented in Figure 3. In summary of the adaptation of this model, it is suggested that exposure to high frequency and severity of intimate partner violence will correlate negatively with the other components of the model to result in high levels of psychopathology and low levels of resilience. Conversely, exposure to low frequency and severity of intimate partner violence will correlate negatively with the other components of the model to result in high levels of psychopathology and low levels of resilience. Each factor will be discussed in detail in Chapter 4 and specific hypotheses will be proposed in Chapter 5.

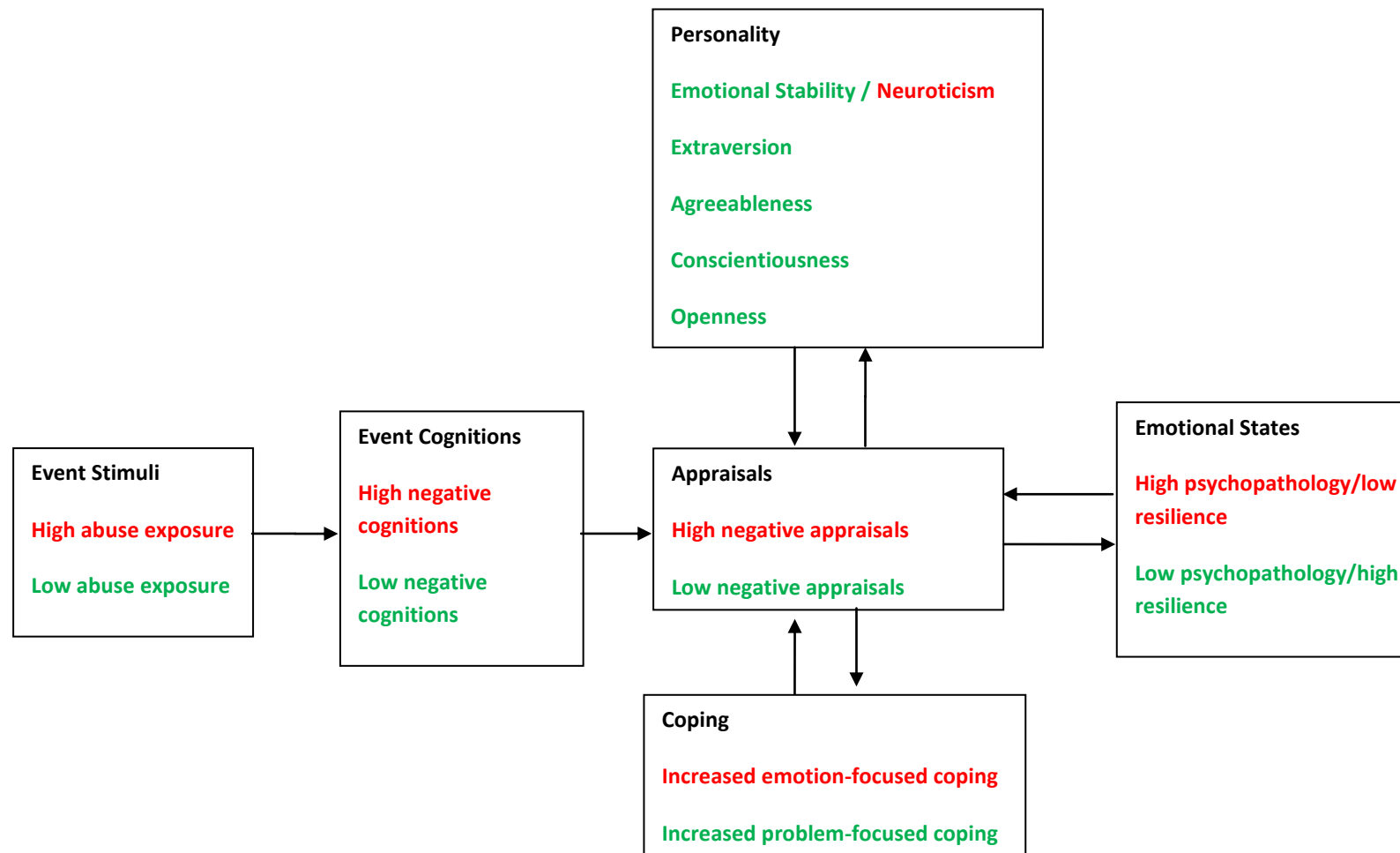


Figure 3. Proposed application of Joseph et al.'s (1995) model to resilient outcomes in women exposed to intimate partner violence, where red indicates outcomes of high abuse exposure and green indicates outcomes of low abuse exposure.

3.5. Summary

Several theories have attempted to elucidate the factors which contribute to posttrauma reactions and the inter-relationships between these factors, as well as underlying mechanisms and processes. Theories have emerged from behavioural, cognitive, developmental, and psychosocial orientations. Although most of these theories have been well received and have formed the foundation of further empirical and theoretical research, most theories appear to have a limited capacity to explain why some individuals fare worse than others psychologically after experiencing a traumatic event. For that reason, the theoretical model chosen to underpin the current study is the integrative model developed by Joseph et al. (1995) because a) it is proposed to account for individual differences in response to traumatic events, b) the model encompasses those factors previously identified as protective and resilience-promoting, and c) the components of the model are directly examinable, thereby permitting thorough examination of the factors which may promote resilient adaptation to intimate partner violence.

Chapter 4: Applying the integrative model to resilience in women exposed to intimate partner violence

In order to apply Joseph et al.'s (1995) model to the relationship between resilience and intimate partner violence, it is necessary to review the literature pertaining to each component. This chapter will therefore review the literature relevant to the event stimuli, event cognitions, personality, appraisal cognitions, coping, and emotional states as related to the experience of intimate partner violence and resilient outcomes for victims.

It is beyond the scope of this thesis to explore the social context in which intimate partner violence might occur and how resilient outcomes are influenced by this. Primarily this limitation is the result of difficulties with recruiting participants (as discussed in Chapter 6) and the additional variables added by examining social context (e.g., social support, social stigma, cultural aspects, etc.) would decrease the power of the statistical analyses and thus impact on the interpretation of the results.

4.1. Event Stimuli

The stimulus factor of Joseph et al.'s (1995) integrative model refers to the aspects of the event that render it most traumatic for the individual; thus, the experience of intimate partner violence will serve as the event stimuli for the purpose of the current study. As previously discussed, intimate partner violence encompasses physical, sexual, and psychological abuse. It is worth noting, that unlike physical or sexual abuse, it is unlikely that single instances of psychological abuse are directly harmful (Claussen

& Crittenden, 1991) despite being potentially upsetting. Therefore, the crucial feature of psychological abuse appears to be the cumulative effect of its sustained and repetitive nature (O'Hagan, 1995), representing a relationship or interpersonal style that has a pervasive influence and insidious effect on the psychological adjustment of the victim in the longer term.

A substantial body of empirical research has supported the link between experiencing intimate partner violence and subsequently developing psychopathology, and this will be discussed in more detail below. Whilst there is no doubt the experience of intimate partner violence is most often detrimental to women who experience it, there appears to be some differences in the literature with regard to the outcome post-exposure depending upon the nature of the abuse inflicted. For example, there is evidence that women who experience both physical and sexual intimate partner violence report higher levels of PTSD than women who experience physical violence alone (e.g., Russell, 1982; Whatley, 1993). Furthermore, relationships in which sexual violence has occurred also tend to be more severely physically violent (e.g., Kilpatrick, Best, Saunders, & Veronen, 1988). However, Basile et al. (2004) assessed the relationship between posttraumatic stress symptoms and intimate partner physical, sexual, psychological abuse and stalking and reported that all forms of violence were reported to be associated with increased PTSD symptoms. Furthermore, when other types of violence were controlled for, psychological abuse was still associated with PTSD symptoms. Mechanic, Weaver, and Resnick (2008) found both psychological maltreatment and

stalking to contribute significantly (8.1%) to variance in PTSD for abused women. While Pico-Alfonso (2005) found no significant relationship between sexual abuse by a partner and PTSD, when dichotomous variables were analysed, psychological abuse, more than physical assaults, was the strongest predictor of PTSD.

Additionally, a small number of studies have examined the association of PTSD symptoms with the Domination/Isolation and Emotional/Verbal subscales of the Psychological Maltreatment of Women Inventory (PMWI: Tolman, 1989). Street and Arias (2001) found PTSD to be predicted beyond the influence of physical abuse by the Emotional/Verbal subscale but not the Dominance/Isolation subscale, suggesting different forms of psychological abuse have a differential impact on the recipient. However, two earlier studies (Arias & Pape, 1999; Dutton, Goodman, & Bennett, 1999) reported no difference in the relationship between these subscales and PTSD, even though these two subscales are intended to measure two functionally distinct behaviours.

In sum, there is a demonstrated relationship between frequency and severity of abuse and increased prevalence of PTSD (Astin, Lawrence, & Foy, 1993; Basile et al., 2004; Dutton et al., 1999; Jones et al., 2001; Street & Arias, 2001). However, there is some conflicting information about the impact of psychological abuse; such that, whilst it is inarguably detrimental to the recipient, there is some suggestion that different forms of psychological abuse may be more detrimental than others.

In an effort to develop a reliable instrument to measure the degree,

frequency, and intensity of physical (including sexual) and psychological abuse of women by their partner, and to evaluate the effectiveness of intervention programs, Shepard and Campbell (1992) developed the Abusive Behaviour Inventory (ABI). The validity and reliability of the ABI was tested on four sample groups: 'men in an abusive relationship', 'women in an abusive relationship', 'men in a non-abusive relationship', and 'women in a non-abusive relationship'. The instrument was found to be a reliable and valid measure of physical and psychological abuse, and was found to clearly distinguish between groups of abusers and non-abusers.

The ABI has since been utilised in a number of empirical studies (e.g., Ali et al., 2000; Neufeld, McNamara, & Ertl, 1999; Raj, Silverman, & Amaro, 2004; Russell & Jory, 1997; Watson et al., 1997) and has also been found to a good measure of potential abusive behaviour (Neufeld, McNamara, & Ertl, 1999). Importantly, the ABI differs notably from the Conflict Tactics Scale (Straus, 1979), the most widely used instrument at the time the ABI was developed, insofar as it does not set the use of violence in the context of a family disagreement or as a means of resolving conflict. Instead, the authors of the ABI propose that violence is used as a means of maintaining dominance, and not as method of resolving conflict. As this rationale adequately encapsulates the insidious nature of psychological abuse, the ABI will be used in the present study to determine the frequency and type of intimate partner violence women have been exposed to.

4.2. Event cognitions

When the concept of PTSD was initially formalised diagnostically, most consideration was given to those aspects of the stimulus that were universally judged as dangerous, uncontrollable, and unpredictable (Criterion A1; *DSM-III*; APA, 1980). However, the *DSM-IV-TR* (APA, 2000) combines this criterion with an additional emphasis on the role of appraisal factors, stipulating that the event must cause the individual to experience feelings of intense fear, helplessness, or horror (Criterion A2). The *DSM-IV-TR* (APA, 2000) further characterizes PTSD by three distinct symptom clusters, including (a) re-experiencing or intrusions of the event (Criterion B; e.g., intrusive thoughts, nightmares), (b) avoiding reminders of the event and emotional numbing (Criterion C; e.g., avoiding thoughts, restricted affect), and (c) hyperarousal (Criterion D; e.g., exaggerated startle, sleep problems). These criteria have been encompassed in Joseph et al.'s (1995) integrative model by the emphasis that any traumatic event is open to interpretation and that individual differences in the process of generating event-related cognitions are important in predicting the subsequent outcome.

The original Impact of Event Scale (IES; Horowitz et al., 1979) was designed to assess self-reported symptoms of intrusion and avoidance following a variety of traumatic experiences. It was developed before the diagnosis of PTSD was entered into the *DSM-III* (APA, 1980), and was later revised to include items related to hyperarousal, in order to better capture the *DSM-IV* criteria for PTSD (IES-R; Weiss & Marmar, 1997). The hyperarousal subscale added by Weiss and Marmar has good predictive

validity with regard to trauma (Briere, 1997), while the intrusion and avoidance subscales detect relevant differences in the clinical response to traumatic events of varying severity. The IES-R is an appropriate instrument to measure the subjective psychological response to a specific traumatic event, and although many other measures of PTSD have emerged, the IES-R remains widely used (e.g., Bernat, Ronfeldt, Calhoun, & Arias, 1998; Brewin et al., 2000; Coker et al., 2005; Müller et al., 2010) because it has been well established as psychometrically sound (Matorin & Lynn, 1998).

Women who experience intimate partner violence commonly experience feelings of fear and helplessness (Barnett, Miller-Perrin, & Perrin, 2005). Regardless of the type of abuse they have experienced, women report more frequently than men that intimate partner violence generates intense and overwhelming fear for themselves, and also for their children (Gore- Felton et al., 1999); so much so that many victims remain in abusive relationships because they fear for their own and their children's safety (Ulrich, 1991). Classical conditioning and exposure to cues that are often associated with the violence (e.g., yelling, the smell of alcohol on the perpetrator's breath, or the time of day attacks most often occur) is often used to explain the fear experienced by individuals who are consistently and repeatedly abused (Foa et al., 1989). Eventually, fears that were initially attributed solely to the violent situation may become more generalized, taking the form of avoidance of non-violent situations or hypervigilance directed at previously neutral stimuli.

However, van der Kolk (2007) proposed that post-trauma

symptomology is not the result of simple conditioning, as many individuals exposed to extreme stressors do not suffer from PTSD. Van der Kolk (2001) postulated that PTSD symptoms disrupt and reorganize the body's homeostatic controls by producing "a cascade of biobehavioral changes" involving a victim's brain chemistry (p. 218). He noted that such changes are particularly evident in 1) the brain stem, which regulates breathing and heart rate; 2) the corpus callosum, which allows for hemispheric transfer of information; 3) the amygdala, which evaluates information for emotional significance; 4) the hippocampus, which is responsible for the cognitive mapping of memories; 5) the anterior cingulate, which is believed to amplify and filter cognitions and emotions; 6) the orbitofrontal cortex, which provides information about environmental stimuli to several areas within the frontal cortex; and 7) the pre-frontal cortex, which is involved in learning, planning, problem-solving, and organizing complex mental experiences.

According to van der Kolk (2001), the body quickly becomes conditioned to respond to trauma-related stimuli by displaying heightened physiological arousal, particularly following situations in which a trauma is severe or consists of a repeated series of acts, as is likely to occur in situations of intimate partner violence. Victims often avoid such stimuli and thinking about or experiencing associated intense emotions in order to avoid arousal symptoms. Van der Kolk (2001) speculated that this form of avoidance can lead to more intrusive thoughts about the trauma and a continued state of physiological hyperarousal. Van der Kolk (2007) suggested that "almost all persons who have been exposed to extreme stress

develop intrusive symptoms, but only some of them also develop avoidance and hyperarousal” (p. 218). It has been further suggested that chronically disordered arousal is the result of persistent intrusive and repetitious thoughts, such that an individual may not be victimised by the event itself, but by having recurrent memories of the event (McFarlane, 1988).

There is now considerable evidence that avoidance and deliberate attempts to suppress intrusive thoughts are usually fruitless and that afterwards, the thoughts return even more strongly (Wenzlaff & Wegner, 2000) and this has been linked to the maintenance of intrusion symptoms (Falsetti, Monnier, Davis, & Resnick, 2002). The theoretical link between greater avoidance and higher symptom levels has been confirmed in a number of retrospective studies of assault and motor vehicle accident victims (e.g., Dunmore, Clark, & Ehlers, 1999; Steil & Ehlers, 2000). Furthermore, prospective studies have shown that avoidance and thought suppression are related to a slower recovery from PTSD (Dunmore, Clark, & Ehlers, 2001; Ehlers, Mayou, & Bryant, 1998). Joseph et al. (1995) suggest that intrusion and avoidance may function differently to other variables and may be better viewed not as symptoms of a disorder, but as markers of emotional processing. For example, research in disaster-related experiences found intrusion, but not avoidance, to be associated with more internal causal attributions (Joseph, Brewin, Yule, & Williams, 1991; Joseph, Yule, & Williams, 1993).

More recent research in the PTSD field further builds on the suggestion that symptom clusters should be considered separately, and raises the possibility that each symptom cluster may have distinct psychosocial

outcomes, as has been demonstrated in samples of war veterans (e.g., Ruscio, Weathers, King, & King, 2002). As noted above, the *DSM-IV-TR* (APA, 2000) currently characterises PTSD by three symptom clusters. However, emerging research indicates it may be beneficial to separate the avoidance and numbing symptoms, thereby creating four clusters e.g., intrusion, avoidance, numbing, and hyperarousal (e.g., Asmundson, Wright, McCreary, & Pedlar, 2003; King, Leskin, King, & Weathers, 1998; Krause, Kaltman, Goodman, & Dutton 2007).

Although this has rarely been examined in samples of intimate partner violence to date, Krause, Kaltman, Goodman and Dutton (2006) used logistic regression to examine the impact of the four proposed symptom clusters on re-victimisation over a 1-year period among women exposed to intimate partner violence. The results indicated that re-victimised women reported higher hyperarousal and numbing symptoms at baseline, however only numbing symptoms increased the probability of re-victimisation after controlling for covariates. The authors also noted the risk of re-abuse was increased by greater severity of violence and shorter relationship duration. In relation to the study being undertaken, this prior research suggests that numbing symptoms may be indicative of decreased resilience, insofar as resilient individuals may have more adept strategies to cope with emotional distress which reduces their need to engage in less adaptive strategies such as avoidance, thought suppression, and numbing.

Further to this, there is a small body of research in which the nature of the violence experienced and the type of event cognitions that develop has been examined. For example, Baldry (2003) investigated the relative

contribution of emotional and physical abuse to the development of psychological symptoms in a sample of 145 abused women recruited from shelters for battered women. Regression analyses indicated that emotional abuse was a stronger predictor of avoidance and intrusion symptoms than physical abuse, even though the occurrence of emotional and physical abuse was highly correlated. In a recent study that identified psychological abuse as one of the strongest predictors of PTSD symptoms, intrusive memories were the most frequently endorsed item (70% at pre-treatment; 60% at follow-up), and avoidance symptoms were reported by just over one half of the participants (52%) (Taft, Murphy, King, Dedeyn, & Musser, 2005). Michael, Ehlers, and Halligan (2005) reported that assault survivors with PTSD showed enhanced perceptual priming for trauma-related words. Moreover, the severity of rumination about intrusive memories and the ease and persistence with which intrusive memories can be triggered have been shown to be predictors of PTSD (Michael, Ehlers, Halligan, & Clark, 2005).

Saladin, Brady, Dansky, and Kilpatrick (1995) showed that women with PTSD and a co-morbid substance use disorder were more likely to have experienced physical assault, rape, and attempted sexual assault and notably, exhibited more intrusion and avoidance symptoms compared to those with PTSD alone. Stewart, Conrod, Phil, and Dongier (1999) examined correlations between each of the symptom clusters and alcohol, anxiolytic, and analgesic dependence in a large sample of women and found that alcohol dependence was significantly correlated with the arousal symptom cluster, whereas analgesic dependence was correlated with the

intrusions, numbing, and arousal clusters. Back, Sonne, Killeen, Dansky, and Brady (2003) examined the trauma histories, psychiatric disorders, and PTSD symptoms of treatment-seeking women with comorbid PTSD/alcohol dependence and PTSD/cocaine dependence. Compared to women with PTSD/cocaine dependence, women with PTSD/alcohol dependence demonstrated significantly greater avoidance and arousal symptoms according to clinician ratings. The authors speculated that alcohol may serve to exacerbate PTSD symptoms, whereas cocaine may impair functioning more generally. This area of research again suggests that there is a difference between those individuals who experience PTSD symptoms and those who do not, yet the mechanisms underpinning this difference have yet to be identified.

In a large sample (N=3218), Acierno, Resnick, Kilpatrick, Saunders, and Best (1999) reported sexual assault predicted only PTSD avoidance in older women, but predicted all forms of psychopathology in younger women; whereas, physical assault predicted only PTSD intrusion symptoms in older women, but all forms of PTSD symptoms and depression in younger women. The results of this study suggest that age, life experience, and type of trauma experienced may have an impact on resilient outcomes for women.

4.3. Personality

In the first instance, personality refers to a set of organized, interrelated systems of cognitive, affective, and behavioural responses (Furham & Cheng, 1999). The dominant model of personality in trait psychology is

that of the Five Factor Model, or the 'Big Five' (Digman, 1990; Goldberg, 1981; McCrae & Costa, 2003). The Big Five factor representation was originally developed by Tupes and Christal (1961), on the basis of re-analyses of various data sets using bipolar variables constructed by Cattell (1957); however, Costa and McCrae (1985) are the most widely credited as they developed the NEO-Personality Inventory, and have undertaken extensive research in the area. The five factors have traditionally been numbered and labelled as follows: I. Extraversion (or Surgency); II. Agreeableness; III. Conscientiousness (or Dependability); IV. Emotional Stability (vs. Neuroticism); and V. Culture, Intellect, or Openness (Goldberg, 1992). These traits have been considered important factors in determining how individuals adapt to both traumatic stress and to the ongoing stresses of their lives (Green, 1996; Watson & Hubbard, 1996).

To summarise the qualities of the five factors, extraversion is said to encompass assertiveness, spontaneity, confidence, energy, and has been linked to a sense of agency and sociability and a tendency toward happiness (Ashton, Lee, & Paunonen, 2002; Depue & Collins, 1999; Depue & Morrone-Strupinsky, 2005). Agreeableness is often characterized as being broadly concerned with the maintaining of relationships (Jensen, Campbell, & Graziano, 2001). Agreeable people are thought to be friendly, helpful, empathic, and able to inhibit negative feelings and most feelings of anger, which appears to circumvent aggression; whereas, people low on agreeableness tend to be antagonistic or oppositional, and use displays of power to manage social conflict (Graziano & Eisenberg, 1999; Graziano, Habashi, Sheese, Tobin, 2007; John & Srivastava, 1999; Meier &

Robinson, 2004; Meier, Robinson, Wilkowski, 2006). Conscientiousness reflects qualities of planning, persistence, impulse control, reliability and purposeful striving toward goals (Digman & Inouye, 1986).

The next factor, emotional stability, concerns the ease and frequency with which a person becomes upset and distressed. Lower levels of moodiness, anxiety, and depression reflect higher levels of emotional stability (Malouff, Thorsteinsson, & Schutte, 2005). In the literature, this factor has most often been measured and reported as neuroticism. Although there is no clear documented reason for this, it can be speculated that the use of this term reflects the pathogenic approach that dominated psychology for the majority of the 20th century (Seligman & Csikszentmihalyi, 2000). As such, measures of neuroticism often include items or facets pertaining to hostility and other negative feelings. Neuroticism has been linked to avoidance temperament (Caspi, Roberts, & Shiner, 2005; Caspi & Shiner 2006; Evans & Rothbart, 2007), suggesting a strong relationship to anxiety and sensitivity to threat may be prevalent. The fifth factor, most often called openness to experience (Costa & McCrae, 1985), is linked to curiosity, flexibility, imaginativeness, and willingness to immerse oneself in atypical experiences (McCrae, 1996).

At present, the NEO Personality Inventory (NEO-PI), developed by Costa and McCrae (1985) is the dominant assessment tool of the Big-Five markers. However, demand for shorter and more easily administered markers of the Big-Five structure, particularly for use in research contexts where subject time is at a premium, prompted the development of a public domain personality resource, the International Personality Item Pool (IPIP;

Goldberg, 1999), despite concerns from other researchers in the field regarding possible misuse by unqualified persons, and the freedom of researchers to use the IPIP in idiosyncratic ways which may lead to the possibility of fragmentation rather than scientific unification in personality research (e.g., Costa & McCrae, 1999). Some IPIP scales have been designed to provide a public-domain alternative to scales in major commercial inventories, and the correlations between the proxy and parent scales tend to be high because the items selected for IPIP proxies of commercial scales are based on empirical correlations with the original scales (Goldberg et al., 2006). For example, the mean correlation between the 30 facet scales of the NEO-PI-R (Costa & McCrae, 1992) and the corresponding IPIP scales is .73 (.94 after correcting for attenuation due to unreliability; Goldberg, 1999). Scales from the IPIP have been used extensively in empirical research since its inception (e.g., Ashton & Lee, 2005; Ashton, Lee, & Goldberg, 2007; Bierdman, Nguyen, Cunningham, & Ghorbani, 2011; Cicero & Kerns, 2011; Fisher & McNulty, 2007).

The interaction between personality and psychopathology has received substantial attention, and it has been suggested that certain personality types may mitigate the negative impacts of experiencing stress and trauma (e.g., Bartone, 1999). As such, a great deal of empirical work has been dedicated to the application of the five factor model to psychopathology and the results show a systematic relationship between the two.

Research shows that individuals low on emotional stability generally report more negative affect, lower self-esteem, and in particular, more symptoms of depression and anxiety (McCrae, 1990). Meta-analyses show

that neuroticism, the inverse of emotional stability, predicts clinical symptoms and disorders, with a stronger relationship to mood and anxiety disorders than to externalizing problems (Malouff et al., 2005).

Neuroticism is also linked to greater risk for suicidal ideation, attempts, and completion (Brezo, Paris, & Turecki, 2006) and to more alcohol use (Malouff, Thorsteinsson, Rooke, & Schutte, 2007).

In contrast, extraversion is negatively associated with suicidality (Brezo et al., 2006) and with clinical symptoms in general, particularly symptoms of mood, anxiety, and eating disorders. Notably, extraversion is strongly associated with measures of well-being, explaining up to 19% of the variance in positive mood (Steel, Schmidt, & Shultz, 2008).

Conscientiousness is reported to have a consistent protective effect, reducing risk for internalizing problems, externalizing problems, and substance use problems (Malouff et al., 2005; 2007), less negative affect, greater academic achievement, and greater subjective wellbeing (Steel et al., 2008; Trapmann, Hell, Hirn, & Schuler, 2007). Conscientiousness also appears to buffer risks for lasting distress associated with high neuroticism (Lonigan & Phillips, 2001; Muris, 2006), and this temperament has been linked to low levels of anxiety and depression (Compas, Connor-Smith, & Jaser, 2004; Muris, de Jong, & Engelen, 2004).

Agreeableness has been associated with greater subjective well-being (Steel et al., 2008) and lower risk for clinical symptoms, particularly externalizing problems (Malouff et al., 2005) and suicide attempts (Brezo et al., 2006). Although openness to experience has been associated with

positive affect (Malouff et al., 2005; Steel et al., 2008), it has not been extensively examined with respect to clinical symptoms and subjective well-being. In a longitudinal study, Soldz and Vaillant (1999) found that neuroticism was negatively associated with global adjustment, wellbeing, substance abuse, mood-altering drug use, and depression, whereas extroversion was positively associated with global adjustment; openness was positively related to psychiatric usage and depression, and agreeableness with adjustment and social support.

A strong positive link has been found between resilience and all personality traits (e.g., Davey, Eaker, & Walters, 2003; Rioli, Savicki, & Cepani, 2002). For example, Furnham, Crump and Whelan (1997) validated the NEO inventory using subjective ratings that included resilience by trained assessors. They found a strong negative association between resilience and neuroticism ($r = -.71$). Conscientiousness was positively significantly associated with subjective ratings of resilience. It was suggested that individuals high in conscientiousness do not act on impulse but prefer thorough planning and working systematically, which can assist in coping with psychosocial stressors. Werner and Smith (1992) found that resilient individuals were more achievement oriented, pursued more education, and almost all held full-time jobs in their adult life. Their adult career success, despite social adversities, was proposed to be related to their strong ability to plan and organize. In a study examining resilience in a sample of people affected by the Kosovo war crisis, resilience was deemed to be related to a combination of higher optimism, extraversion, openness to experience, conscientiousness, and control coping, paired with

lower neuroticism (Riolfi et al., 2002). However, Riolfi et al.'s study did not formally assess resilience, but merely defined resilience as "higher than predicted psychological adjustment in the face of stressors" (p. 1610).

In another study, using a sample of natural disaster victims, McFarlane (1988) found that neuroticism positively predicted longevity of posttraumatic psychological disorder, while extraversion did not. Likewise, Campbell-Sills, Cohen, and Stein (2006) found that resilience was negatively associated with neuroticism, and positively related to extroversion and conscientiousness. Friborg, Barlaug, Martinussen, Rosenvinge, and Hjemdal (2005) reported people higher in agreeableness (more trusting, cooperative, empathic, and warm) were found to be more resilient, possibly because they had a wider social network, which could buffer against stressors.

There appears to be limited literature examining the relationship between intimate partner violence and personality variables. However, Hines and Saudino (2008) investigated the relationship between the five-factor model of personality and the use and receipt of psychological, physical, and sexual intimate partner violence in both men and women. Each of the five factors of personality was associated with at least one type of intimate partner violence perpetration or victimization. Specifically, high extraversion and low agreeableness predicted women's exposure to psychological abuse, high neuroticism and low agreeableness predicted women's exposure to physical abuse, whereas high neuroticism and conscientiousness and low agreeableness predicted women's exposure to sexual abuse. Therefore, the dimensions of neuroticism and agreeableness

were the strongest predictors of abuse perpetrated towards women. A review of existing literature did not identify any studies examining the relationship between the five factors, intimate partner violence, and resilience. This shortcoming in the literature suggests there is room for expansion, in moving away from a pathological to a salutogenic approach to intimate partner violence research.

4.4. Appraisal cognitions

Joseph et al. (1995) clearly distinguish appraisal cognitions from event cognitions (as discussed above, see Figure 2) in their integrative model, postulating that appraisal cognitions are *about* event cognitions and the information depicted; furthermore, appraisal cognitions draw meaning more extensively from past experiences and/or aspects of personality. Joseph et al. (1995) suggest that appraisal cognitions may either take the form of automatic thoughts (linked to schema activation and strong emotional states and re-appraisals) or different perspectives that result from consciously processing possible alternative meaning, which is influenced by disclosure to, and input from, others in the social network. It has been suggested that as resilient individuals are likely to see the trauma a time-limited, negative experience and are able to recognise that it does not necessarily have adverse future consequence, and they may be able to find some aspect of personal growth, whereas individuals with persistent post-trauma symptoms are likely have excessively negative appraisals of the event, its sequelae, or both (Ehlers & Clark, 2000).

It has previously been highlighted within the empirical literature that differences in appraisal and cognitive style can have a differential impact on mental health (Beck, 1970), and there is a growing body of evidence suggesting that trauma-related cognitions are linked to the development and maintenance of post-trauma psychopathology (e.g., Bernat, et al., 1998). Researchers have postulated that traumatic events often lead to changes in the way an individual thinks about themselves, the world, and others (Briere & Jordan, 2004; Foa et al., 1999), and this then influences post-trauma adjustment, such that an individual who believes the world and other people are untrustworthy is likely to experience higher levels of distress and maladjustment. It has been suggested in the literature that cognitive changes can persist for quite some time once the event has ended or after traumatic stimuli are removed from one's environment depending on the frequency and severity of the trauma, and these negative cognitions have been associated with less resilient outcomes (Bonanno et al., 2008; deRoos-Cassini, Mancini, Rusch, & Bonanno, 2010; Dickstein, Suvak, Litz, & Adler, 2010; Norris, Tracy, & Galea, 2009; Tedeschi & Calhoun, 2004). McCann and Pearlman (1990) theorized that although psychological responses to trauma often appear to be "symptoms," they may in fact be transient reactions displayed by the victim as they attempt to make sense of and integrate the trauma into their pre-existing belief system and life context; a proposal which is consistent with Joseph et al.'s (1995) suggestion that psychological symptoms are markers of emotional processing.

Overall, it appears to be the general consensus that individuals suffering from persistent post-trauma symptoms experience excessively negative appraisals of the event, its sequelae, or both (McCann & Pearlman, 1990). These negative appraisals are thought to maintain post-trauma symptomology by producing a sense of current threat that is accompanied by intrusions, arousal, and strong emotions such as anxiety, anger, shame, or sadness (McCann & Pearlman, 1990). The negative appraisals also prompt a series of cognitive and behavioural responses that have the short-term aim of reducing distress but result in long-term dysfunction as a consequence of preventing cognitive change and therefore maintaining the symptoms.

The attribution of blame has been considered a central component of appraisal. Attribution is the attempt to ascertain what factors give rise to what outcomes (Fiske & Taylor, 1991). This can be an automatic process or it can be a conscious, deliberate effort motivated by a desire to understand events and to avoid future unpleasant experiences (Janoff-Bulman & Wortman, 1977). Janoff-Bulman (1979) was one of the first researchers to investigate differences in the nature of self-blame. She proposed behavioural self-blame involved attributions to the individual's own behaviour, which is considered to be modifiable. This type of self-blame was described as control-related and reportedly associated with belief in the possibility of avoiding negative outcomes in the future. In comparison, characterological self-blame was described as esteem-related as it involved attributions to the individual's personality, which is considered to be relatively non-modifiable. Janoff-Bulman (1979)

postulated that this type of self-blame was associated with a belief that the victim deserved past negative outcomes. The outcomes of this initial research indicated behavioural self-blame to have adaptive consequences for coping, and characterological self-blame to have maladaptive consequences.

A body of research has since evolved that has examined the impact of self-blame versus other-blame, and behavioural versus characterological self-blame across different trauma types; however only those results related to interpersonal trauma will be discussed here. Using a sample of 70 female victims of domestic violence and a semi-structured interview methodology, Andrews and Brewin (1990) reported characterological self-blame was most strongly associated to a history of childhood physical or sexual abuse, lack of social support and a high rate of depression once the relationship was terminated. Self-blame was reportedly highest whilst still in the violent relationship; however, this changed to other-blame once the relationship was over. Arata and Burkhart (1996) undertook a questionnaire based study with female survivors of coercive sexual experiences (N=316). The results of this study suggested women with PTSD reported more characterological self-blame, more societal blame and more behavioural self-blame than those women without PTSD. Regression analyses indicated characterological self-blame was the only variable that had significant impact on PTSD outcome. Using a subsample of a larger project, Feinauer and Stuart (1996) examined the responses of 276 female survivors of child sexual abuse to the Trauma Symptom Checklist and the McPearl Coping Scale. It was reported that blaming the self, fate, and both

self and fate were associated with higher levels of symptomatology, whilst blaming the perpetrator was associated with the lowest levels of symptomatology. However, the methodology of this study had a primary flaw such that if the victim did not blame themselves or fate, the investigators made the assumption the victim blamed the perpetrator and the participant was then allocated to this group. Overall, the results of these studies suggest that characterological self blame is likely to be most prohibitive of resilient outcomes for women exposed to various degrees of intimate partner violence.

Following on from Janoff-Bulman's (1979) initial research, Janoff-Bulman and Frieze (1983) then proposed the three basic assumptions affected by a traumatic experience are the belief in personal invulnerability, the belief the world is meaningful, understandable, and safe, and the positive perception of the self. Schwartzberg and Janoff-Bulman (1991) also noted that traumatic events often lead victims to realize that their previously held notions of control and meaningfulness are shattered when they realise chance often plays a greater role in their lives than they previously perceived. Traumatic events can lead individuals to question their self-worth and change previously-held beliefs that the world is a just or benevolent place (Janoff-Bulman, 1992).

Researchers have found that prior to the occurrence of traumatic events, most individuals tend to espouse the "just-world" hypothesis, i.e., that the world is a benevolent place and that terrible events only occur as a result of chance, and could never happen to them (Marhoefer-Dvorak, Resick, Kotsis Hutter, & Girelli, 1988). Marhoefer-Dvorak et al. (1988) found that one

sample of rape victims who viewed the world as just and benevolent before being raped tended to blame themselves for the trauma, as they had never believed it possible that they could be raped. Younger individuals may be particularly vulnerable to such world views, as generational studies show that adults over 25 tend to view their life experience as more just and within their control (Calhoun, Cann, Tedeschi, & McMillan, 1998).

Building on this previous body of research, and to explain both the development and maintenance of PTSD, Foa and Riggs (1993) and Foa and Rothbaum (1998) proposed two basic dysfunctional cognitions that mediate the development of PTSD: the world is *completely* dangerous, and one's self is *totally* incompetent. The authors postulated that individuals acquire such dysfunctional cognitions in one of two ways. Firstly, the individuals may have a pre-existing notion that the world is extremely safe and that they are extremely competent. These individuals therefore have difficulty in assimilating the traumatic experience and subsequently over-accommodate their schemas about self and world. Alternatively, individuals who have experienced prior traumas have pre-existing existing schemas of the world as a dangerous place and oneself as incompetent that is further primed by the most recent trauma, suggesting the presence of rigid concepts about self and world renders individuals vulnerable to develop PTSD.

It can be insinuated from this theory that resilient individuals are likely to have finer discrimination of degrees of safety and competence and are therefore more able to interpret the trauma as a unique experience that does not have broad implications for the nature of the world and the nature of their ability to cope with it. Similar suggestions have been made by other

authors (e.g., Ehlers & Steil, 1995), but this postulation appears yet to be empirically tested.

Certain events incorporate characteristics that would render them traumatic for any individual. These characteristics have been described as being objective in nature, (Bernat et al., 1998; Brewin et al., 2000), and include the experience of physical injury and pain (Acierno et al., 1999). Research has shown that experiencing injury at the time of the event, or sustaining injuries such as open wounds or bruising predicts higher rates of PTSD symptoms (Acierno et al., 1999). Consistent with the *DSM-IV-TR* (APA, 2000) diagnostic criteria, clinical research and meta-analytical studies report that both the objective characteristics of the traumatic event, e.g., the severity (e.g., Brewin et al., 2000), and the subjective characteristics, such as cognitive appraisals (e.g., Ozer et al., 2003), are the strongest predictors of post-trauma symptomology. Furthermore, perception of the threat to psychological integrity is not necessarily objectively determined by the severity of the threat itself (Lazarus & Folkman, 1984). For example, Mertin and Mohr (2000) reported that 67% of victimized women believed they would be killed by their partners; however, only 40% endorsed experiencing severe violence as defined by the researchers (i.e., being punched, kicked, or threatened with a weapon). Similarly, Pape and Arias (2000) reported that women's nervous reactions to abusive incidents were not associated with their reports of the total violence experienced. These reported results are consistent with Foa et al.'s (1993; 1998) suggestion that the traumatic experience primes existing schemas.

Weaver and Clum (1995) conducted a meta-analysis exploring psychological distress among victims of a variety of interpersonal trauma, including intimate partner violence. The authors reported that subjective general and self-blame appraisals contributed twice as much to the victims' psychological distress as objective factors. More specifically, vulnerability appraisals (i.e., perception of physical and psychological danger, loss of power, and loss of control) have been linked to depressive symptoms in women exposed to intimate partner violence (Nixon, Resick, & Nishith, 2004; Nurius et al., 2003).

In studies of motor vehicle accident survivors and assault victims, negative interpretations of the event itself and of why the victim is subsequently experiencing symptoms were more frequent in people who develop PTSD, and particularly in those whose symptoms persist (Dunmore, Clark, & Ehlers, 1997; Dunmore et al., 1999; Ehlers et al., 1998; Ehlers, Maercker, & Boos, 2000; Steil & Ehlers, 2000). In prospective studies, Dunmore et al. (2001) and Ehlers et al., (1998) additionally showed that negative interpretations of symptoms predicted a slower recovery from PTSD. Furthermore, perceived permanent change and an overall feeling of alienation were demonstrated to impede recovery in rape victims and in survivors of torture and assault (Dunmore et al., 1997; Ehlers, 1998; Ehlers et al., 2000).

The findings from these studies suggest that subjective appraisals may have a stronger impact on women's post-trauma adjustment and symptomology than more objective measures of violence, such as frequency and severity. Findings are also congruent with the role of

psychological abuse as a predictor of depression, despite being considered a less severe (i.e., not life-threatening) form of abuse (Calvete, Estevez, & Corral, 2007; Pico-Alfonso et al., 2006). It is therefore plausible that women who experience intimate partner violence who experience both highly objective victimisation and highly subjective negative appraisals are less likely to be resilient, and more likely to exhibit post-trauma symptoms.

In order to develop a comprehensive measure of the appraisals of trauma and its involvement in the development and persistence of PTSD, two leading research groups developed the Posttraumatic Cognitions Inventory (PTCI; Foa et al., 1999). In the initial sample of 600 participants, 65% ($n = 392$) reported experiencing a trauma that involved perceived or actual threat of serious injury or death and evoked fear, intense terror, horror, or helplessness. Included among the trauma experiences were accidents ($n = 78$), nonsexual assault ($n = 39$), sexual assault ($n = 38$), and child sexual abuse ($n = 19$). The preliminary item pool ($n = 114$) for the PTCI was generated by experts in the field and submitted to an exploratory factor analysis. The resulting three factors represent negative cognitions about the self (21 items), negative cognitions about the world (7 items), and self-blame (5 items). Excellent internal consistency was noted for each factor ($\alpha = .86-.97$), as well as moderate to high correlations with the PDS ($r_s = .57-.78$). The three subscales of the PTCI together correctly classified 86% of the sample into those with and without PTSD, suggesting that this inventory appears to assess three specific types of dysfunctional cognitions that are associated with PTSD. The PTCI has since been established as valid and reliable across various sample groups (e.g., Beck et al., 2004; Foa

& Rauch, 2004; Meiser-Stedman et al., 2009; Müller et al., 2010), and will therefore be utilised in the current study.

4.5. Coping

Coping refers to the cognitive and behavioural responses that an individual utilises to diminish and/or manage the demands of stressful situations (Folkman & Lazarus, 1988). According to Folkman and Lazarus' model (1988) coping is proposed to result from two forms of appraisal; appraisal of the event, and appraisal of the personal resources required (and available) to manage it. The interaction between the appraisals then informs the type of coping strategy employed: problem-focused coping, where the individual channels their resources to resolve the problem, or, emotion-focused coping, where the individual's resources are directed at easing the distress the problem has created (Folkman & Lazarus, 1988). Positive reappraisal, prayer, or denial may be considered emotion-focused coping given that the aim is to help the individual psychologically reconstitute or simply avoid negative affect consistent with traumatic distress, whereas problem-focused coping might include seeking outside assistance through social service or legal aid agencies. However, Carver, Scheier, and Weintraub (1989) have criticized the limitations of a problem-focused and emotion-focused approach by suggesting some coping strategies may fall into both categories, for example social support may both be a problem-focused coping (obtaining help with problems) and an emotion-focused coping (obtaining moral support). Despite the criticisms raised by Carver et al. (1989), the majority of research in this area continues to focus on problem-, versus emotion-focused coping.

Coping styles have been theorized to be context dependent, such that some researchers espouse that resolving distress-inducing events can only successfully occur with active attempts to confront and change the event (Davis, 2002) and that the use of emotion-focused coping places one at risk for developing PTSD (Maercker & Herrle, 2003; Marmar, Weiss, Metzler, & Delucchi, 1996). Whilst the use of denial may allow the individual to minimize the threat of having to change one's assumptions about how the world operates (Janoff-Bulman & Frieze, 1983), it may come at the price of being unable to integrate new and important information into one's existing schema, a process important in recovery from trauma (Smith Landsman, 2002). In the case of intimate partner violence, it may also lead to victims staying in abusive relationships longer, placing them at continued risk for further abuse. However, according to Lazarus (1993), "there is ample evidence that under certain conditions—particularly, those in which nothing useful can be done to change the situation—rational problem solving efforts can be counterproductive, even likely to result in chronic distress when they fail; then emotion-focused efforts would offer the best coping choice" (p. 238).

In studies of battered women, greater economic resources and financial independence have similarly been associated with the use of problem-focused strategies, particularly relationship termination behaviours (Rusbult & Martz, 1995; Strube & Barbour, 1983). Greater economic resources are also associated with higher levels of social support, and the size and responsiveness of battered women's support network are other important determinants of choice of coping strategy (Mitchell & Hodson, 1983).

Women in abusive relationships with a supportive and responsive social network may feel more empowered to use problem-focused strategies and may benefit from higher levels of resource availability (Dutton, Hohnacker, Halle, & Burghardt, 1994; Waldrop & Resick, 2004). Furthermore, one study found that battered women reporting higher levels of tangible support were more likely to cooperate with the criminal prosecution of the perpetrator (Goodman et al., 1999). However, given that many women in abusive relationships are often impoverished, undereducated, and/or unemployed (Byrne, Resnick, Kilpatrick, Best, & Saunders, 1999; Cunradi, Caetano, & Schafer, 2002; Field & Caetano, 2004), they may not have the resources or ability to leave an abusive relationship. In those cases, it may be that using emotion-focused coping more adequately alleviates mental distress than problem-focused coping would in the same situation (Lazarus, 1993).

The use of emotion-focused coping strategies has been demonstrated to be relatively ineffective for dealing with stressful experiences in general and, moreover, for dealing with the experience of intimate partner violence and other forms of trauma. For example, Mitchell and Hodson (1983) found that survivors of intimate partner violence who display less active cognitive coping and more avoidance coping when they leave their abusers were more prone to develop severe depression, particularly if they had limited social support and fewer economic and personal resources.

Fiore-Lerner and Kennedy (2000) interviewed 191 Montana women who were 1) currently involved in a violent relationship with no intention of leaving, 2) currently involved in a violent relationship and thinking about

leaving, and 3) had left their violent relationship over time periods extending from six months to three years or more. These authors found that women who had most recently left violent relationships displayed more problem- and emotion-focused coping than women who had been out of violent relationships for a year or more. Women who had been out of violent relationships for longer overall tended to display higher levels of problem-focused coping, as opposed to emotion-focused, coping.

Using a sample of female victims of physical and sexual assault, Taft et al., (2007) reported engagement coping (problem-focused) was predictive of positive mental health whilst disengagement coping (emotion-focused) was predictive of poorer mental health. They also reported that being a victim of sexual aggression was a stronger predictor of poorer mental health than physical assault. Similar results have also been reported elsewhere in the literature (e.g., Calvete et al., 2008).

In another study, intimate partner violence survivors from domestic violence agencies had expectations that they could control their future and showed problem-solving coping in the face of the abuse, which in turn was correlated with lowered levels of dysphoria (Clements & Sawhney, 2000). However, in a qualitative study by Davis (2002), intimate partner violence survivors identified great inner strengths and active strategies to keep them safe. She found that women would survive for many years using emotion-focused coping until they had built the resources to leave. Further, Hage (2006) found that intimate partner violence survivors who reported using internal strength and spiritual resources to cope with abuse developed self-

agency and more active problem-focused methods of coping as they monitored the patterns of abuse in order to survive.

In a quantitative study by Lewis et al. (2006), the most frequently reported coping strategy of women exposed to intimate partner violence was reportedly wishful thinking, a coping strategy that increased as violence escalated in severity and with more threats and intimidation from the batterer. Notably, women who used emotion-focused coping strategies such as wishful thinking were also more likely to report symptoms of depression, and PTSD in other studies (e.g., Valentiner, Foa, Riggs, & Gershuny, 1996). Waldrop and Resick's (2004) review article on coping in battered women similarly reports that coping becomes more avoidant as the severity of violence increases.

These studies suggest that it can be protective to use emotion-focused strategies in the shorter term when other avenues are unavailable. However, in another investigation of battered women in shelters, Arias and Pape (1999) found that greater use of emotion-focused coping was related to higher levels of symptomatology of PTSD. Similar to previous studies, problem-focused coping was not associated with this outcome. Then again, Kocot and Goodman (2003) examined relationships between problem-focused coping, assessed using three problem-focused scales of the COPE (Carver et al., 1989), and symptoms of PTSD and depression among a sample of court-involved battered women. Contrary to expectations, problem-focused coping was associated with higher levels of PTSD symptoms and depression, particularly among participants without

supportive social networks. The outcomes of these studies suggest the relationship between coping style and psychological outcomes is not linear.

In light of the abovementioned research, it is also important to note that an individual's coping style is also strongly influenced by their personality. Even prior to coping, personality can influence the frequency of exposure to stressors, the type of stressors experienced, and appraisals (Vollrath, 2001). For example, extraversion involves sensitivity to reward, positive emotions, sociability, assertiveness, and high energy (Caspi et al., 2005; McCrae & John, 1992; Rothbart & Hwang, 2005), so theoretically, strong approach tendencies and assertiveness should provide the energy required to initiate and persist in problem solving (Lengua, Sandler, West, Wolchik, & Curran, 1999; Vollrath, 2001); positive affect should facilitate cognitive restructuring; and an orientation toward others and access to a social network should facilitate social support coping. These characteristics have been previously associated with resilient outcomes (e.g., Garmezy, 1991; Rutter, 1987; Schumm et al., 2006).

Neuroticism predicts exposure to interpersonal stress, and tendencies to appraise events as highly threatening and coping resources as low (Bolger & Zuckerman, 1995; Grant & Langan-Fox, 2007; Gunthert, Cohen, Armeli, 1999; Penley & Tomaka, 2002; Suls & Martin, 2005). As the inverse of emotional stability, this personality type reflects tendencies to experience fear, sadness, distress, and physiological arousal (McCrae & John, 1992; Miles & Hempel, 2003; Rothbart & Hwang, 2005). Given this vulnerability to distress, neuroticism should lead to emotion-focused coping and disengagement from threat, and negative affect would also be likely to

impede positive thinking and cognitive restructuring, and therefore likely to be detrimental to achieving a resilient outcome following exposure to intimate partner violence.

Conscientiousness predicts low stress exposure (Lee-Baggley, Preece, & DeLongis, 2005; Vollrath, 2001), most likely because conscientious people plan for predictable stressors and avoid impulsive actions that can lead to financial, health, or interpersonal problems. As conscientiousness implies persistence, self-discipline, organization, achievement orientation, and a disciplined approach (Caspi et al., 2005; McCrae & John, 1992), this personality type should facilitate problem solving and make disengagement less likely (Lengua et al., 1999; Vollrath, 2001). The strong attention-regulation capacity underpinning conscientiousness (Derryberry, Reed, & Pilkenton-Taylor, 2003) is likely to aid cognitive restructuring, which requires a capacity to disengage from powerful negative thoughts, thus is likely to aid resilient adaptation.

Agreeableness involves high levels of trust and concern for others (Caspi et al., 2005; McCrae & John, 1992) and is linked to low interpersonal conflict and thus less social stress (Asendorpf, 1998). Because those high in agreeableness tend to have strong social networks (Bowling, Beehr, & Swader, 2005; Tong et al., 2004), agreeableness may predict social support coping, which has previously been linked to resilience (Schuum et al., 2006).

Openness to experience involves the tendency to be imaginative, creative, curious, flexible, attuned to inner feelings, and inclined toward

new activities and ideas (John & Srivastava, 1999; McCrae & John, 1992). These tendencies may facilitate engagement coping strategies that require considering new perspectives, such as cognitive restructuring and problem solving, but may also facilitate use of disengagement strategies such as wishful thinking and denial.

Optimism involves the expectation of good outcomes and an engaged approach to life. These characteristics suggest that optimism will relate positively to engagement types of coping, such as problem solving and cognitive restructuring, and inversely to avoidance or disengagement coping. Conversely, pessimism involves the expectation of bad outcomes, which should promote distress and disengagement coping.

Extraversion, conscientiousness, and openness all relate to perceiving events as challenges rather than threats and to positive appraisals of coping resources (Penley & Tomaka, 2002; Vollrath, 2001) and are therefore likely to promote resilient outcomes. Unsurprisingly, high neuroticism plus low conscientiousness predicts especially high stress exposure and threat appraisals, which are likely to deplete resilience, whereas low neuroticism plus high extraversion or high conscientiousness predicts especially low stress exposure and threat appraisals (Grant & Langan-Fox, 2006; Vollrath & Torgersen, 2000).

There is also empirical evidence to suggest that coping strategies employed during the course or aftermath of a traumatic event may be influenced by the interpretation that the individual makes of the event. Brewin, MacCarthy, and Furnham (1989) reported that individuals who

blamed themselves for an event were less likely to engage in social integration and help-seeking behaviours, whilst feelings of guilt may result in avoidance and social withdrawal (Joseph et al., 1995). O'Brien and DeLongis (1996) found that those higher on neuroticism were more likely to use confrontation and less likely to use empathic forms of coping when coping with a stressful situation involving someone with whom they had a close relationship than when they were coping with a stressful situation involving someone with whom they had a more distant relationship. The findings suggested that higher levels of neuroticism results in engaging in interpersonally maladaptive ways of coping particularly in stressful situations with close others. Therefore, it appears that individuals with pre-existing tendencies to hold negative beliefs and think irrationally, combined with certain personality traits such as neuroticism, are more vulnerable following a traumatic event, and less likely to utilise adaptive coping strategies.

One frequently used coping questionnaire is the COPE Inventory (Carver et al., 1989) which, in its original format, assesses 13 lower-order strategies using four questions assigned to each of the following sub-scales: *active coping, planning, suppression of competing activities, restraint coping, seeking social support for instrumental reasons, seeking social support for emotional reasons, positive reinterpretation and growth, acceptance, turning to religion, focus on and venting of emotions, denial, behavioural disengagement, and mental disengagement*. The development of these sub-scales was conceptually driven, and the theoretical grouping of

the items to their sub-scales was largely confirmed using principal-factors exploratory factor analysis (Carver et al., 1989).

In an attempt to reduce participant response burden, Carver (1997) published the Brief COPE. This questionnaire asks only 28 questions on a four-point Likert scale, assigning two questions to each subscale. The coping dimensions also can be divided into two major categories: Problem-focused Strategies (i.e. active coping, planning and using instrumental support) and Emotion focused Strategies (i.e. positive reframing, acceptance, religion, using emotional support and denial), as has been done in previous studies (e.g., Saniah & Zainal, 2010). Rather than prescribing a rigid structure of the coping strategies assessed by the Brief COPE, Carver (1997) recommended that researchers use the Brief COPE flexibly and creatively as suits, such as by suggesting the possibility of only selecting a sub-set of the sub-scales. Researchers using the Brief COPE therefore refer to this recommendation to justify an exploratory analysis to determine empirically how the data from their sample is to be analysed (e.g., Zelikovsky, Schast, & Jean-Francois, 2007), and this approach will be used to inform analyses relating to problem- and emotion-focused coping in the current study.

4.6. Emotional states

Intimate partner violence can result in a host of negative outcomes for women experiencing it, including homicide, reactive aggression, physical illness, injury, and neurological, cognitive, and emotional changes associated with injury, fear conditioning, and physical or emotional

deprivation (Barnett et al., 2005). However, outcomes of intimate partner violence vary based on the frequency, severity, and nature of abuse, and the complex interplay of individual and interpersonal dynamics that contribute to the development and maintenance of the violence (Briere & Jordan, 2004).

Not surprisingly, numerous studies have demonstrated the link between abuse and the development of depression (e.g., Bifulco et al., 2002; Briere & Runtz, 1988; Chapman et al., 2004; Gibb et al., 2001), anxiety (e.g., Allen, Coyne, & Huntoon, 1998; Ferguson & Dacey, 1997), hostility (e.g., Haj-Yahia & Tamish, 2001; Swett & Halpert, 1993), paranoid ideation (e.g., Jing-Qi, & Wei, 2005; Murphy et al., 1988), phobic anxiety (e.g., Haj-Yahia & Tamish, 2001; Lev-Weisel & Amir, 2003), PTSD (e.g., Arias & Pape, 1999; Roth, Newman, Pelcovitz, van der Kolk, & Mandel, 1997; Strauchler et al., 2004; Street & Arias, 2001), psychoticism (e.g., Jing-Qi & Wie, 2005; Shichang, Yalin, & Guoping, 2004), and generally greater symptomatology (e.g., Braver, Bumbery, Green, & Rawson, 1992; Coker et al., 2002; Moeller, Bachman, & Moeller, 1993; Spertus et al., 2003) than in non-abused populations.

Golding (1999) conducted a meta-analysis of 56 studies and reported that abused women were 3.6 to 3.8 times more likely to have depression, suicidality, and PTSD, and 5.6 times more likely to abuse drugs or alcohol than the general population. This analysis showed the magnitude of the association between intimate partner violence and mental health problems, with the size of the association statistically homogeneous in studies of PTSD (Golding, 1999). In a medical sample, women suffering past and

current intimate partner violence, including those with psychological abuse only, were found to be more likely to report poor physical and mental health than were women who never experienced intimate partner violence, (Coker et al., 2000). Similarly, in community samples, women with a history of intimate partner violence have also been found to be at increased risk for various physical and emotional health concerns (Hath Away et al., 2000). Health problems such as headaches, back pain, sexually transmitted diseases, and digestive problems are more frequently reported by women with a history of intimate partner violence than by women without such histories (Campbell, 2002; Coker et al., 2000). The empirical research available therefore strongly indicates the potential for physical and psychological dysfunction as a consequence of exposure to intimate partner violence.

Contrary to the assumption that separation from the abusive partner eventually resolves the problems that women face, the few longitudinal studies in which mental health consequences of intimate partner violence have been examined suggest that whilst there may be some improvement in wellbeing, women continue to suffer negative effects long after the abuse has ended (Campbell, Sullivan, & Davidson, 1995; Mertin & Mohr, 2001; Woods, 2000). For example, symptoms of physical and mental health problems were found to decline over a 14-month period after leaving a shelter (Sutherland, Bybee & Sullivan, 2002), while Campbell and Soeken (1999) found that physical health improved over a 3.5-year period for women who were no longer experiencing abuse. Importantly, Rivara et al. (2007) found that, although health care costs declined over a 5-year period

after separation, these costs remained 20% higher for abused versus non-abused women. Moreover, Acierno et al. (2007) reported women who experienced sexual assault an average of 50 years ago were more likely to present with autonomic arousal and avoidance symptoms of PTSD than those with no prior sexual assault. Also, women who reported experiencing physical assault an average of 28 years previously were more likely to present with past year substance abuse, depression, and avoidance and re-experiencing symptoms of posttraumatic stress disorder (PTSD) than those with no previous physical or sexual assault (Acierno et al., 2007). These studies highlight the ongoing deleterious effects of experiencing intimate partner violence, and reinforce the importance of identifying the most salient predictors of women's mental and physical health following exposure to intimate partner violence.

It is estimated that up to 60% of intimate partner violence victims meet criteria for PTSD when they seek treatment (Saunders, 1994), with one meta-analysis of 56 studies revealing a 63.8% weighted mean prevalence of PTSD in survivors (Golding, 1999). Furthermore, a dose-response relationship between intimate partner violence and PTSD has been demonstrated, such that higher amounts of violence are correlated with greater symptoms of PTSD or increased likelihood of a PTSD diagnosis (e.g., Coker et al., 2005; Ford-Gilboe et al., 2009; Hughes & Jones, 2000; Mertin & Mohr, 2000; Pico-Alfonso, 2005; Woods, 2000).

Although resilience theory suggests it is not the severity or frequency of the event that influences outcomes, but the way in which the event is dealt with, evidence of a dose-response relationship is consistent with Janoff-

Bulman's (1992) suggestion that individuals are at greater risk if they have not yet re-established a stable and secure inner world prior to the next traumatic event. It should be noted however, that many studies use samples derived from community welfare shelters which may provide a somewhat biased representation as women exposed to intimate partner violence living in welfare shelters have been exposed to more severe violence (Johnson, 2006) and have been shown to exhibit PTSD symptoms at a higher frequency (84% to 40%) than victimized women not residing in a shelter (Golding, 1999). Despite this criticism, these prevalence rates stand in marked contrast to the 8% lifetime prevalence rate reported in the *DSM-IV-TR* (APA, 2000).

Norris and Kaniasty (1994) noted that multiply traumatized individuals have generally poorer outcomes than individuals who have experienced a single traumatic event. The *DSM-IV-TR* (APA, 2000) diagnostic criterion were designed to reflect dysfunctional reactions to single traumatic events (Herman, 1992), and as such are not intended to encompass psychological reactions to repeated or chronic traumatisation that occurs as a result of intimate partner violence. Furthermore, it should be noted that although psychological abuse does not pose a threat to the physical integrity of the victim, it does constitute an extreme form of interpersonal stress, and as such it may be a potential threat to the victim's psychological integrity (Ebert & Dyck, 2004).

Ebert and Dyck (2004) postulated that a threat to an individual's psychological integrity can result in 'mental death', which they argued to be the core feature of complex PTSD. Complex PTSD transcends current

formulations of PTSD and encompasses symptoms of affective dysregulation, dissociation and somatisation, alterations in self-perception, altered relationships with others, and modified systems of meaning (Ide & Paez, 2000; Sack, 2004; Teegan & Schrieffer, 2002). The concept of complex PTSD has been proposed to account for the posttraumatic stress symptomatology that has been recognised in victims suffering the diverse sequelae of prolonged, repeated traumatisation, resulting from physical and sexual abuse (Herman, 1992; Roth et al., 1997). However, this disorder is not formally recognised in DSM formulations at this time.

In trauma recovery, resilience and impairment are not necessarily opposites, but instead can be experienced concurrently and may potentially represent the different aspects of coping and adjustment to an abnormal experience (Bussey & Wise, 2007; O’Leary, 1998). Simultaneous to the wide range of debilitating effects of trauma, most women who experience intimate partner violence demonstrate a remarkable capacity for survival and perseverance (Anderson, 2010). When conducting a review of the literature relating to resilience and psychopathology in victims of intimate partner violence, the empirical research has primarily focused on the impact of children’s wellbeing following exposure to family violence (e.g., Graham-Bermann, Gruber, Howell, & Girz, 2009; Jaffe, 2005; Howell, 2011), which is consistent with resilience research originating from developmental psychology.

It is evident that resilience research is extending to adult trauma adjustment in areas such as bereavement and natural disaster (e.g., Bonanno et al., 2002; 2005; Metzl, 2009). However, it highlights the need to expand

this area of research and understanding to victims of other types of trauma, specifically relational trauma, whereby the traumatic event is deliberately, and often forcefully, inflicted upon the victim by another person. Research emerging in this area has focused on military samples (e.g., Bartone, 2006) and prisoners of war (e.g., Engdahl, Harkness, Eberly, Page, & Bielinski, 1993).

Most of the available research that has examined resilience in women exposed to intimate partner violence has utilised a qualitative approach, often grounded in feminist theory (e.g., Davis, 2002; Oke, 2008). Alternatively, specific factors that are believed to contribute to resilience, such as social support and coping, have been assessed in relation to effect of PTSD outcomes (e.g., Bradley, Schwartz, & Kaslow, 2005), as opposed to perceived overall resilience. Jessor (1996) recommends a “joint reliance on qualitative and quantitative procedures, producing kinds of information that are complementary and converging, [which] can now be seen as a powerful strategy for enriching the understanding of social life” (p. 6).

The Resilience Scale (Wagnild & Young, 1993) was designed on the basis of a qualitative study of 24 older women who had successfully adapted in the aftermath of a major life event, and presents a simple and direct way to begin identifying overall resilience. This scale has been established as psychometrically sound, with reliability coefficients consistently above 0.88 (Wagnild, 2009). The scale has been used with samples of adolescents, and middle-aged and older adults and is consistently correlated with positive factors, such as optimism, morale, and coping effectiveness, and is inversely related to depression and perceived

stress (e.g., Ahern, Kiehl, Sole, & Byers; Aroian & Norris, 2000; Christopher, 2000; Heilemann, Lee, & Kury, 2003; Humphreys, 2003; Nygren et al., 2005; Rew, Taylor-Seehafer, Thomas, & Yockey, 2001).

To date, one quantitative study has reported using the Resilience Scale to examine resilience in a sample of sheltered battered women. Humphreys (2003) reported that resilience was significantly and inversely correlated with three global measures and five subscales of psychopathology as measured by the Symptom Checklist-90R. Whilst this is a step in the right direction, Humphrey's (2003) study is in keeping with the tradition of examining resilience within a disease-focused medical model in that it focused on risk as opposed to protective factors.

4.6.1. Treatment for Trauma Responses

There have been several therapeutic models proposed for the treatment of psychological responses to trauma, and in particular, in response to intimate partner violence. Most of therapeutic models are based on Cognitive Behavioural Therapy (CBT), and focus on exposure techniques, cognitive restructuring, improvement of self-esteem, and anxiety control training, and occasionally complemented with self-help groups (Echeburúa & Corral, 1998; Monnier, Briggs, Davis, & Ezzell, 2001). CBT is the most studied treatment in the general population, and current guidelines recommend it as a first-line treatment for all patients (Foa, 2009). With a focus on cognitive reframing, CBT has been demonstrated to effectively promote psychological resilience in children and adults (Stallard, 2009; Stallard et al., 2005), and CBT has long been recognised as effective in

helping survivors of various trauma, including intimate partner violence (Crespo & Arinero, 2010; Johnson, Zlotnick, & Perez, 2011). A study by Foa, Zoellner, and Feeny (2006) utilising a sample of recent sexual and physical assault victims receiving treatment at an average of 1 month post-assault found that a multi-session early intervention based on cognitive and behavioural principles showed some efficacy relative to supportive counselling in the short term. However, the results did not show clear long-term benefits.

The most positive results were achieved by Echeburúa, Corral, Sarasua, & Zubizarreta, (1996), Kubany, Hill, and Owens (2003), and Rincón (2003). These three cases employed multi-component cognitive-behavioural programs specifically designed for women with PTSD, subsequent to exposure to intimate partner violence; the first two works using an individual format, and the last one, a group format. They all achieved positive results, both in the reduction of posttraumatic symptomatology (97, 87, and 90.9%, respectively, of the women who presented PTSD no longer met the diagnostic criteria for this disorder at post-treatment assessment), as well as in improvement of depression, self-esteem, and guilt. In fact, the results tended to become more consolidated at the follow-ups.

Further to remediating the immediate impact of posttraumatic stress responses, appropriately targeted clinical intervention has been shown to reduce the risk of future victimisation. For example, Iverson et al. (2011) examined the effect of CBT for PTSD and depressive symptoms on the risk of future intimate partner violence victimization. Using a sample of 150 women diagnosed with PTSD secondary to a range of interpersonal

traumatic events, this study demonstrated that reductions in PTSD and in depressive symptoms during treatment were associated with a decreased likelihood of experiencing victimization from an intimate partner at a 6-month follow-up even after controlling for recent intimate partner violence and prior interpersonal traumas.

4.7. Summary

It is clear from this review of the literature that a pathogenic approach has been used as the primary model for describing, understanding, and treating the psychological symptoms and struggles of women exposed to intimate partner violence. This approach has generated a great deal of knowledge and understanding about psychopathology, primarily PTSD, as an outcome of experiencing intimate partner violence.

Although this chapter has focused on the outcomes of women exposed to higher frequency and severity of abuse, this is reflective of the general body of research in this area and the lack of research examining resilient responses to intimate partner violence. This highlights two of the main downfalls of using a pathological model as a basis for examining trauma, insofar as ‘normal’ reactions to abnormal circumstances have become classified as symptoms as opposed to evidence of strength in the face of adversity (Anderson, 2010) and results of empirical studies have limited generalisability due to sample selection biases. As resilience is now considered to be a common response to trauma (Bonanno, 2004), there is no reason to expect that women exposed to various degrees of intimate partner

violence cannot also demonstrate resilient responses or that research into this type of traumatic experience cannot also adopt a salutogenic approach.

Chapter 5: Rationale

The link between all forms of abuse (physical, sexual, psychological) that constitute intimate partner violence and the subsequent development of psychopathology has been the target of considerable research to date (e.g., Arias & Pape, 1999; Coker et al., 2000; Margolin et al., 1998; Roth et al., 1997; Strauchler et al., 2004; Street & Arias, 2001), and it is evident that the experience of intimate partner violence is traumatising for many of the women who are subjected to it. As noted in Chapter 1, whilst men are also exposed to intimate partner violence, the focus of this thesis is on women as the data indicates they are exposed to intimate partner violence at a considerably higher rate (ABS, 2006; Black et al., 2011; Mouzos & Makkai 2004). However, the vast majority of research in this area has neglected to acknowledge that not all women experience a negative trajectory as a result of experiencing intimate partner violence. Indeed, even in the face of traumatic stress, not all individuals uniformly decompensate, and according to Greene (1996) “diagnosable pathology is the exception rather than the rule” (p. 187). One way to better understanding these differing responses is to examine individuals whose psychological outcomes indicate more resilience in the face of traumatic experiences, and the inclusion of a referent, non-traumatised group allows for identification of unique predictors of resilience.

Some of the strongest determinants of how individuals fare in terms of both their psychological and physical health when faced with stressful experiences include individual characteristics such as personalities, belief systems, and resultant cognitions and behaviours throughout the coping

process. These characteristics, along with situational factors, may also determine the extent to which people respond in a resilient manner to stressful and traumatic experiences (Carver, 1998). For these reasons, and those previously discussed, the theoretical model chosen to underpin the current study is the integrative model developed by Joseph et al. (1995) which combines event stimuli, event cognitions, personality, appraisals, coping, and emotional states. Although using this model as a theoretical guide, this study will not be attempting to empirically validate this model.

The aim of this study is to use the integrative model proposed by Joseph et al. (1995) as the theoretical foundation to investigate the factors that serve as protective resources to reduce psychological distress, buffer negative outcomes, and ultimately promote resilient outcomes for women who have been exposed to various degrees of intimate partner violence. Specifically, the study aims to assess the relationship of resilience to event cognitions, appraisals, personality, coping, and psychopathology in women exposed to intimate partner violence, ranging from none to very high.

On the basis of the research reviewed in the previous chapter relating to psychological outcomes of intimate partner violence, the following hypotheses were generated:

1. Participants reporting higher rates of physical and psychological abuse would report lower levels of resilience.
2. The high resilience group would report lower levels of negative event cognitions, appraisals, and psychopathology than the low resilience group.

3. As this study is using Masten and Reed's (2001) definition of resilience as "a pattern of positive adaptation in the face of significant adversity or risk" (p. 75), it was expected that resilience would have a negative relationship with high (negative) scores on event cognitions and appraisal scale scores, and with psychopathology scores.
4. All personality variables (high extraversion, high agreeableness, high conscientiousness, high emotional stability, and high intellect/imagination) would have a positive relationship with high resilience and all other variables of the model, and would reduce the strength of the relationship between resilience and event cognitions, appraisals, and psychopathology.
5. Lower levels of resilience would result in stronger endorsement of emotion-focused coping strategies; whereas higher levels of resilience would promote the use of problem-focused coping strategies.
6. Coping style would reduce the strength of the relationship between resilience and event cognitions, appraisals, and psychopathology.
7. Emotional stability and problem-focused coping would be positive significant statistical predictors of resilience, whilst self-blame and psychopathology would be negative significant statistical predictors of resilience.

Chapter 6: Method

6.1. Participants

As previously noted, the most recent estimates suggest women continue to represent 85% of those abused by intimate partners (Black et al., 2011). Therefore, participation in the current study was limited to women. A total of 184 women participated in the current study. Participation was voluntary and anonymous. Selection was made on the basis being over 18 years of age and ever having had an intimate relationship. Although the participants of interest in this study were abused women, women who had never been abused were also included to enable the assessment of continuous variables from low to high and allow for identification of unique predictors of resilience. Women were asked not to volunteer for the study if they were currently in an abusive relationship. No further exclusion criteria were applied.

As there has been a demonstrated difference between community samples and shelter populations (e.g., Johnson, 2006; Jones et al., 2001), the current study utilised a community sample in order to increase the generalisation of the results and overcome the common pitfall of drawing a sample solely from help-seeking women at crisis shelters. Participants were recruited from various Tasmanian community service organisations, the local prison facility, social networking sites (e.g., Facebook), local radio, and undergraduate psychology lectures. No financial incentive was offered to prospective participants; however, undergraduate psychology students were offered one hour of research course credit for their participation. Overall, a total of 285 questionnaires were distributed, with a return rate of

64.56%. Of the 184 participants, 137 provided their age (74.45%). The reported minimum age was 18 years and the maximum age was 58 years ($M = 29.44$, $SD = 10.51$).

6.2. *Materials*

The materials used for the study were questionnaires, as detailed below. The participant information sheet and all questionnaires used in the study are presented in Appendix A.

6.2.1. *Abusive Behaviour Inventory*

The Abusive Behaviour Inventory (ABI) (Shepard & Campbell, 1992) is a 30-item instrument that uses a five point Likert scale (1= Never; 5= Very Frequently) that is designed to measure the frequency of abusive behaviours within an intimate relationship. The ABI includes 10 physical abuse items which were classified as assaultive behaviours and include sexual assault. The ABI also includes 20 items deemed to assess the frequency of psychological abuse. Shepard and Campbell (1992) reported the items were drawn from the following subcategories: humiliation/degradation, isolation, intimidation, threats, use of 'male privilege' (p.293) (compliance demanded based on belief of male privilege), and economic abuse. The physical abuse subscale has a maximum raw score of 50. The psychological abuse subscale has a maximum raw score of 100, with a maximum possible raw score of 150 for overall frequency of abuse. The mean score of these items is computed by summing the values of the items per scale and dividing by the applicable number of items.

Shepard and Campbell (1992) reported reliability coefficients between .79 and .92 suggesting the ABI is a reliable questionnaire. They also reported highly significant statistical differences ($p < .01$) between abusive and non-abusive group scores on the ABI, supporting the validity of the questionnaire. High ABI scores were also found to correlate highly with clinical and client assessment of abuse, and previous arrest for domestic violence.

6.2.2. *The Resilience Scale*

The Resilience Scale (RS) (Wagnild & Young, 1993) was designed to identify the degree of individual resilience, considered by the authors to be a positive personality characteristic that enhances individual adaptation. The RS is a 25-item self-report scale with a 7-point Likert response format (1= Strongly disagree; 7= Strongly agree). Possible scores ranged from 25-175 with higher scores indicating higher resilience. Evidence of construct validity was reported through factor analysis (Wagnild & Young, 1993). The internal consistency of the RS is respectable with Cronbach's alphas ranging from .76-.91. Coefficient alpha for the total scale was .91 when used with adults (Wagnild & Young, 1993) and .72 in a study of inner-city, vocational high school, minority adolescents (Hunter & Chandler, 1999). Test-retest reliability was also adequate, with correlations ranging from .67-.84.

6.2.3. *Impact of Event Scale – Revised*

The Impact of Event Scale – Revised (IES-R) (Weiss & Marmar, 1997) is a 22-item self-report instrument used to assess current posttraumatic symptomatology relating to intrusion, avoidance and hyperarousal.

Participants were instructed to indicate, using a five-point Likert scale (0= Not at all; 4= Extremely), how distressed they felt by specific posttraumatic symptoms during the past seven days, including the day of testing. The subscales have been reported as internally consistent and the measure has been noted to have good test-retest reliability (e.g., Matorin & Lynn, 1998). The split half reliability coefficient has been documented to be .86, whilst the test-retest reliability was reported as .87, and Cronbach's alpha of .79–.92. It has been reported to have good sensitivity (.92) and adequate specificity (.62). The maximum test score is 88, and the maximum subscale scores are intrusion (32), avoidance (32) and hyperarousal (24). However, no clinical cut-offs have been published.

6.2.4. *The Brief COPE*

The Brief COPE Inventory is the abridged version of the COPE Inventory (Carver et al., 1993) designed to assess the way in which people cope with life stressors. The Brief COPE includes 14 subscales each assessing different coping dimensions: 1) active coping, 2) planning, 3) using instrumental support, 4) using emotional support, 5) venting, 6) behavioural disengagement, 7) self-distraction, 8) self-blame, 9) positive reframing, 10) humour, 11) denial, 12) acceptance, 13) religion, and 14) substance use. Each scale contains two items (28 altogether). Participants are asked to respond to each item on a four-point Likert scale (1= Not at all; 4= A lot), indicating what they generally do and feel when they experience stressful events. The higher the score on each coping strategy, the greater the use of the specific coping strategy. The Brief COPE scale has good internal consistency and test-retest reliability, and concurrent validity has

been established. Carver (1997) reported high Cronbach's alpha values for some domains such as religion ($\alpha=.82$) and substance use ($\alpha=.90$). Other domains indicated acceptable values of Cronbach's alpha, such as active coping ($\alpha=.68$), planning ($\alpha=.73$), positive reframing ($\alpha=.64$), acceptance ($\alpha=.57$), humour ($\alpha=.73$), emotional support ($\alpha=.71$), instrumental support ($\alpha=.64$), self-distraction ($\alpha=.71$), denial ($\alpha=.54$), venting ($\alpha=.50$), behavioural disengagement ($\alpha=.65$), and self-blame ($\alpha=.69$). In health psychology, the Brief COPE has predicted clinically relevant outcome across many stressful situations and populations (e.g., Carver et al., 1993; Carver, 1997; Lode et al., 2007). Based on the definitions of problem-focused and emotion-focused coping (Folkman & Lazarus, 1988), the Brief COPE subscales of active coping, planning, and instrumental support were classified as problem-focused coping and the rest of the subscales fell into emotion-focused coping.

6.2.5. *International Personality Item Pool (IPIP) Big Five marker scales.*

The 50-item sample questionnaire from the IPIP web site (<http://ipip.ori.org/ipip/>; Goldberg, 1999) is designed to assess the five broad domains of personality that are used to describe human personality. The questionnaire features ten questions for each of the five personality factors and uses a five-point Likert scale (1= Very inaccurate; 5= Very accurate). The personality dimensions measured in the inventory are Extraversion, Agreeableness, Conscientiousness, Emotional Stability and Openness. These scales have shown high convergent and low discriminant correlations with markers of the Big Five factors. The internal-consistency

reliabilities of these scales ranged from .88 to .91 (Ashton & Lee, 2005).

Convergent correlations between the IPIP Big Five scales and the Big Five Mini-Marker scales (Saucier, 1994) ranged from .69 (both Agreeableness and Emotionality) to .77 (Extraversion).

6.2.6. *Posttraumatic Cognitions Inventory*

The Posttraumatic Cognitions Inventory (PTCI; Foa, Ehlers, Clark, Tolin, & Orsillo, 1999) is a 33-item scale, which is rated on a 7-point Likert-type (1= Totally disagree; 7= Totally agree), designed to assess beliefs and thoughts related to trauma experiences. Scale scores are formed for the three subscales, which show a high degree of intercorrelation ($r_s = .57-.75$). Internal consistency appeared sound for the three subscales (Negative Cognitions About the Self, $\alpha = .97$; Negative Cognitions About the World, $\alpha = .88$; Self-Blame, $\alpha = .86$) in the original article. Test—retest reliability for a 1-week interval ranged from .75 to .89 and for a 3-week interval ranged from .80 to .86 for the three subscales. Convergent validity with two other scales (World Assumptions Scale (WAS), Janoff-Bulman, 1989,1992; Personal Beliefs and Reactions Scale (PBRS), Mechanic & Resick, 1993) that measure trauma-related cognitions appear promising, as does the ability of the PTCI to differentiate individuals with and without PTSD (sensitivity = .78, specificity = .93; (Foa et al., 1999).

6.2.7. *Symptom Checklist-90-Revised*

The Symptom Checklist-90-Revised (SCL-90-R) (Derogatis, 1983) is a widely used 90 item questionnaire designed to assess patterns of

psychological symptoms experienced during the week before assessment, in psychiatric, medical, and non-patient samples. The questionnaire identifies the presence of symptoms warranting consideration for clinical intervention. Each of the 90 items is rated on a five point Likert scale (0= Not at all; 4= Extremely) assessing the severity of distress associated with experiencing each symptom. The test consists of nine primary symptom subscales: somatisation, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. In addition, three global indices provide single scores of the nature and extent of psychological symptoms. The Global Severity Index (GSI) had been designed to provide a single summary score of the current level of psychopathology. The Positive Symptoms Distress Index (PSDI) has been designed to provide a measure of perceived distress separate from the number of items endorsed. The Positive Symptom Total (PST) has been designed to evaluate the extent of symptomatology by scoring the number of endorsed items. Internal consistency for the subscales has been reported to range from .77 to .90, suggesting that the symptom items reflect the underlying factor proposed to be measured by each subscale. Test-retest reliability has been reported to range from .80 to .90, indicating stability across time. Convergent and construct validation studies have demonstrated the SCL-90-R to be a good measure of current psychopathology (Derogatis, 1983). A GSI score or two subscale scores above a standard score of 63 has been described as an indication of a positive diagnosis or clinical case (Derogatis, 1983). Standard score norms

for non-patient adults were used to derive the standard scores for this sample.

6.3. Procedure

Ethics approval was obtained from the Human Research Ethics Committee (Tasmania) Network. Please refer to Appendix A for a copy of the Ethics approval letter. To recruit student participants, advertisements for the study were placed on the School of Psychology's website and were posted during first-year lectures. Students were able to collect the questionnaire packages directly from the Student Liaison Office. Once completed, students were asked to return the sealed envelopes to the Student Liaison Officer who then provided them with one hour of course credit.

In order to recruit members of the general public, a total of 45 community welfare organisations were contacted either via email, telephone, or in person and were presented with information about this study. If the organisation agreed to assist with disseminating information about the study, an advertising flyer was left on display within the client access areas. Some organisations agreed to have questionnaires available for potential participants to access freely, whilst other organisations chose to exercise their own discretion in the distribution the questionnaire packages. Overall, 16 community organisations assisted with recruitment; of which, nine made the questionnaires freely available whilst seven distributed the packages according to discretion.

In addition, potential participants were able to register their interest to participate via the School of Psychology's research webpage. Members of the general public who accessed the webpage and expressed their interest in participating were emailed and requested to provide a postal address. Questionnaire packages and a reply-paid envelope were then forwarded to the potential participant's mailing address. Once completed, participants were requested to return the questionnaire using the reply-paid envelope. Once questionnaires were sent out, all mailing addresses and names were destroyed in order to maintain anonymity.

6.4. Design and data analysis

The study was a survey based design. Participants were grouped in accordance with their Resilience Scale (Wagnild & Young, 1993) overall score forming the between groups independent variable. Scores on the Resilience Scale were trichotomised using SPSS Version 19.0. Scores ranging between 55 and 122 were used to form the Low Resilience group (N=63) while scores ranging between 142 and 174 formed the High Resilience group (N=61); mid-range scores (123-141; N= 60) were excluded from ANOVA analyses. Responses to the remaining questionnaires, the IES-R, the Brief COPE, the IPIP scales, the PTCI, and the SCL-90-R were the dependent variables.

For the regression analysis, which included data from all 184 participants, responses to the IES-R, the Brief COPE, the IPIP scales, the PTCI, and the SCL-90-R were the predictor variables, and participants' overall score on the Resilience Scale was the outcome variable. A missing values analysis was performed to determine that the data were missing

completely at random, affecting data for eight participants. An expectation maximization analysis was then used to estimate the means and missing values were then replaced by imputed values. The SCL-90-R 'additional items' subscale was not included in any subsequent analyses due to the amount of missing data (MVA = 47%).

A series of mixed ANOVAs were performed to examine the interaction between resilience and the various self-report questionnaire measures. Resilience (high and low) was the between groups independent variable and the varying questionnaire subscales formed the within subjects independent variable in each analysis. Dependent variables were the scores obtained from the self report questionnaire measures. One-way ANOVAs and paired samples *t* tests were conducted post hoc to test for significant differences between individual means where appropriate. Correlational analyses were used to identify significant relationships between resilience and the dependent variables for the inclusion in the regression analysis. Forward stepwise regression analysis was then conducted to determine the significant concurrent predictors of resilience. An alpha level of .05 was used for all analyses, with Bonferroni adjustments applied for multiple testing.

Chapter 7: Results

7.1. Descriptive statistics

Raw data were analysed using SPSS version 19.0. Table 2 shows the means and standard deviations for the high and low resilience groups and the total sample group for each of the variables. As can be seen in Table 2, the high resilience group reported less frequency of abuse, (physical, psychological and overall), than the low resilience group. The high resilience group also reported lower rates of event-related cognitions, as measured by the IES-R, than the low resilience group. In relation to coping styles, the high resilience group reported engaging more frequently in active coping, seeking instrumental support, planning, seeking emotional support, venting, positive reframing, acceptance, and religion than the low resilience group. Conversely, the low resilience group reported engaging more frequently in self-distraction, denial, substance use, behavioural disengagement, and self-blame than the high resilience group. The mean for both groups on the humour subscale was equivalent. The high resilience group scored higher on all personality variables than the low resilience group, especially on the emotional stability subscale. A significant difference is also observable in the mean scores of the appraisal variables (PTCI) and psychopathology variables (SCL-90-R), with the high resilience group scoring significantly lower than the low resilience group on all variables.

Table 2

Means and Standard Deviations for the Total Sample and the High and Low Resilience Groups

Variable	Score range	Total (N=184)		High Resilience group (N=61)		Low Resilience Group (N=63)	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Resilience	26-182	130.86	22.14	153.90	8.93	107.34	15.98
ABI Physical abuse	1-5	2.17	1.04	1.76	1.13	1.92	1.05
ABI Psychological abuse	1-7.5	1.83	1.04	2.21	1.19	2.57	1.05
ABI Total	1-5	2.34	1.09	2.06	1.14	2.36	1.00
IES-R Avoidance	0-32	14.27	8.26	11.05	8.41	17.94	7.09
IES-R Hyperarousal	0-24	11.56	8.37	8.52	8.12	15.24	7.19
IES-R Intrusion	0-32	13.71	7.88	11.20	8.28	16.87	7.05
IES-R S Total	0-88	39.54	22.68	30.76	23.31	50.05	18.75
BC Active coping	2-8	4.90	2.14	5.02	2.41	4.73	2.05
BC Instrumental support	2-8	4.48	2.29	4.57	2.33	4.08	2.39
BC Planning	2-8	4.67	2.27	4.89	2.56	4.40	2.13
BC Humour	2-8	3.50	2.06	3.34	1.84	3.33	2.31
BC Self distraction	2-8	4.93	2.06	4.82	2.21	4.97	2.04
BC Denial	2-8	2.83	1.45	2.64	1.48	3.09	1.67
BC Substance use	2-8	3.51	2.24	3.30	2.10	3.90	2.54
BC Emotional support	2-8	4.70	2.35	5.02	2.31	4.11	2.52
BC Behavioural disengagement	2-8	3.14	1.74	2.72	1.50	3.68	2.00
BC Venting	2-8	4.03	2.02	4.02	2.04	3.89	2.09

Table 2 *Cont*

BC Positive reframing	2-8	4.47	2.24	4.87	2.28	4.05	2.20
BC Acceptance	2-8	5.02	2.29	5.26	2.40	4.89	2.34
BC Religion	2-8	3.21	2.17	3.39	2.10	2.95	2.17
BC Self-blame	2-8	4.31	2.22	3.52	1.91	5.35	2.52
IPIP Extraversion	10-50	31.21	8.18	33.70	8.49	28.69	7.29
IPIP Agreeableness	10-50	41.72	5.78	42.70	5.35	40.19	6.35
IPIP Conscientiousness	10-50	34.79	6.98	37.25	5.44	32.62	7.94
IPIP Emotional Stability	10-50	27.42	8.25	31.93	7.25	21.82	7.24
IPIP Intellect/Imagination	10-50	37.45	6.11	39.18	5.52	35.35	5.92
PTCI Negative self view	1-7	2.49	1.34	1.78	1.05	3.36	1.31
PTCI Negative world view	1-7	3.57	1.78	2.80	1.86	4.55	1.53
PTCI Self-blame	1-7	2.97	1.43	2.33	1.16	3.82	1.34
PTCI Total	33-231	92.32	44.92	68.14	36.99	122.44	41.54
SCL-90-R Somatisation	.02-2.52	0.95	0.97	.54	.81	1.40	1.04
SCL-90-R Obsessive-compulsive	.02-3.04	1.34	1.01	.84	.78	1.95	.99
SCL-90-R Interpersonal sensitivity	.02-2.68	1.40	1.11	.83	.89	2.14	1.00
SCL-90-R Depression	.02-3.08	1.37	1.06	.78	.87	2.03	.97
SCL-90-R Anxiety	.02-2.92	0.96	1.05	.51	.87	1.52	1.08
SCL-90-R Hostility	.02-3.08	0.88	1.01	.43	.79	1.46	1.06
SCL-90-R Phobic anxiety	.02-2.56	0.68	0.98	.40	.82	1.06	1.05
SCL-90-R Paranoid	.02-2.84	1.00	1.05	.65	.97	1.51	1.05
SCL-90-R Psychoticism	.02-1.59	0.79	1.47	.36	.73	1.32	1.92
SCL-90-R GSI	.02-3.20	1.06	0.92	.58	.79	1.62	.85
SCL-90-R PST	24-81	45.46	24.54	32.74	22.24	59.27	19.51
SCL-90-R PSDI	.95-3.12	2.18	3.41	1.57	.73	2.40	.71

Initially, as a means of establishing validity, the high and low resilience groups were subjected to a one-way ANOVA which confirmed there was a significant difference between the two groups, $F(1, 122) = 397.88$, $MSE = 67195.01$, $p < .001$, with the high resilience group scoring significantly higher on the Resilience Scale ($M = 153.90$, $SD = 8.93$) than the low resilience group ($M = 107.34$, $SD = 19.98$). This analysis was included as a confirmatory manipulation check of the data. Following this, a number of mixed ANOVAs were performed to examine the interaction between resilience and the dependent variables, the results of which are discussed below.

7.2. Analysis of Variance

7.2.1. *The effect of resilience on abuse type*

A 2 [Resilience: high, low] x 2 (Abuse type: physical, psychological) mixed ANOVA was used to analyse whether the frequency of physical and psychological abuse differed across the high and low resilience groups. There was a significant main effect of abuse type, $F(1, 122) = 99.27$, $MSE = 18.19$, $p < .001$, with a moderate effect size ($\eta^2 = .45$). Overall, participants reported a higher frequency of psychological abuse ($M = 2.39$, $SD = 1.13$) than physical abuse ($M = 1.85$, $SD = 1.09$). The main effect of resilience was not significant, $F(1, 122) = 1.99$, $MSE = 4.46$, $p = .16$; however, the interaction between resilience and abuse type approached significance, $F(1, 122) = 2.89$, $MSE = .53$, $p = .091$. As demonstrated in Figure 1, the difference between the high and low resilience groups was larger for psychological abuse than for physical abuse.

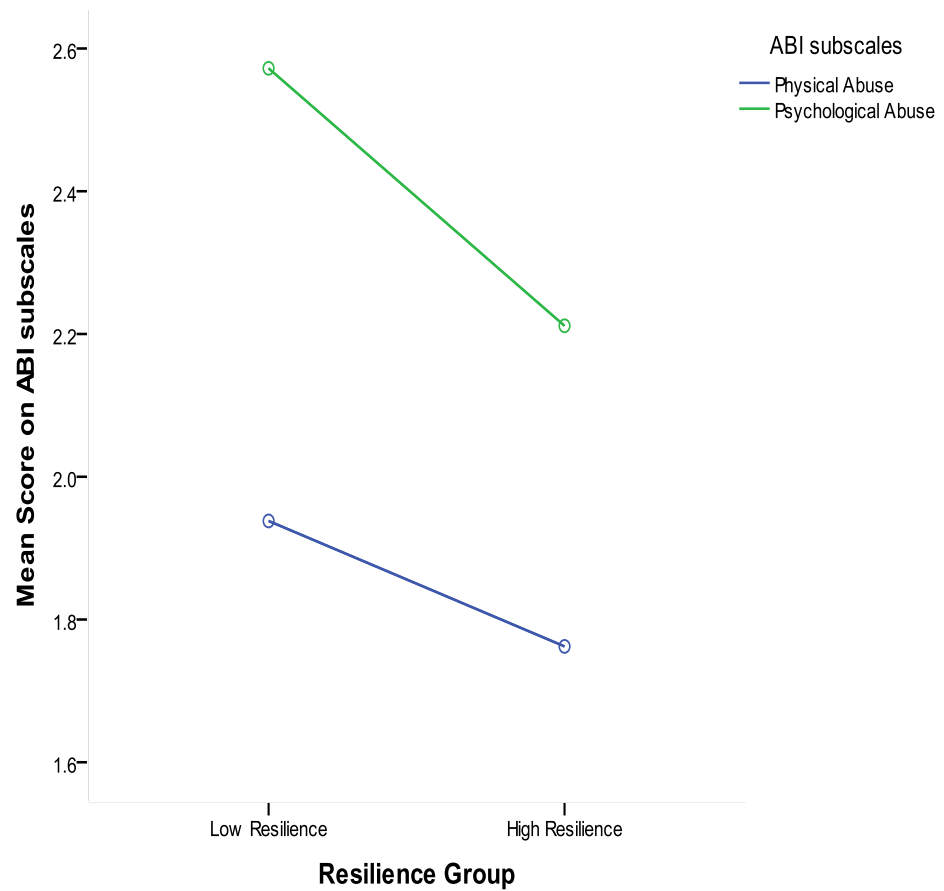


Figure 4. Mean ABI subscale scores for high and low resilience groups.

A one-way ANOVA was then conducted to assess abuse frequency (Low, High) on overall resilience scores. The results showed no significant difference between the high and low abuse groups, $F(1, 162) = 1.91$, $p = 0.17$ on overall resilience scores.

7.2.2. *The effect of resilience on event cognitions*

A 2 [Resilience: high, low] x 3(Event Cognitions: avoidance, hyperarousal, intrusion) mixed ANOVA was used to analyse the effect of resilience levels on event cognitions, as measured by the IES-R. There was a significant main effect for event cognitions, $F(2, 219) = 16.19$, $MSE =$

268.00, $p < .001$. Post hoc comparisons using paired samples t -tests using Bonferroni adjusted alpha levels of 0.025 indicated there was no significant difference between avoidance ($M = 14.55$, $SD = 8.48$) and intrusion ($M=14.08$, $SD = 8.16$), $t(123) = .854$, $p = .395$, but hyperarousal symptoms ($M=11.93$, $SD = 8.37$) were significantly lower than avoidance symptoms, $t(123) = 5.13$, $p < .001$, and also significantly lower than intrusion symptoms, $t(123) = -5.31$, $p < .001$. There was a significant main effect for resilience, $F(1, 122) = 25.84$, $MSE = 3841.70$, $p < .001$, such that the high resilience group had lower levels of event cognitions ($M = 10.26$) than the low resilience group ($M = 16.68$). As can be seen in Table 3, this effect was apparent across all levels of event cognitions variable. The interaction between resilience and event cognitions was not significant, $F(1.8, 219) = .90$, $MSE = 14.89$, $p = .37$.

Table 3

Means and Standard Deviations for the Effect of Resilience on Event Cognitions

Variable	High resilience group		Low resilience group	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<i>Event Cognitions</i>	10.26	-	16.68	-
Avoidance	11.05	8.14	17.94	7.09
Hyperarousal	8.52	8.18	15.24	7.19
Intrusion	11.20	8.28	16.87	7.05

7.2.3. *The effect of resilience on coping*

A 2 [Resilience: high, low] x 14 (Coping: all Brief COPE variables) mixed ANOVA was used to analyse the effect of resilience levels on coping

variables, as measured by the Brief COPE. The main effect of resilience was not significant, $F(1, 122) = 0$, $MSE = .00$, $p = .99$; however, there was a significant main effect of coping, $F(8, 998) = 28.50$, $MSE = 106.36$, $p < .001$, with a small effect size, ($\eta^2 = .19$). The interaction between resilience and coping variables was significant, $F(8, 998) = 7.37$, $MSE = 27.51$, $p < .001$, with a small effect size ($\eta^2 = .06$), as shown in Figure 4. One-way ANOVAs using Bonferroni adjusted alpha levels of 0.004 were used to test for differences between individual means. Post hoc analyses demonstrated the high resilience group reported engaging in the use of emotional support and positive reframing significantly more frequently than the low resilience group, whilst the low resilience group reported engaging in the use of behavioural disengagement and self-blame more significantly frequently than the high resilience group. Group means, standard deviations, and one-way ANOVA results are presented in Table 4.

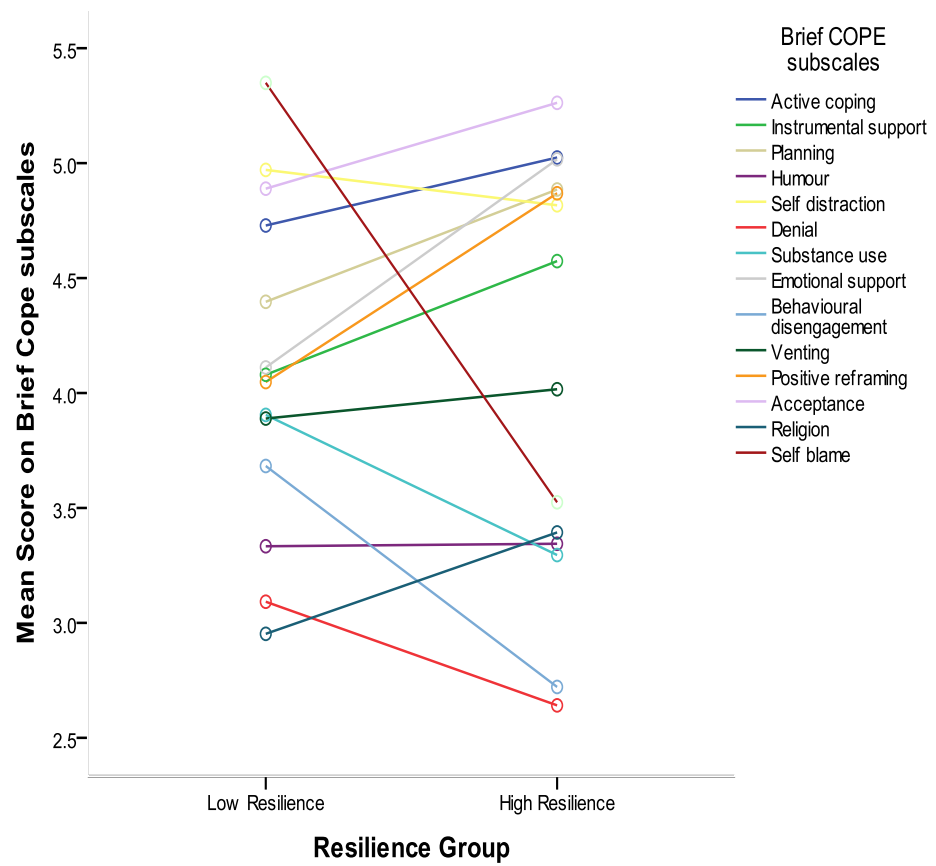


Figure 5. Mean scores for each of the subscales of the Brief COPE for high and low resilience groups.

Table 4

Group Mean Ratings, Standard Deviations, and Post-hoc Results for Each Subscale of the Brief COPE for the High (H) and Low (L) Resilience

Groups

Variable	High resilience		Low resilience		One-way ANOVA		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>	Post hoc
Active coping	5.02	2.41	4.73	2.05	.54	.46	na
Instrumental support	4.57	2.33	4.08	2.39	1.36	.25	na
Planning	4.89	2.56	4.40	2.13	1.34	.25	na
Humour	3.34	1.84	3.33	2.31	.00	.98	na
Self distraction	4.82	2.21	4.97	2.04	.16	.69	na
Denial	2.64	1.48	3.09	1.67	2.54	.11	na
Substance use	3.30	2.10	3.90	2.54	2.12	.15	na
Emotional support	5.02	2.31	4.11	2.51	4.36	.04	na
Behavioural disengagement	2.72	1.50	3.68	2.45	9.15	.003**	L>H
Venting	4.02	2.04	3.89	2.10	.12	.73	na
Positive reframing	4.87	2.28	4.05	2.20	4.17	.04	na
Acceptance	5.26	2.40	4.89	2.34	.77	.38	na
Religion	3.39	2.10	2.95	2.17	1.32	.25	na
Self-blame	3.52	1.91	5.35	2.52	20.52	.000***	L>H

Note: ** $p < .01$, *** $p < .001$ following Bonferroni adjustment.

Following this, the Brief COPE variables were separated into problem- and emotion-focused and separate ANOVAs were conducted to assess the hypothesis that lower levels of resilience would result in stronger endorsement of emotion-focused coping strategies; whereas higher levels of resilience would promote the use of problem-focused coping strategies.

Two two-way mixed ANOVAs were conducted to assess the effects of resilience on problem focused and emotion focused coping. The 2 [Resilience: high, low] x 3 (Problem-focused coping: active coping, planning, and instrumental support) mixed ANOVA conducted on the problem-focused coping subscales showed that there was a significant main effect of problem-focused coping, $F(2, 244) = 6.51, MSE = 10.94, p < .05, \eta^2 = .05$. Post hoc comparisons using paired samples t -tests using Bonferroni adjusted alpha levels of 0.025 indicated the difference between active coping ($M = 4.87, SD = 2.23$) and planning ($M = 4.64, SD = 2.37$), $t(123) = 1.82, p = .07$ was not significant, and the difference between instrumental support and planning was approaching significance, $t(123) = -2.20, p = 0.03$; however, active coping ($M = 4.87, SD = 2.23$) was more frequently endorsed than instrumental support ($M = 4.32, SD = 2.36$), $t(123) = 3.07, p < .01$. The main effect of resilience was not significant, $F(1, 122) = 1.28, MSE = 6.89, p = .26$. The interaction between resilience and problem-focused coping variables was not significant, $F(2, 244) = .27, MSE = .46, p = .73$.

The 2 [Resilience: high, low] x 11 (Emotion-focused coping: humour, self-distraction, denial, substance use, emotional support, behavioural disengagement, venting, positive reframing, acceptance, religion, self-blame) mixed ANOVA conducted on emotion-focused coping subscales showed that the main effect of resilience was not significant, $F(1, 122) = .18, MSE = 4.92, p = .67$; however, there was a significant main effect of emotion-focused coping, $F(10, 1220) = 30.73, MSE = 72.66, p < .001, \eta^2 = .20$. The interaction between resilience and emotion-focused coping

variables was also significant, $F(10, 1220) = 8.57$, $MSE = 20.26$, $p < .001$, $\eta^2 = .07$. One-way ANOVAs were used to test for significant differences between individual means. These analyses demonstrated again that the high resilience group reported engaging in the use of emotional support and positive reframing more frequently than the low resilience group, whilst the low resilience group reported engaging in the use of behavioural disengagement and self-blame more frequently than the high resilience group. Group means, standard deviations, and ANOVA results are presented in Table 4.

7.2.4. *The effect of resilience on personality variables*

A 2 [Resilience: high, low] x 5 (Personality: extraversion, agreeableness, conscientiousness, emotional stability, intellect/imagination) mixed ANOVA was used to analyse the effect of levels of resilience on personality variables, as measured by the IPIP subscales. There was a significant main effect of personality, $F(4, 470) = 104.63$, $MSE = 4019.88$, $p < .001$, $\eta^2 = .46$. There was a significant main effect of resilience, $F(1, 122) = 52.22$, $MSE = 4219.25$, $p < .001$, $\eta^2 = .30$. As shown in Figure 5, there was a significant interaction between resilience and personality, $F(4, 470) = 7.03$, $MSE = 270.02$, $p < .001$, $\eta^2 = .06$. One-way ANOVAs using Bonferroni adjusted alpha levels of 0.01 were used to test for significant differences between individual means. Although all comparisons between high and low resilience groups reached significance, Figure 5 shows the effect is most notable for emotional stability. Group means, standard deviations, and ANOVA results are presented in Table 5.

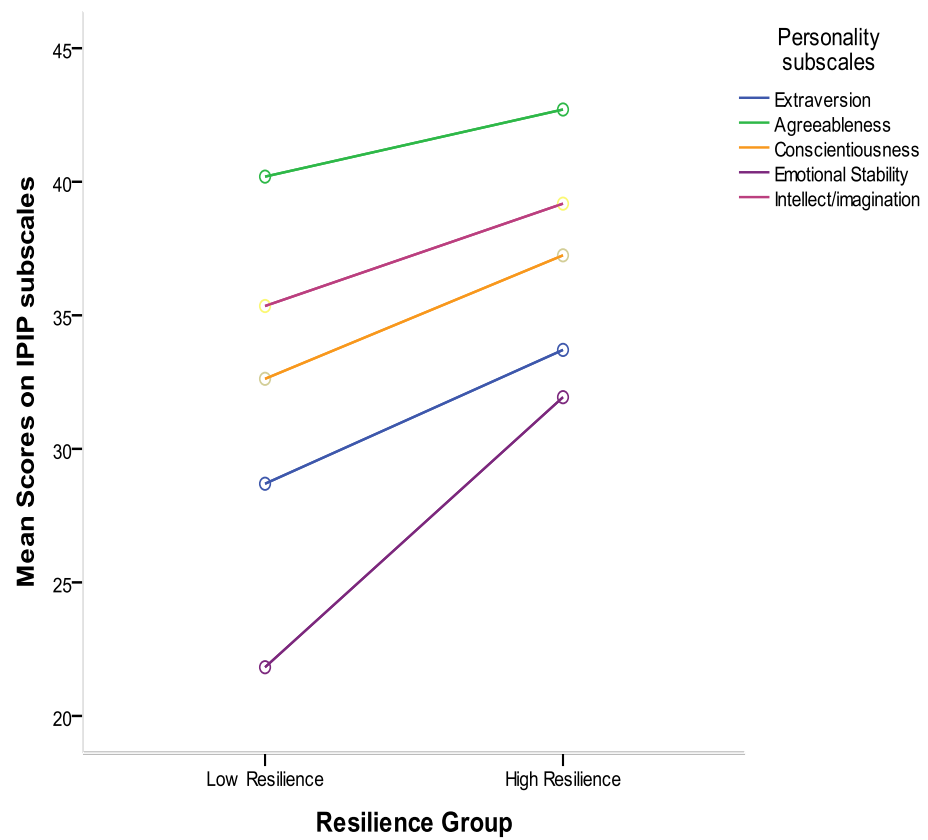


Figure 6. Mean scores for each of the subscales of the IPIP for high and low resilience groups.

Table 5

Group Mean Ratings, Standard Deviations, and Post Hoc Results for Each Subscale of the IPIP Personality Factors for the High and Low Resilience Groups

Variable	High resilience		Low resilience		One-way ANOVA		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>	Post hoc
Extraversion	33.70	8.49	28.69	7.29	12.45	.001**	H>L
Agreeableness	42.70	5.35	40.19	6.35	5.66	.019	ns
Conscientiousness	37.25	5.44	32.62	7.94	14.23	.000***	H>L
Emotional Stability	31.93	7.25	21.82	7.24	60.38	.000***	H>L
Intellect/imagination	39.18	5.52	35.35	5.92	13.89	.000***	H>L

Note: ** $p < .01$, *** $p < .001$ after Bonferroni adjustment

7.2.5. *The effect of resilience on appraisal*

A 2 [Resilience: high, low] x 3 (Appraisal: negative self-view, negative world view, self-blame) mixed ANOVA was used to analyse the effect of resilience levels on appraisal, as measured by the PTCI subscales. There was a significant main effect of appraisal, $F(2, 197) = 40.66$, $MSE = 46.64$, $p < .001$, $\eta^2 = .25$. Post hoc comparisons using paired samples t -tests using Bonferroni adjusted alpha levels of 0.025 indicated there was a significant difference between all appraisal variables, such that participants were more likely to hold a negative world view ($M = 3.69$, $SD = 1.91$) than a negative self-view ($M = 2.58$, $SD = 1.43$), $t(123) = -9.38$, $p > .001$, were more likely to hold a negative world view than engage in self-blame ($M = 3.09$, $SD =$

1.46), $t(123) = 4.08, p < .001$, and were more likely to engage in self-blame than to hold a negative self-view, $t(123) = -5.22, p < .001$. There was a significant main effect of resilience, $F(1, 122) = 60.15, MSE = 241.12, p < .001, \eta^2 = .33$, such that the high resilience group had lower overall levels of event cognitions ($M = 2.30$) than the low resilience group ($M = 3.92$) as shown in Table 6. The interaction between appraisal and resilience was not significant, $F(2, 197) = .60, MSE = .689, p = .52, \eta^2 = .005$.

Table 6

Group Mean Ratings and Standard Deviations for the Main Effect of Resilience on PTCI Scores for the High and Low Resilience Groups

Variable	High resilience		Low resilience	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Negative self view	1.78	1.05	3.36	1.31
Negative world view	2.80	1.85	4.55	1.53
Self-blame	2.33	1.16	3.82	1.34

7.2.6. *The effect of resilience on psychopathology*

A 2 [Resilience: high, low] x 12 (Psychopathology: 12 SCL-R-90 variables) mixed ANOVA was used to analyse the effect of resilience levels of psychopathology. There was a significant main effect of psychopathology, $F(11, 124) = 601.39, MSE = 223556.37, p < .001, \eta^2 = .83$, and a significant main effect of resilience, $F(1, 122) = 53.85, MSE = 3622.23, p < .001, \eta^2 = .31$. The interaction between resilience and psychopathology was also significant, $F(11, 124) = 48.80, MSE =$

18142.03, $p < .001$, $\eta^2 = .29$, and is shown in Figure 6. One-way ANOVAs using Bonferroni adjusted alpha levels of 0.004 were used to test for significant differences between individual means. Although all comparisons between high and low resilience groups reached significance, Figure 6 shows the difference between groups was less pronounced for phobic anxiety, paranoid ideation, and the positive symptom distress inventory than for the other variables. Group means, standard deviations, and ANOVA results are presented in Table 7.

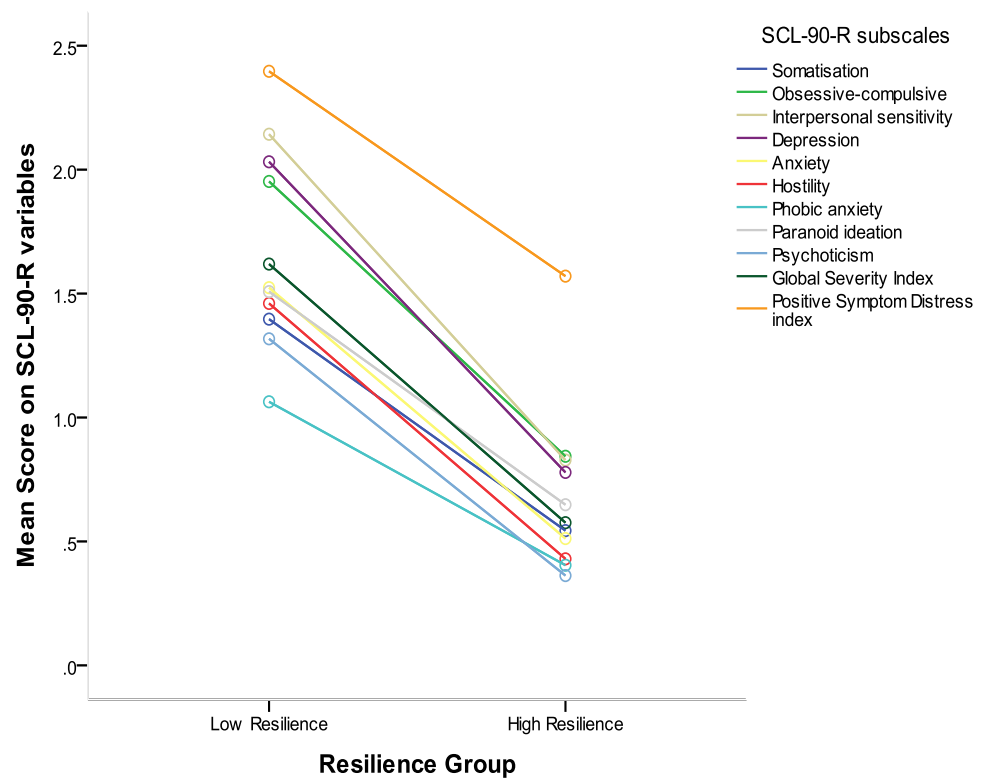


Figure 7. Mean scores for each of the subscales of the SCL-90-R for high and low resilience groups.

Table 7

Group Mean Ratings, Standard Deviations, and Post Hoc Results for Each Subscale of the SCL-90-R for the High and Low Resilience Groups

Variable	High resilience		Low resilience		One-way ANOVA		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>	Post hoc
Somatisation	.54	.81	1.40	1.04	25.87	<.001***	L>H
Obsessive- compulsive	.84	.78	1.95	.99	47.64	<.001***	L>H
Interpersonal sensitivity	.83	.89	2.14	1.00	59.84	<.001***	L>H
Depression	.78	.87	2.03	.97	57.56	<.001***	L>H
Anxiety	.51	.87	1.52	1.08	33.05	<.001***	L>H
Hostility	.43	.79	1.46	1.06	37.59	<.001***	L>H
Phobic Anxiety	.40	.82	1.06	1.05	15.20	<.001***	L>H
Paranoid ideation	.65	.97	1.51	1.05	22.46	<.001***	L>H
Psychoticism	.36	.73	1.32	1.92	13.28	<.001***	L>H
GSI	.58	.79	1.62	.85	50.28	<.001***	L>H
PST	32.74	22.24	59.27	19.51	49.96	<.001***	L>H
PSDI	1.57	.73	2.40	.71	41.00	<.001***	L>H

Note: GSI = Global Severity Index, PST = Positive Symptom Total, PSDI = Positive Symptom Distress Inventory.

*** $p < .001$ after Bonferroni adjustment

7.3. Correlational Analyses

A series of bivariate correlations were used to address the hypotheses related to the strength and direction of the relationship between resilience and the dependent variables. Following this, partial correlation was used to explore the relationships between resilience and event cognitions (as measured by the IES-R), resilience and appraisal (PTCI), resilience and personality (IPIP variables) and resilience and psychopathology (SCL-90-R) while controlling for scores on the Brief COPE. Partial correlation was then used to explore the relationships between resilience and event cognitions, resilience and coping, resilience and appraisal, and resilience and psychopathology while controlling for personality factors (IPIP variables).

7.3.1. *The relationship between resilience and abuse type*

The relationship between resilience and abuse type was examined using the variables of resilience and the subscales of the Abusive Behaviour Index. As expected, there were no significant correlations between resilience and abuse type (physical or psychological) or between resilience and overall frequency of self-reported abuse (ABI Total score) (see Table 8). However, there were strong correlations between physical and psychological abuse, and between physical and psychological abuse with the total score.

Table 8

Correlations Between Resilience and Abuse Type

Variable	Resilience	Physical abuse	Psychological abuse	Total Score
Resilience	-	-	-	-
ABI Physical abuse	-.05	-	-	-
ABI Psychological abuse	-.12	.84***	-	-
ABI Total score	-.10	.92***	.98***	-

Note: *** $p < .001$ (2-tailed).

7.3.2. *The relationship between resilience and event cognitions*

The relationship between resilience and event cognitions was examined using the variables of resilience and the subscales and total score of the Impact of Events Scale Revised. Resilience was negatively correlated to the event cognition variables (see Table 8), suggesting as levels of post-trauma symptoms and a stronger subjective appraisal of impact increase, resilience decreases. When coping factors were controlled for, a weak negative partial correlation between resilience and event cognitions remained significant (see Table 9). An inspection of the zero order correlations suggested that controlling for coping style had very little effect on the strength of the relationship between resilience and event cognitions. When personality factors were controlled for, the relationship between resilience and event cognitions was no longer significant (refer to Table 9).

An inspection of the zero order correlations suggested that controlling for personality resulted in a decrease in the strength of the relationship between resilience and event cognitions, suggesting personality has a degree of influence on the impact of event-related cognitions.

Table 9

Bivariate and Partial Correlation Statistics for the Relationship Between Resilience and Event Cognitions

Variable	Bivariate Correlations (N=184)	Partial Correlations Coping (N=168)	Partial Correlations Personality (N=177)
Avoidance	-.29***	-.19*	-.07
Hyperarousal	-.32***	-.26**	-.08
Intrusion	-.25***	-.23**	-.06
Total score	-.31***	-.25**	-.08

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

7.3.3. The relationship between resilience and coping

The relationship between resilience and coping was examined using the variables of resilience and the subscales of the Brief COPE. As shown in Table 10, resilience was significantly and positively correlated to coping factors of planning, emotional support and positive reframing. Resilience was significantly and negatively correlated to coping factors of denial, substance use, behavioural disengagement, and self-blame. The relationships between resilience and active coping ($p = .06$), resilience and

instrumental support ($p = .09$), resilience and acceptance ($p = .06$) approached significance. The relationship between resilience and coping factors of humour, self-distraction, religion, and venting were not significantly correlated.

As can be seen in Table 11, when personality factors were controlled for, there was a weak positive partial correlation between resilience and coping variables of active coping, planning, emotional support, positive reframing, acceptance and religion. There was a small negative partial correlation between resilience and self-blame. Furthermore, when controlling for personality factors, denial, substance use, and behavioural disengagement were no longer significant, acceptance and religion become significant and self distraction approached significance. An inspection of the zero order correlations suggested that controlling for personality resulted in a small decrease in the strength of the relationship between resilience and coping style, suggesting personality has a degree of influence on the chosen coping style.

Table 10

Pearson Correlation Statistics Between Resilience and Brief COPE Subscales

Variable	Res	A C	I S	Plan	Hum	S D	Denial	S U	E S	B D	VEN	P R	ACC	REL	S B
Res	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A C	.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I S	.13	.66**	-	-	-	-	-	-	-	-	-	-	-	-	-
Plan	.16*	.80**	.74**	-	-	-	-	-	-	-	-	-	-	-	-
Hum	.01	.33**	.46**	.40**	-	-	-	-	-	-	-	-	-	-	-
S D	.02	.59**	.56**	.67**	.43**	-	-	-	-	-	-	-	-	-	-
Denial	-.18*	.15*	.20**	.22**	.36**	.34**	-	-	-	-	-	-	-	-	-
S U	-.15*	.36**	.30**	.39**	.37**	.46**	.398**	-	-	-	-	-	-	-	-
E S	.18*	.59**	.84**	.64**	.47**	.49**	.207**	.33**	-	-	-	-	-	-	-
B D	-.25**	.25**	.28**	.35**	.36**	.47**	.597**	.49**	.22**	-	-	-	-	-	-
VENT	.06	.56**	.61**	.64**	.58**	.54**	.309**	.50**	.62**	.42**	-	-	-	-	-
P R	.20**	.61**	.64**	.67**	.60**	.58**	.266**	.36**	.62**	.35**	.65**	-	-	-	-
ACC	.14	.67**	.63**	.70**	.49**	.69**	.263**	.39**	.67**	.40**	.62**	.71**	-	-	-
REL	.11	.49**	.55**	.58**	.31**	.44**	.213**	.27**	.49**	.24**	.44**	.53**	.45**	-	-
S B	-.34**	.37**	.49**	.50**	.42**	.61**	.514**	.54**	.43**	.65**	.51**	.52**	.56**	.42**	-

Note: Res = Resilience, A C = Active coping, I S = Instrumental Support, Plan = Planning, Hum = Humour, S D = Self distraction, E S = Emotional Support, B D = behavioural disengagement, VEN = venting, P R = Positive reframing, ACC = Acceptance, REL = Religion, S B = Self-blame.

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 11

Partial Correlation Statistics Between Resilience and Brief COPE Subscales when Personality Variables are Controlled For

Variable	Res	A C	I S	Plan	Hum	S D	Denial	S U	E S	B D	VEN	P R	ACC	REL	S B
Res	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A C	.16*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I S	.14	.67**	-	-	-	-	-	-	-	-	-	-	-	-	-
Plan	.26**	.80**	.75**	-	-	-	-	-	-	-	-	-	-	-	-
Hum	.06	.35**	.47**	.41**	-	-	-	-	-	-	-	-	-	-	-
S D	.14	.60**	.57**	.67**	.43**	-	-	-	-	-	-	-	-	-	-
Denial	.08	.16*	.23**	.21**	.38**	.31**	-	-	-	-	-	-	-	-	-
S U	.04	.38**	.34**	.39**	.37**	.44**	.33**	-	-	-	-	-	-	-	-
E S	.16*	.59**	.83**	.65**	.48**	.50**	.26**	.38**	-	-	-	-	-	-	-
B D	-.10	.27**	.33**	.36**	.37**	.47**	.56**	.44**	.28**	-	-	-	-	-	-
VENT	.10	.57**	.62**	.65**	.59**	.55**	.33**	.52**	.63**	.45**	-	-	-	-	-
P R	.23**	.62**	.64**	.68**	.61**	.60**	.31**	.40**	.62**	.39**	.68**	-	-	-	-
ACC	.19**	.67**	.62**	.70**	.50**	.69**	.27**	.41**	.67**	.43**	.62**	.72**	-	-	-
REL	.18*	.49**	.55**	.58**	.31**	.43**	.20**	.26**	.49**	.24**	.45**	.54**	.44**	-	-
S B	-.15*	.40**	.54**	.51**	.44**	.59**	.45**	.49**	.49**	.63**	.54**	.58**	.59**	.42**	-

Note: Res = Resilience, A C = Active Coping, I S = Instrumental Support, Plan = Planning, Hum = Humour, S D = Self Distraction, E S = Emotional Support, B D = Behavioural Disengagement, VEN = Venting, P R = Positive Reframing, ACC = Acceptance, REL = Religion, S B = Self-blame.

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

7.3.4. *The relationship between resilience and personality*

The relationship between resilience and personality was examined using the variables of resilience and the subscales of the IPIP. As expected, resilience was significantly positively correlated to all personality variables, with a strong correlation evident between resilience and emotional stability (refer to Table 12). When coping factors were controlled for, a negative partial correlation between resilience and personality remained significant (see Table 12). An inspection of the zero order correlations suggested that controlling for coping style had a minimal effect on the strength of the relationship between resilience and personality.

Table 12

Bivariate and Partial Correlation Statistics for the Relationship Between Resilience and Personality

Variable	Bivariate Correlations (N= 184)	Partial Correlations Coping (N= 168)
Extraversion	.28***	.21**
Agreeableness	.23***	.17*
Conscientiousness	.38***	.36***
Emotional stability	.58***	.49***
Intellect/imagination	.22***	.19**

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

7.3.5. *The relationship between resilience and appraisal*

The relationship between resilience and appraisal was examined using the variables of resilience and the subscales and total score of the PCTI. As hypothesized, there was a moderate to strong negative correlation between resilience and appraisal (see Table 13). These results suggest resilience decreases as levels of self-blame and negative cognitions increase. When coping factors were controlled for, there was a moderate negative partial correlation between resilience and appraisal (refer to Table 13). An inspection of the zero order correlations suggested that controlling for coping style resulted in a small to moderate decrease in the strength of the relationship between resilience and appraisal. When personality factors were controlled for, the relationship between resilience and appraisal remained significant (see Table 13). An inspection of the zero order correlations suggested that controlling for personality resulted in a decrease in the strength of the relationship between resilience and appraisal, suggesting personality has a degree of influence on the impact of appraisal on resilience.

Table 13

Bivariate and Partial Correlation Statistics for the Relationship Between Resilience and Appraisal

Variable	Bivariate Correlation (N = 184)	Partial Correlation – Coping (N = 168)	Partial Correlation – Personality (N=177)
Negative self view	-.52***	-.38***	-.28***
Negative world view	-.39***	-.32***	-.22*
Self-blame	-.47***	-.29***	-.27***
Total score	-.52***	-.39***	-.30***

Note: ** $p < .01$, *** $p < .001$

7.3.6. The relationship between resilience and psychopathology

The relationship between resilience and psychopathology was examined using the variables of resilience and the subscales of the SCL-90-R 9 (refer to Table 14). As expected, resilience was significantly negatively correlated with all psychopathology variables measured by the SCL-90-R, with the exception of the Positive Symptom Distress Index.

As can be seen in Table 15, there was a moderate negative partial correlation between resilience and psychopathology when coping factors were controlled for, and the relationship between resilience and all psychopathology variables remained significant, with the exception of psychoticism. An inspection of the zero order correlations suggested that

controlling for coping style resulted in a small decrease in the strength of the relationship between resilience and psychopathology.

As can be seen in Table 16, when personality factors were controlled for, there was a moderate negative partial correlation between resilience and psychopathology variables of somatisation, obsessive-compulsive, interpersonal-sensitivity, depression, anxiety, hostility, the global severity index and the positive symptom total. When personality factors were controlled for, resilience was no longer significantly correlated to phobic anxiety, paranoid ideation, psychoticism, and remained uncorrelated with the positive symptom distress index. An inspection of the zero order correlations suggested that controlling for personality resulted in a weak increase in the strength of the relationship between resilience and psychopathology.

Table 14

Pearson Correlations Between Resilience and SCL-90-R Subscales

Variable	Res	Som	Ob-C	I-S	Dep	Anx	Host	Phob	Para	Psych	GSI	PST	PSDI
Res	-	-	-	-	-	-	-	-	-	-	-	-	-
Som	-.40**	-	-	-	-	-	-	-	-	-	-	-	-
Ob-C	-.47**	.71**	-	-	-	-	-	-	-	-	-	-	-
I-S	-.53**	.64**	.69**	-	-	-	-	-	-	-	-	-	-
Dep	-.53**	.70**	.75**	.79**	-	-	-	-	-	-	-	-	-
Anx	-.41**	.79**	.76**	.73**	.78**	-	-	-	-	-	-	-	-
Host	-.44**	.63**	.647**	.68**	.67**	.65**	-	-	-	-	-	-	-
Phob	-.31**	.71**	.60**	.66**	.64**	.78**	.52**	-	-	-	-	-	-
Para	-.36**	.65**	.66**	.77**	.71**	.71**	.68**	.70**	-	-	-	-	-
Psych	-.29**	.42**	.41**	.52**	.48**	.49**	.44**	.49**	.49**	-	-	-	-
GSI	-.52**	.80**	.80**	.82**	.85**	.85**	.74**	.73**	.80**	.52**	-	-	-
PST	-.43**	.77**	.76**	.81**	.81**	.82**	.75**	.73**	.78**	.53**	.88**	-	-
PSDI	-.12	.22**	.20**	.13	.28**	.23**	.14	.09	.07	.06	.16*	.17*	-

Note: Res = Resilience, Som = Somatisation, Ob-C = Obsessive-Compulsive, I-S = Interpersonal Sensitivity, Dep = Depression, Anx = Anxiety, Host = Hostility, Phob = Phobic Anxiety, Para= Paranoid ideation, Psych = Psychoticism, Add = Additional items, GSI = Global Severity Index, PST = Positive Symptom Total, PSDI = Positive Symptom Distress Inventory.

**, Correlation is significant at the 0.01 level (2-tailed).

*, Correlation is significant at the 0.05 level (2-tailed).

Table 15

Partial Correlations Between Resilience and SCL-90-R Subscales when Controlling for Coping Factors

Variable	Res	Som	Ob-C	I-S	Dep	Anx	Host	Phob	Para	Psych	GSI	PST	PSDI
Res	-	-	-	-	-	-	-	-	-	-	-	-	-
Som	-.35**	-	-	-	-	-	-	-	-	-	-	-	-
Ob-C	-.35**	.68**	-	-	-	-	-	-	-	-	-	-	-
I-S	-.42**	.58**	.60**	-	-	-	-	-	-	-	-	-	-
Dep	-.41**	.65**	.68**	.69**	-	-	-	-	-	-	-	-	-
Anx	-.28**	.77**	.70**	.65**	-.28**	-	-	-	-	-	-	-	-
Host	-.34**	.58**	.57**	.62**	.60**	.58**	-	-	-	-	-	-	-
Phob	-.20*	.63**	.54**	.59**	.54**	.74**	.46**	-	-	-	-	-	-
Para	-.27**	.57**	.57**	.71**	.59**	.63**	.62**	.64**	-	-	-	-	-
Psych	-.14	.33**	.31**	.41**	.37**	.39**	.36**	.36**	.42**	-	-	-	-
GSI	-.41**	.78**	.76**	.74**	.77**	.81**	.69**	.67**	.73**	.41**	-	-	-
PST	-.34**	.74**	.74**	.75**	.74**	.78**	.72**	.67**	.69**	.42**	.84**	-	-
PSDI	-.09	.19*	.16*	.07	.25**	.19*	.10	.05	.00	-.00	.10	.11	-

Note: Res = Resilience, Som = Somatisation, Ob-C = Obsessive-Compulsive, I-S = Interpersonal Sensitivity, Dep = Depression, Anx = Anxiety, Host = Hostility, Phob = Phobic Anxiety, Para= Paranoid ideation, Psych = Psychoticism, Add = Additional items, GSI = Global Severity Index, PST = Positive Symptom Total, PSDI = Positive Symptom Distress Inventory.

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 16

Partial Correlations Between Resilience and SCL-90-R Subscales when Controlling for Personality Factors

Variable	Res	Som	Ob-C	I-S	Dep	Anx	Host	Phob	Para	Psych	GSI	PST	PSDI
Res	-	-	-	-	-	-	-	-	-	-	-	-	-
Som	-.18**	-	-	-	-	-	-	-	-	-	-	-	-
Ob-C	-.25**	.64**	-	-	-	-	-	-	-	-	-	-	-
I-S	-.32**	.55**	.59**	-	-	-	-	-	-	-	-	-	-
Dep	-.30**	.63**	.67**	.69**	-	-	-	-	-	-	-	-	-
Anx	-.19**	.75**	.69**	.65**	.72**	-	-	-	-	-	-	-	-
Host	-.26**	.54**	.56**	.57**	.57**	.57**	-	-	-	-	-	-	-
Phob	-.14	.68**	.54**	.61**	.56**	.76**	.45**	-	-	-	-	-	-
Para	-.10	.56**	.56**	.70**	.61**	.63**	.59**	.65**	-	-	-	-	-
Psych	-.08	.32**	.29**	.41**	.36**	.38**	.35**	.38**	.40**	-	-	-	-
GSI	-.29**	.75**	.73**	.74**	.79**	.80**	.66**	.70**	.74**	.41**	-	-	-
PST	-.22*	.72**	.69**	.75**	.75**	.77**	.69**	.68**	.70**	.43**	.84**	-	-
PSDI	-.07	.20**	.17*	.12	.30**	.29**	.12	.09	.05	.02	.14	.16*	-

Note: Res = Resilience, Som = Somatisation, Ob-C = Obsessive-Compulsive, I-S = Interpersonal Sensitivity, Dep = Depression, Anx = Anxiety, Host = Hostility, Phob = Phobic Anxiety, Para= Paranoid ideation, Psych = Psychoticism, Add = Additional items, GSI = Global Severity Index, PST = Positive Symptom Total, PSDI = Positive Symptom Distress Inventory.

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

7.4. Regression Analyses

For regression analyses it is generally recommended to have a minimum of ten participants per variable (Tabachnick & Fidell, 1996). As this basic assumption is not met by the number of participants ($n= 184$) for the current study, not all the variables included in the questionnaires could be used in a multiple regression analysis. As such, only those variables that were significantly and highly correlated with the predictor (resilience) were included in the analysis. These variables were: IES-R avoidance, hyperarousal, and intrusion subscales, denial, planning, substance use, emotional support, behavioural disengagement, positive reframing, self-blame, extraversion, agreeableness, conscientiousness, emotional stability, intellect/imagination, PTCI negative self view, negative world view and self-blame subscales, and all but two of the SCL-90-R subscales. Therefore, as they were not strongly and significantly correlated with resilience the following variables were omitted from the analysis: ABI physical, ABI psychological, ABI total, IES-R total, humour, self distraction, religion, acceptance, venting, instrumental coping, active coping, PTCI total, SCL additional items, and SCL PSDI.

The remaining variables were entered into a Forward Stepwise Regression to determine which combination of variables best predicted resilience. The statistical criteria for entry was a probability of $F \leq .05$, with the criteria for subsequent removal probability of $F \geq .1$. General assumptions of multiple regression were tested for the final model prior to interpretation. VIF was less than 10 and tolerance greater than .2 for all variables indicating an absence of collinearity in data (Bowerman &

O'Connell, 1990; Menard, 1995). The independence of errors assumption was upheld as indicated by the Durbin-Watson test. Further analysis revealed no evidence of heteroscedasticity and distribution of errors was normal. From these analyses the model was deemed to meet the assumptions of multiple regression and was accepted.

At the first step emotional stability was entered, accounting for approximately 33% of the variance of resilience, $R^2=.33$. At the second step, depression was entered, accounting for approximately an additional seven per cent of the variance of resilience, $\Delta R^2=.07$. Planning was entered at the third step, accounting for approximately an additional five per cent of the variance of resilience, $\Delta R^2=.05$. At the fourth step, self-blame was entered, accounting for approximately an additional three per cent of the variance of resilience, $\Delta R^2=.03$. Self-blame was added at the fifth step, accounting for approximately an additional two per cent of the variance of resilience, $\Delta R^2=.02$. At the sixth step, intellect/imagination was entered, accounting for approximately an additional two per cent of the variance of resilience, $\Delta R^2=.02$. At the seventh step, denial was entered, accounting for approximately an additional 1 per cent of the variance of resilience, $\Delta R^2=.01$. Conscientiousness was entered at the eighth step, accounting for approximately an additional one per cent of the variance of resilience, $\Delta R^2=.01$. At the ninth, and final, step, positive reframing was entered, accounting for approximately an additional less than one per cent of the variance of resilience, $\Delta R^2=.008$. In the final model depression was a significant predictor of resilience, $F(9, 174) = 25.72, p < .001$, accounting for

approximately 55 % of the variance, $R^2=.55$. The results for each predictor in the final model from the stepwise regression are shown in Table 16.

As can be seen in Table 17, the results indicate that self-blame is negatively associated with resilience whilst emotional stability and planning are positively associated with resilience; all three variables are the strongest predictors in the model. The results also indicate resilience is negatively associated with depression and negative self view and positively associated with intellect/imagination, denial, conscientiousness, and positive reframing.

Table 17

Summary of Regression Statistics for the Forward Stepwise Regression of Predictors on Resilience

Variable	b	SE	β	ΔR^2
<i>Step 1</i>				.329**
Emotional Stability	1.55	.16	.58	
<i>Step 2</i>				.39***
Emotional Stability	1.10	.18	.41	
Depression	-6.50	1.42	-.31	
<i>Step 3</i>				.45***
Emotional Stability	.1.09	.17	.41	
Depression	-.7.28	1.37	-.35	
Planning	2.33	.54	.24	
<i>Step 4</i>				.48***
Emotional Stability	.97	.17	.36	
Depression	-5.66	1.41	-.27	
Planning	3.39	.61	.35	
Self-blame	-2.44	.71	-.25	

Table 17 *Cont.*

<i>Step 5</i>				.50***
Emotional Stability	.93	.17	.35	
Depression	-5.67	1.39	-.27	
Planning	3.44	.60	.35	
Self-blame	-2.31	.70	-.23	
Intellect/Imagination	.51	.19	.14	
<i>Step 6</i>				.51***
Emotional Stability	.97	.17	.36	
Depression	-6.12	1.37	-.29	
Planning	3.64	.59	.36	
Self-blame	-3.01	.73	-.30	
Intellect/Imagination	.60	.19	.17	
Denial	2.63	.95	.17	
<i>Step 7</i>				.53***
Emotional Stability	.89	.17	.33	
Depression	-5.45	1.38	-.26	
Planning	3.40	.58	.35	
Self-blame	-3.06	.72	-.31	
Intellect/Imagination	.55	.19	.15	
Denial	2.68	.94	.18	
Conscientiousness	.44	.18	.14	
<i>Step 8</i>				.54***
Emotional Stability	.79	.17	.30	
Depression	-3.83	1.52	-.18	
Planning	3.29	.58	.34	
Self-blame	-2.94	.72	-.30	
Intellect/Imagination	.51	.19	.14	
Denial	3.02	.94	.20	
Conscientiousness	.45	.17	.14	
Negative Self View	-2.77	1.17	-.17	
<i>Step 9</i>				.55***
Emotional Stability	.73	.17	.27	
Depression	-3.48	1.52	-.17	
Planning	2.52	.68	.26	
Self-blame	-3.52	.76	-.35	
Intellect/Imagination	.47	.19	.13	
Denial	2.76	.94	.18	
Conscientiousness	.50	.17	.16	
Negative Self View	-2.42	1.17	-.15	
Positive Reframing	1.53	.75	.16	
Total variance explained				54.9%

Note: *** $p < .001$ b = unstandardised estimate, SE = standard error, β = standardised value

Chapter 8: Discussion

8.1. General Discussion

The overall findings of the present study indicate that those participants reporting higher levels of resilience experienced lower levels of negative symptoms (e.g., negative event cognitions, appraisals, and psychopathology), and this was largely influenced by personality factors, primarily emotional stability. Moreover, the results suggest that resilient traits (e.g., personality factors) can be translated into resilient processes (e.g., coping style), as will be discussed in detail in this chapter.

The majority of research examining intimate partner violence to date has utilised the pathogenic approach that has underpinned most psychological trauma research. This has generated a large body of evidence demonstrating that intimate partner violence is indeed traumatising for many of the women who are subjected to it. However, given emerging evidence that resilience is in fact more common than originally thought, it is highly likely that some women demonstrate better adjustment in the face of this type of traumatic stress than others. The individual characteristics that help a woman respond in a resilient manner after having been in an abusive relationship are not well researched and not well understood as yet. Hence, the aim for the present study was to examine what intrapersonal mechanisms promote resilient responses to intimate partner violence.

One of the most frequent criticisms of existing research on intimate partner violence is that samples are frequently drawn exclusively from shelters (Jones et al., 2001). This is problematic as help-seeking participants may not reflect the population of domestic violence survivors

as a whole. For example, these women have been shown to differ on level of violence experienced (e.g., Johnson, 2006). Furthermore, as noted in the introduction, there are a number of women who do not necessarily recognise that they have been exposed to various forms of intimate partner violence. In light of this, convenience sampling was used to recruit participants for this study as the use of a somewhat more diverse, community sample allows inferences to be generalised to a wider group of women who have experienced various degrees of intimate partner violence.

This study opted to move away from the traditional pathological approach to investigating intimate partner violence and instead focus on utilising salutogenic approach which is consistent with resilience research. To reflect this approach, participants were comprised of women who had experienced a range of exposure to intimate partner violence, from none to a very high level of exposure. The inclusion of referent, non-traumatised participants allowed for identification of unique predictors of resilience. Further to this, data analysis was directed at examining differences between high and low resilience groups, as opposed to high and low abuse groups. Indeed, initial analyses supported this approach as there was no significant difference found between degree/severity of abuse and overall resilience scores.

The initial hypothesis that participants reporting higher rates of physical and psychological abuse would report lower levels of resilience was tested using mixed ANOVAs. There was a significant main effect of abuse type, such that participants reported a higher frequency of psychological abuse than physical abuse. Given that physical and sexual

abuse very rarely occur without a component of psychological abuse (Pittman & Lee, 2004), and psychological abuse also occurs in isolation (Claussen & Crittenden, 1991), it is not unexpected that participants in the current sample have reported higher rates of psychological abuse than physical abuse. However, no significant differences were detected between high and low resilience groups in terms of exposure to both physical and psychological abuse, nor was there a significant interaction between abuse type and resilience. Furthermore, overall resilience was independent of abuse exposure. This suggests higher levels of abuse did not result in lower levels of resilience, and resilience was independent of exposure to abuse. Therefore, the results do not support this hypothesis.

The lack of support for this hypothesis is inconsistent with previous findings that cumulative traumas result in poorer psychological outcomes (e.g., Norris & Kaniasty, 1994). The ABI is designed to assess the degree, frequency, and intensity of the abuse experienced. It is therefore presumed endorsement of various questionnaire items as “frequently” or “very frequently” implies the participant was subjected to these abusive behaviours on more than one occasion, thereby exposing the participant to multiple (or cumulative) traumas. It has been speculated that repeated exposure to traumatic events leads to sensitization, not desensitization (Herman, 1992; Solomon & Prager, 1992). As sensitivity increases, responsiveness to conditioned trauma cues (e.g., yelling, the smell of alcohol on the perpetrator’s breath, or the time of day attacks most often occur) also increases (Foa et al., 1989). In turn, the activation of conditioned responses is likely to increase arousal and distress, and thereby

implies a decreased ability to respond to traumatic experiences in a resilient manner. This explanation suggests resilience is a process, and that repeated exposure to traumatic events has a deleterious effect on resilience.

However, researchers differ in their conceptualization of resilience, with some suggesting that it is a trait (e.g., ego resilience), whereas others portray it as a dynamic developmental process (Luthar et al., 2000). That resilience was found to be independent of abuse exposure in this study suggests that resilience is a trait, such that, a specific constellation of protective factors were pre-existing for those women displaying high resilience in this sample and these protective factors enabled them to function relatively effectively despite the frequency and/or severity of abusive experiences they reported.

Given that this sample comprised women exposed to a range of abusive behaviours in terms of frequency and severity, it is possible that both process and trait factors contributed to this outcome. It may be that those women with less exposure to intimate partner violence have higher trait resilience which manifested as less tolerance for such behaviour and had the capacity to terminate the relationship before the situation worsened. It also may be that those women exposed to higher levels of intimate partner violence in the current sample engaged in resilient processes by planning, preparing and eventually terminating the abusive relationship, as was noted by Humphrey's (2003) in her study of resilient battered women.

It was expected that the high resilience group would report lower levels of negative event cognitions, appraisals, and psychopathology than the low

resilience group. The results of mixed ANOVAs showed a significant main effect of resilience, indicating the high resilience group experienced lower levels of negative event cognitions, appraisals, and psychopathology than the low resilience group. The significant interaction found between resilience and psychopathology suggests that resilience was independent of event cognitions and appraisals, but as resilience increased, psychopathology decreased.

The finding that participants reported elevated rates of avoidance and intrusion symptoms (event cognitions) is consistent with the research (Baldry, 2003; Joseph et al., 1995; Saladin et al., 1995; Taft et al., 2005; van der Kolk, 2001). This result is understandable if one is to consider the role of classical conditioning in the development of avoidance symptoms (e.g., Foa et al., 1989), and the empirical evidence that avoidance can then lead to and maintain intrusive symptoms (e.g., Falsetti et al., 2002; Wenzlaff & Wegner, 2000).

That there was no significant interaction between resilience and event cognitions was unexpected in light of the considerable body of previous research indicating avoidance, intrusion and hyperarousal are strongly related to less adaptive outcomes (e.g., Dunmore et al., 1999; Dunmore et al., 2010; Ehlers et al., 1998; Steil & Ehlers, 2000). This result may suggest that these constructs are independent of each other, such that resilient individuals may still experience negative event cognitions but the cognitions do not detract from a woman's ability to recover from experience abuse within an intimate relationship. If this is the case, this result would suggest that resilience is an innate trait of the individual.

However, this may be a reflection of one of the main limitations of the current study, insofar as the duration since the abuse was not measured or accounted for. As the IES-R measures event cognitions as experienced in the past seven days, it is therefore possible that participants were no longer experiencing these symptoms or had found strategies to cope effectively with them. If participants had developed effective coping strategies this is presumed to be reflective of resilient processes and outcomes.

Further to this, since highly resilient individuals often proactively seek social support and less resilient individuals often display avoidance coping (Werner-Wilson et al., 2000), avoidant individuals would not likely have volunteered for this study as they might expect the process to trigger negative emotions or cognitions they were actively seeking to avoid. This concern was indeed expressed explicitly by community welfare organisations that were approached to assist with recruitment of potential participants; in fact, so strong was their concern that most organisations declined to assist with recruitment.

That there was a main effect of appraisal but a lack of a significant interaction between resilience and appraisals suggests that these constructs may also be independent of each other. Again, this result indicates that the participants in this study were engaging in resilient processes regardless of exposure to intimate partner violence. That resilience and appraisals were independent of each other also suggests other factors are contributing to the manifestation of resilient outcomes insofar as highly resilient women may experience self-blame but have other resources with which to buffer the negative effect of this, whereas less resilient women who experience self

blame may not have access to other resources to protect against the deleterious effects of self-blame.

However, the results indicate self-blame or a negative view of self or world is not necessarily detrimental to achieving a resilient outcome. Indeed, there is some suggestion within the literature that self-blame can serve in a protective manner. As noted in Chapter 4, Janoff-Bulman (1979; 1992) made a distinction between behavioural self-blame and characterological self-blame, and then suggested that behavioural self-blame will lead to less posttraumatic distress as it leads victims to believe they have more control over events and are therefore less likely to be involved in traumatic experiences in the future. Several studies have supported this theory. For example, Delahanty et al. (1997) found that people who agreed with the police that they were responsible for their own motor vehicle accidents reported less distress over the following year than those who agreed with the police that they were not responsible for their accidents, and Koss, Figuredo, and Prince (2002), who employed structural equation modelling, found that behavioural self-blame was somewhat protective even among victims of rape.

If resilience is conceptualised as a dynamic process of adaptation (as opposed to an innate trait) to adverse circumstances and more than the absence of psychopathology (Bonanno, 2004; Masten & Reed, 2001), it would stand to reason that an individual's response to traumatic experiences has the potential to change and improve; therefore, resilience and psychopathology may not necessarily be mutually exclusive. The finding of the current study indicates that psychopathology decreases as resilience

increases. Whilst there is evidence to support the trait characteristics of resilience, this outcome suggests there is also a process component to resilience, such that women can respond to intimate partner violence in a manner that can assist in ameliorating the deleterious psychological effects of this type of traumatic stress.

As previously noted, some prior studies have assessed resilience on the basis of no or few PTSD symptoms (e.g., Bonanno, et al., 2005; 2006; 2007). Whilst this ‘blanket’ approach is not necessarily incorrect, this method may not capture the progressive changes that may occur as an individual adjusts to the traumatic experience.

As this study utilised Masten and Reed’s (2001) definition of resilience as “a pattern of positive adaptation in the face of significant adversity or risk” (p. 75), the hypothesis that resilience would have a negative relationship with event cognitions, appraisals, and psychopathology was supported. The ability to cognitively reappraise, reframe, or find positive meaning in an adverse event is characteristic of many resilient individuals (Southwick, Vythilingam, & Charney, 2005).

Resilience has been associated with a tendency to perceive potentially stressful events in less-threatening terms (Tugade & Fredrickson, 2004) and to remain optimistic about the ability to cope with stressors. These data are coherent with previous research findings and particularly with the assertions of Ehlers and Clark (2000) who note that people who fail to recover naturally from a trauma perceive a sense of current threat due to the development of negative beliefs about the self and the world. It is

important to note that perceiving threat in negative experiences has adaptive benefits at the time of the event and perhaps, in the immediate aftermath. However, over prolonged periods, negative cognitions and appraisal style can have deleterious effects on one's psychological and physical well-being (Folkman & Lazarus, 1985). The data of the current study appears to capture this as women who reported higher levels of resilience reported fewer symptoms of cognitive, physical, and psychological distress overall. Most relevant however, the results of the current study replicate the findings of Humphreys (2003), where resilience was reported to be significantly and inversely correlated with a number of dimensions of the SCL-R-90, particularly somatisation, obsessive-compulsive, interpersonal sensitivity, depression, and anxiety, as well as each of the three global measures.

Correlational analyses supported the hypothesis that all personality variables would have a positive relationship with resilience and event cognitions, appraisals, coping, and psychopathology. It was then anticipated that controlling for personality would reduce the strength of the relationship between resilience and event cognitions, coping style, appraisals, and psychopathology. This hypothesis was supported, as when personality factors were controlled for, there were small to moderate decreases in the strength of the relationship between resilience and event cognitions, coping style, appraisals, and psychopathology. Most notable was the decrease in the relationship between resilience and event cognitions. This result suggests personality has a degree of influence on the impact of these variables on resilience; such that, as resilience increases, the

likelihood of experiencing negative event cognitions, coping style, appraisals, and psychopathology decreases.

A strong positive link has previously been found between resilience and the personality traits of emotional stability, extraversion, conscientiousness, openness to new experiences, and agreeableness (Davey et al., 2003; Rioli et al., 2002). In line with these findings, there is accumulating support for applying the Big Five measure to cluster individuals into well adjusted (resilient) and more vulnerable subgroups (Asendorpf, Borkenau, Ostendorf & Van Aken, 2001; Rammstedt, Riemann, Angleitner & Borkenau, 2004). Most studies show evidence for the resilient personality profile being characterized by a high score on all the Big Five factors, which is further replicated by the current study. These outcomes are unsurprising given that the Big Five personality variables embody characteristics such as the ease and frequency with which a person becomes upset and distressed, planning, persistence, impulse control, reliability, purposeful striving toward goals, assertiveness, confidence, energy, a sense of agency and sociability, and a tendency toward happiness and these characteristics are often used as measures of resilience (Ashton et al., 2002; Depue & Collins, 1999; Depue & Morrone-Strupinsky, 2005; Digman & Inouye, 1986).

The hypothesis that controlling for coping would also reduce the strength of the relationship between resilience and event cognitions, appraisals, and psychopathology was then assessed, again using partial correlations. The results supported the hypothesis, such that there was a small decrease in the strength of the relationship between resilience and

event cognitions, appraisals, and psychopathology when coping style was controlled for. This suggests that as resilience increases, coping style acts as a protective mechanism to reduce the impact of negative event cognitions, appraisals, and psychopathology related to the experience of intimate partner violence. Once again, these data point towards coping style as an integral facet of resilience as a process. Quite some time ago, coping emerged as a factor that mediates the relationship between stress and psychological adjustment (Folkman & Lazarus, 1988) and the results of the present study provide further support for that.

It was also expected that the high resilience group would endorse problem-focused coping strategies more strongly than the low resilience group; whilst the low resilience group would endorse emotion-focused coping more strongly than the high resilience group. This hypothesis was only partially supported. Analyses using ANOVAs did not detect significant differences between the two groups with regards to problem-focused coping; however, there was a significant interaction between resilience and emotion-focused coping, such that the high resilience group reported engaging in the use of emotional support and positive reframing more frequently than the low resilience group, whilst the low resilience group reported engaging in the use of behavioural disengagement and self-blame more frequently than the high resilience group. This may be related to changes in coping strategies since the time of the event as there is evidence in the empirical literature that women's coping strategies change from emotion-focused to problem-focused as they progress through their recovery and healing (e.g., Fiore-Lerner & Kennedy, 2000). Furthermore,

it may be the result of the interrelatedness of problem- and emotion-focused coping.

Carver and Conner-Smith (2010) explained that effective problem-focused coping diminishes the threat, but in so doing also diminishes the distress generated by that threat. Effective emotion-focused coping reduces distress, making it possible to consider the problem more calmly, perhaps accommodating better problem-focused coping. As the current sample comprised women who had never or were no longer in an abusive relationship, it could be surmised that there was no longer a need for them to engage in problem-focused coping, and that emotion-focused coping was most relevant in aiding them to make sense of their experience.

Lazarus and Folkman (1984) suggested the choice and usefulness of chosen coping strategies could be affected by environmental constraints, personal constraints, and extreme threat. In the case of battered women, multiple examples of coping constraints could be cited, e.g., lack of social contacts, high dependency needs, severity and frequency of abuse. Although problem-focused coping may seem preferable in that it allows individuals to change the source rather than the outcome of a particular stressor, emotion-focused coping is also highly valuable given its ability to manage failures made by an individual when attempting to engage in problem-focused coping. This may be particularly useful when a situation is difficult or impossible to change, particularly if there are risks of imminent harm, such as is often the case in abusive intimate relationships.

Examining coping as a process is quite difficult as coping is dynamic and influenced by social feedback and other contextual variables. This is especially pertinent in research on intimate partner violence, where the dynamics of chronic abusive relationships contribute to the complexity of the coping process. Future research that examines women at various stages in abusive relationships may begin to aid our understanding how coping may change over the course of a relationship.

Finally, forward stepwise regression was used to test which variables were significant statistical predictors of resilience. The results supported the hypothesis that emotional stability and problem-focused coping would be positive significant statistical predictors of resilience, whilst self-blame, and psychopathology would be negative significant statistical predictors of resilience. The results also indicated intellect/imagination and conscientiousness (personality variables), denial and positive reframing (coping variables), and negative self view (appraisal variable) were significant predictors. In short, the regression analysis indicated resilient outcomes to intimate partner violence are determined by both individual traits and process factors.

Personality variables represent the trait factors of resilience. The finding that emotional stability demonstrated one of the strongest predictive relationships to resilience was not surprising. Individuals low on emotional stability (e.g., high neuroticism) generally report more negative affect, lower self-esteem, poorer coping, difficulty controlling impulses, and more symptoms of depression and anxiety (Costa & McCrae, 1992; McCrae, 1990). Hence, this finding is consistent with the outcomes of other

empirical research, albeit most studies have usually assessed neuroticism as opposed to emotional stability (e.g., Campbell-Sills et al., 2006; Furnham et al., 1997). Likewise, conscientiousness has been positively related to recovery after trauma (Rioli et al., 2002), and it is thought that characteristics such as maintaining routines/habits, preferring order and structure, and working systematically (McCrae & Costa, 1997) assists in coping with psychosocial stressors (Friborg et al., 2005).

Intellect/imagination has otherwise been referred to as openness within the wider literature, and has also been recently linked to resilient adaptation to trauma and stressful life events (e.g., Davey et al., 2003). As previously noted, there is accumulating support for applying the Big Five measure to cluster individuals into resilient and more vulnerable subgroups (Asendorpf, et al., 2001; Rammstedt, et al., 2004). In particular, there is growing strength for the association between resilience and personality factors of emotional stability, conscientiousness, and openness (e.g., Rioli, et al., 2002), and the present results are consistent with this body of research.

There is an argument within the literature that in trauma recovery, resilience and impairment are not necessarily opposites, but instead potentially represent the different aspects of adjustment to an abnormal experience (Bussey & Wise, 2007; O’Leary, 1998). The results of the current study certainly provide support for this argument, as although depression was negatively correlated with resilience, its predictive power was not strong. Interestingly, resilience was not predicted by the presence of any other psychopathology indices. Individuals who suffer with

depression commonly experience anhedonia, low levels of positive emotion, diminished responsiveness to pleasurable stimuli, and an attentional bias toward depression-congruent information such as sad, unpleasant, and negative words, facial expressions, and memories (Hasler, Drevets, Manji, & Charney, 2004). Therefore, their ability to cognitively reappraise, reframe, or find positive meaning in an adverse event, which is characteristic of many resilient individuals, is impaired.

Although there is an abundance of literature demonstrating the deleterious effects of depression on the psychological wellbeing of women exposed to intimate partner violence (e.g., Kernic, Holt, Stoner, Wolf, & Rivara, 2003; Martinez-Torteya et al., 2009; Taft et al., 2005), a review of the available empirical literature identified the study undertaken by Humphreys (2003) as the only empirical study to date that has examined the relationship between resilience and depression in women exposed to intimate partner violence. As noted above, this study reported resilience to be significantly and inversely correlated with a number of dimensions of the SCL-R-90, including depression.

Drawing from the broader trauma and resilience literature, Wingo et al. (2010) conducted a cross-sectional study of 792 highly traumatized, predominantly African Americans, and reported that both childhood abuse and other trauma exposure (unspecified) significantly contributed to depressive symptom severity while resilience significantly mitigated it. Additionally, these authors found that resilience moderated depression severity both as a main effect and an interaction with other trauma exposures. Meanwhile, another study examined the effect of abuse

cessation on depressive symptoms among women abused by a male intimate partner, reporting that cessation of physical/sexual abuse only was associated with a 27% decline, and cessation of both types of abuse was associated with a 35% decline in the likelihood of depression (Kernic et al., 2003).

Further to this, a considerable number of studies have examined the relationship between childhood abuse and adult depressive symptoms (e.g., Bifulco et al., 2002; Briere & Runtz, 1988; Chapman et al., 2004; Gibb et al., 2001; Ovara, McLeod, & Sharpe, 1996; Rich, Gingerich, & Rosen, 1997; Spertus et al., 2003). Notably, one cross-sectional study found that, given similar levels of childhood emotional neglect, individuals with high resilience had fewer general psychiatric symptoms compared to those with low resilience (Campbell-Sills et al., 2006); however, the authors did not specify results in relation to depressive symptoms. Nevertheless, depression is not limited to those individuals with a trauma history. There is considerable empirical evidence documenting the relationship between depression and factors such as low social support, financial difficulties, relationship stress, and environmental stressors within the general population (e.g., Grav, Hellzèn, Romild, & Stordal, 2012; Husain, Gater, Tomenson, & Creed, 2004; Wang & Patten, 2002). These studies all provide invaluable information about the psychological wellbeing of individuals exposed to various types of abuse and stressors but fail to explain what mechanisms allow some of those individuals to adapt to with greater ease.

The hopelessness theory of depression (Abramson, Metalsky, & Alloy, 1989) may offer a possible explanation for this process. According to this theory, individuals who are inclined to make global attributions and infer negative consequences and negative characteristics about themselves are considered to be more vulnerable to a cognitively mediated subtype of depression following exposure to a traumatic or negative life event. This theory is also consistent with the suppositions made by Janoff-Bulman (1979) regarding appraisals and self-blame.

Indeed, prior research has demonstrated a link between negative self attributions/self-blame and increased rates of depression (e.g., Andrews & Brewin, 1990; Feinauer & Stuart, 1996). Furthermore, shame has been identified as a key element of depression (Lewis, 1987), and may be seen as a natural extension of the helplessness and defeat that many victims experience (Finkelhor & Brown, 1986). The relationship between abuse and shame has also been supported by research on physically and sexually abused women (e.g., Andrews, 1995).

When considering the application of these theories to intimate partner violence, it is understandable that some women exposed to abuse may develop depressive cognitions, particularly as a direct result of insidious and unrelenting nature of psychological abuse (e.g., you're worthless; no-one else will ever love you, etc.). It is likely that these depressive cognitions will change once the abusive relationship has been terminated, and this was certainly found by Andrews and Brewin (1990) who reported self-blame to be at its highest whilst still in the violent relationship, but this changed to other-blame once the relationship was over. This suggests that

negative cognitive style and attribution of blame are malleable over time, and this therefore allows for the possibility that other resilient characteristics will influence depressive symptoms.

A number of coping variables presented as significant predictors of resilience in the final regression model, specifically planning, denial, self-blame, and positive reframing. Self-blame was negatively correlated with resilience, whilst planning, denial, and positive reframing were positively correlated. Researchers have proposed that behavioural self-blame is more protective than characterological self-blame (Aranta & Burkhart, 1996; Janoff-Bulman, 1979). In this study, both were significant negative predictors of resilience in the final model if one is to consider the Brief COPE self-blame variable as behavioural and the PTCI negative self view variable as characterological (see Startup, Makgekgenene, & Webster, 2007).

Although it was discussed above that several studies have found behavioural self-blame to have protective qualities, other studies have found both behavioural and characterological self-blame to be associated with posttraumatic distress (e.g., Frazier, Berman, & Steward, 2002). Behavioural self-blame has been consistently associated with more concurrent distress among rape survivors (e.g., Arata, 1999; Frazier, 1990, 2000; Frazier & Schauben, 1994; Meyer & Taylor, 1986; Koss et al., 2002). Further to this, O'Neill and Kerig (2000) reported that both behavioural and characterological self-blame were associated with distress among victims of domestic violence, and suggested it may be hard for such victims to blame their behaviour without also blaming their characters. Although some

researchers have found self-blame to be protective (e.g., Delahanty et al., 1997; using a sample of motor vehicle accident victims), the potential for self-blame to be protective may vary with different kinds of traumatic experience.

As this study also included women who had no exposure, or very limited exposure to intimate partner violence, it is also worth noting that self-blame appears to be particularly characteristic of people low in emotional stability (i.e., high in neuroticism) (McCrae & Costa, 1986). Neuroticism emerges in patterns of coping in response to a major stressful event and cross-sectional studies have shown that certain coping modes, namely wishful thinking and self-blame, help explain why low emotional stability leads to increases in anxiety and depression under stress (Felton, Revenson, & Hinrichsen, 1984; Folkman & Lazarus, 1985). As is becoming evident from the results of the current study and the broader body of research, the interplay between low emotional stability and the subsequent increase in psychopathology and poor coping style has a deleterious effect on resilience.

On the other hand, the final regression model suggests that planning, denial, and positive reframing are adaptive coping strategies that promote resilient outcomes for all women, regardless of degree or frequency of exposure to intimate partner violence. These coping strategies are consistent with the individual attempting to regain a sense of control over their experiences. Theories regarding the role of perceived control in adjustment to stressful life events typically have hypothesized that events perceived as uncontrollable are more distressing than those perceived as

controllable (e.g., Foa, Zinbarg, & Rothbaum, 1992). Indeed, perceived control has been found related to PTSD severity (Kushner, Riggs, Foa, & Miller, 1993). O'Neill and Kerig (1998) reported that women who had left an abusive relationship had greater perceived control than those who did not, and perceived control was positively related to self-esteem and negatively to psychological difficulties, moderating the relationship between self-esteem and violence. A relationship between perceived control and well-being was also found by Follingstad et al. (1992) and by Cohen and Edwards (1988).

The general consensus that adaptive outcomes are better facilitated by problem-focused coping, and hindered by emotion-focused coping (e.g., Penley, Tomaka, & Wiebe, 2002; Waldrop & Resick, 2004) was only partially support by the current study as noted above. The use of emotion/avoidant coping strategies has previously been demonstrated to be relatively ineffective for dealing with stressful experiences in general and, more specifically, for dealing with the experience of intimate partner violence (e.g., Calvete et al., 2008; Fiore-Lerner & Kennedy, 2000; Mitchell & Hodson, 1983; Taft et al., 2007). However, as this sample group consisted of women who had been exposed to intimate partner violence to a greater or lesser extent and in some cases had never experienced intimate partner violence and because the duration since exposure may have varied considerably (although not assessed), the results suggest that resilient outcomes may be achieved by using a variety of coping strategies at different times throughout the adjustment process. This perspective is consistent with an understanding of effective coping as

effectively managing the adversity one is faced with in order to function at an optimal level.

Overall, this regression model is consistent with the empirical literature examining resilience particularly that which emerged early on when investigations were primarily focused on protective and vulnerability factors. As reviewed in Chapter 2, early resilience research arising from developmental psychology identified factors such as having an internal locus of control, sound problem solving ability, productive critical thinking skills, high expectations for the future, a positive social orientation, and a sense of personal worthiness as contributors to resilient outcomes (Garmezy, 1974; 1991; Rutter, 1979; 1985; 1987; Werner & Smith, 1982). Given the factors included in the final model, it may be worth considering resilience as both a trait and a process, such that resilient processes may be the translation of resilient traits into action.

8.2. Theoretical implications

As noted in the discussion above, women in the current sample group demonstrated resilience to be both a trait and a process regardless of exposure to abuse. This is interesting given the manner in which resilience has been conceptualised within the broader literature. As reviewed in Chapter 2, there is still no universally accepted definition of psychological resilience (Wald et al., 2006). Early theorists initially postulated that resilience was a trait (e.g., Rutter, 1985); insofar as resilience was viewed as a personality trait or set of variables unique to the individual that served to protect psychological wellbeing under adverse circumstances. Whilst this perspective is still current within today's literature (e.g., Connor &

Davidson, 2003), over the last two decades many researchers have come to view resilience as a dynamic, modifiable process that allows individuals to adapt well, not only to major life events, but to daily hassles as well (Lazarus & Folkman, 1984; Luthar, Cicchetti, & Becker, 2000). From this perspective, the “ordinary magic” of dealing with difficult life circumstances results from the normal functioning of human adaptational systems (Masten, 2001) and is not as rare as was once suggested (Bonanno, 2004).

As the results of the current study suggest resilience is a combination of both trait and process, one way to interpret this would be view resilient processes as the manifestation of underlying resilient traits. This is to suggest that if an individual is high on resilient traits (e.g., personality variables such as high emotional stability), this will translate into resilient processes (e.g., adaptive coping strategies) and more adaptive, resilient outcomes. Conversely, those individuals demonstrating low resilient traits (e.g., low emotional stability/high neuroticism) would be expected to utilise less resilient processes and therefore have less adaptive psychological outcomes (Brezo et al., 2006; Malouff et al., 2005; 2007).

Whilst the possibility of resilience being both a trait and a process appears to have received limited empirical attention thus far (but see Jacelon, 2008), there is a growing body of evidence to suggest that personality and coping interact to predict adjustment, whereby personality-related vulnerabilities may either be increased or decreased by coping style. For example, specific emotion-focused coping strategies have been found to strengthen the link between neuroticism and posttraumatic stress symptoms

(Chung, Dennis, Easthope, Werrett, & Farmer, 2005). However, the ability to clearly determine whether resilience is a trait, a process, or a combination of both continues to be clouded and somewhat distorted as much of what is known about adjustment in trauma-exposed adults has been derived from studies of treatment-seeking or distressed individuals recruited from clinical settings (Bonanno, 2004). One particular strength of the current study is that the sample group was not limited to women receiving psychiatric treatment or assistance from shelters, which therefore allows for a wider interpretation of resilient outcomes in this cohort. Additional studies examining resilience in this sample population would benefit from using non-clinical populations in order to help clarify the mechanisms of resilience.

Although the purpose of this study was not to directly test Joseph's et al. (1995) model, but to utilise it as a theoretical foundation, there are some comparisons worthy of reflection. Remembering that social support was not measured in this study, the results of the present study indicate resilience was independent of event stimuli, event cognitions, and appraisals, but was directly related to personality, coping, and emotional states. This outcome supports the proposed link between personality, coping, and psychopathology included in the model. However, it suggests that event cognitions and appraisals may be a by-product of the interplay between personality and coping when applied to resilience in this particular cohort. Therefore, it may be the case that event cognitions and appraisals are not key components of trauma adaptation as proposed by the model, which is worth further investigation.

Any further research using this model would be wise to include social support as a variable, particularly as social support has previously been established as an important predictor of coping and psychopathology in trauma-exposed cohorts (e.g., Zoellner, Foa, & Brigidi, 1999). It would also be important to directly examine the relationship between personality and levels of social support (perceived or otherwise), as certain personality characteristics (e.g., extraversion) are more socially oriented than others (Carver & Conner-Smith, 2010).

8.3. Clinical implications

One of the most important goals of resilience research is to identify factors which promote adaptive outcomes following trauma and which factors are amenable to change via clinical interventions. The results of the current study provide further valuable clinical information for those providing psychological aid to women who have experienced various degrees of intimate partner violence, or indeed to women presenting with lower levels of resilience in general.

When considering the results of the regression analysis, emotional stability, self-blame, and planning presented as the most influential factors on resilience in the final model. Most importantly, the results suggest that resilient traits (e.g., personality factors) can be translated into resilient processes (e.g., coping style); processes which can be inevitably taught and strengthened within a therapeutic context. Identification of these factors provides a means of operationalising resilience and it would therefore be

worthwhile to primarily target these three factors in a clinical setting with the aim of promoting resilience.

Given the clinical complexity of posttraumatic stress responses, it is not surprising that the development of effective treatments is quite challenging. As previously discussed in Chapter 4, CBT is currently the first line treatment protocol for all patients (Foa, 2009). Unfortunately, the majority of randomised clinical trials to date have examined CBT's effectiveness in ameliorating psychopathology as opposed to promoting resilience. That said, it can be speculated that most of the cognitive behavioural strategies that are likely to be utilised to reduce psychological distress inherently promote attributes related to resilience, such as cognitive flexibility and adaptive coping skills, and indeed have been included in adult resilience programs (e.g., Milllear, Liossis, Shochet, Biggs, & Donald, 2008).

For the purpose of this study, emotional stability was assessed as a personality variable. As previously discussed, emotional stability reflects the ease and frequency with which a person becomes upset and distressed. Generally, lower levels of emotional stability (i.e., reflecting higher levels of neuroticism) have been linked to increased levels of depression, anxiety, sensitivity to threat, and an avoidance temperament (Caspi & Shiner 2006, Caspi et al., 2005; Evans & Rothbart, 2007). Whilst personality is generally considered an innate and static quality (Furham & Cheng, 1999), psychological interventions such as cognitive behavioural therapy (CBT) aim at skilling the individual with strategies to overcome their difficulties by changing their thinking, behaviour, and emotional responses.

There is considerable empirical evidence to support the effectiveness of CBT in treating anxiety and depression (e.g., Westra, 2004), and has been demonstrated to reduce posttraumatic stress symptomatology (e.g., Harvey, Bryant, & Tarrier, 2003; Hinton et al., 2004; Rosenberg, Mueser, Jankowski, Salyers, & Acker, 2004). CBT has also been demonstrated to significantly reduce anxiety and depression symptoms co-morbid with PTSD (e.g., Basoglu, Ekblad, Baarnhielm, & Livanou, 2004; Blanchard et al., 2003). Moreover, clinical trials have also established CBT to be an effective treatment option for personality disorders (e.g., Barley et al., 1993; Davidson et al., 2006; Muran, Safran, Samstag, & Winston, 2005). Therefore, although personality is static, women exposed to intimate partner violence or are otherwise demonstrating low levels of resilience can learn to cope and manage their distress in more functional ways.

As previously noted, depression and self-blame (behavioural and characterological) were significant predictors of resilience. Individuals suffering with depression typically use explanatory styles of thinking that evaluate difficult problems as permanent, pervasive, and unsolvable, and if also engaging in self-blame they are likely to attribute causality to their own behaviour, their character, or both. However, resilient non-depressed individuals are more likely to view difficult problems as temporary, specific to the situation, and solvable. As CBT typically aims to explore thoughts and feelings as they relate to behaviours, this type of therapy can help individuals recognize chronic pessimistic and depressive explanatory styles of thinking and to systematically change those styles of thinking, including attributions of blame. CBT also teaches the client to reappraise adverse

events in less-threatening terms and to increase their appraisal of the likelihood for successful coping. It has been suggested that full remediation of depressive symptoms may not occur unless the use of self-blame as a coping strategy is reduced (Cascardi & O'Leary, 1992).

Whilst the results of the present study have shown that this cohort of women used a variety of emotion- and problem-focused coping strategies, one of the strongest predictors of resilience was planning as a coping strategy. This is consistent with the general consensus within the broader literature that adaptive outcomes are better facilitated by problem-focused coping (including planning), and hindered by emotion-focused coping (e.g., Penley et al., 2002; for a review, see Waldrop & Resick, 2004), with some researchers espousing that resolving distress-inducing events can only successfully occur with active attempts to confront and change the event (Davis, 2002). Planning represents a means for the individual to regain a sense of control over their life and provides a future-oriented purpose. As noted by Humphreys (2003), women who have successfully terminated an abusive relationship have had to develop a plan, obtain information, and organise an exit strategy whilst considering many different factors, including the safety of themselves and their children. The cognitive behavioural strategies noted previously can also be used to assist individuals to develop an internal locus of control, good problem solving skills, and an orientation towards the future are characteristics associated with resilience (Garmezy, 1974; 1991; Rutter, 1979; 1985; 1987; Werner & Smith, 1982).

Overall, the results of the present study suggest that those participants reporting higher levels of resilience experienced lower levels of negative symptoms (e.g., negative event cognitions, appraisals, and psychopathology). It seems logical therefore, for therapeutic interventions to promote the use of psychological strategies that enhance emotional stability first and foremost. Indeed, from a salutogenic perspective, strategies that emphasise the ‘building of buffering strengths’ similar to those characterising resilience (e.g., interpersonal skills, optimism, authenticity, perseverance, pleasure capacity, personal responsibility, and purpose) are recognised as viable approaches in clinical practice (Duckworth, Steen, & Seligman, 2005, p. 642).

There is growing evidence for the “undoing effect” of positive emotions (Duckworth et al., 2005, p.641) and the notion that positive emotions buffer individuals from stress (Folkman & Moskowitz 2000). For example, inducing positive emotion has been demonstrated to result in a more rapid dissipation of negative emotion (Fredrickson, 1998), and to undo the cardiovascular after-effects of negative emotions (e.g., increased heart rate, increased blood pressure, increased vasoconstriction) (Tugade & Fredrickson, 2004). Pennebaker (1993) found that those who used relatively more positive than negative emotion words while writing expressively during difficult or distressing times were most likely to benefit from disclosive writing (cf. Pennebaker & Francis, 1996; Pennebaker, Mayne, & Francis, 1997). In a similar vein, Tugade and Fredrickson (2004) demonstrated that positive emotions appear to help individuals find positive meaning in stressful situations. Fredrickson and Joiner (2002) proposed

that there exists an “upward spiralling” effect of positive emotion and broadened thinking, such that individuals who experience positive emotions are more likely to find meaning in negative events, and this meaning-making in turn leads to greater positive emotion and enhanced emotional wellbeing. Therefore, clinicians who are able to instil their clients with hope, who induce positive emotions, or who time skill-based therapeutic interventions to correspond with the client’s positive mood state may increase the chance that clients both fully learn therapeutic skills and the speed with which they do so (Rudd, Joiner, & Rajab, 2001).

8.4. Limitations

As noted above, this study utilised a community-drawn convenience sample of women including those who had never experienced intimate partner violence and those who had experienced very severe intimate partner violence in order increase the generalisability of the results. However, the use of a convenience sample of volunteers suggests that caution be exercised in generalizing the study findings beyond samples of women with similar characteristics as those in the study (i.e., English-speaking Australian women from diverse socioeconomic backgrounds).

There are several additional limitations to the present study. First, all constructs were measured based on women’s self-report; therefore, associations might be inflated as a result of single-rater and /or single-method biases (Avolio, Yammarino, & Bass, 1991). Future research would benefit from a multi-method, multi-informant approach. Second, because of the lack of normative data, women’s experiences of intimate partner

violence were classified as high or low frequency relative to other women in this sample. This method may reduce generalization of our findings to samples that experience higher levels of intimate partner violence.

Another possible limitation is the lack of control for length of time since last incident of abuse, which indicates recall bias is a potential threat to validity in this study. However, although longer recall periods are associated with lower recall of abuse and retrospective bias (Yoshihama & Gillespie, 2002), intimate partner violence has been found to have long-term consequences and the problems experienced by women remain intrusive for varying lengths of time (Wuest, Ford-Gilboe, Merritt-Gray, & Berman, 2003). For instance, although the temporal proximity of abuse has been found to be related to higher numbers of health problems in women who experienced intimate partner violence, it has also been found that abused women remain less healthy over time (Campbell et al., 2002). Further, the findings of Ford-Gilboe et al. (2009) suggest that past intimate partner violence continues to exert direct negative effects on women's mental and physical health for an average of 20 months after leaving and that the extent of this impact depends on the severity of abuse. These findings also contradict the common assumption that the act of leaving ends the problems associated with being in an abusive relationship.

Finally, this study did not address the social context in which the abuse occurred or was disclosed. Many individual, family, and social characteristics beyond the scope of this study are likely influence women's subjective appraisals of their experience of intimate partner violence, such as genetic vulnerability, previous victimization history, and social

context/support (Schumm, Briggs-Phillips, & Hobfall, 2006; Southwick et al., 2005). Future research should investigate the pathways that lead to the development of women's subjective appraisals, as this may shed light on potential interventions to address women's experiences and improve the possibility of resilient outcomes.

In keeping with a salutogenic approach, PTSD was not formally examined as part of the current study. There is already a considerable body of research that has focused on PTSD but there is clearly a dearth of information relating to resilience, particularly in relation to intimate partner violence. Prevalence rates of PTSD within this sample could have been assessed using the IES-R, the PTCI, or subscales from the SCL-90-R. Given the overwhelming evidence in the empirical literature that women exposed to intimate partner violence generally tend to experience either sub-clinical or clinically significant symptoms of PTSD, it is most likely to also be the case in this sample. As previously noted in Chapter 4, PTSD has become the primary framework for understanding trauma reactions, particularly in response to intimate partner violence. It was considered a valuable exercise to maintain the focus of the present study on factors which will promote resilience and recovery.

8.5. Summary and conclusions

By examining psychological resilience from a subjective, intrapersonal (i.e., personality traits, cognitive style) perspective, the present investigation provides greater insight into the reasons why resilient individuals are able to effectively adapt and cope with exposure to intimate partner violence,

whereas others facing similar conditions do not fare as well. Overall, the results of the present study suggest that those participants reporting higher levels of resilience experienced lower levels of negative symptoms (e.g., negative event cognitions, appraisals, and psychopathology), and this was largely influenced by personality factors, primarily emotional stability.

Most importantly, the results suggest that resilient traits (e.g., personality factors) can be translated into resilient processes (e.g., coping style) which can be taught and strengthened within a therapeutic context. The difficulty now, for both clinicians and women alike, is to cast these characteristics in a form that can be encouraged and supported, rather than be viewed in the form of fixed, unchangeable traits. The challenge of providing psychological aid to women who experienced intimate partner violence lies not necessarily with the victim's receptivity or willingness to adapt and change but with the clinician's willingness to shift their therapeutic stance from a pathological model of disease that focuses on symptoms and diagnosis to a salutogenic approach that focuses on strength and capacity building.

References

- Abramson, L. Y., Metalsky, G. I., & Alloy, L. B. (1989). Hopelessness depression: A theory-based subtype of depression. *Psychological Review*, 96 (2), 358-358. doi:10.1037/0033-295X.96.2.358
- Access Economics. (2004). *The Cost of Domestic Violence to the Australian Economy*. A report prepared for the Australian Government's Office of the Status of Women by Access Economics, funded by the Australian Government under Partnerships Against Domestic Violence.
- Acierno, R., Brady, K., Gray, M., Kilpatrick, D. G., Resnick, H., & Best, C. (2002). Psychopathology following interpersonal violence: A comparison of risk factors in older and younger adults. *Journal of Clinical Geropsychology*, 8, 13-23. doi:10.1023/A:1013041907018
- Acierno, R., Lawyer, S. R., Rheingold, A., Kilpatrick, D. G., Resnick, H. S., & Saunders, B. E. (2007). Current psychopathology in previously assaulted older adults. *Journal of Interpersonal Violence*, 22, 250-258. doi:10.1177/0886260506295369
- Acierno, R., Resnick, H., Kilpatrick, D. G., Saunders, B., & Best, C. (1999). Risk factors for rape, physical assault, and posttraumatic stress disorder in women: Examination of differential multivariate relationships. *Journal of Anxiety Disorders*, 13, 541-563. doi:10.1016/S0887-6185(99)00030-4
- Ahern, N. R., Kiehl, E. M., Sole, M. L., & Byers, J. (2006). A review of instruments measuring resilience. *Issues in Comprehensive Paediatric Nursing*, 29, 103-25. doi:10.1080/01460860600677643

- Ali, A., Toner, B. B., Stuckless, N., Gallop, R., Diamant, N. E., Gould, M. I., & Vidins, E. I. (2000). Emotional abuse, self-blame, and self-silencing in women with irritable bowel syndrome. *Psychosomatic Medicine*, 62, 76-82.
- Allen, J. G., Coyne, L., & Huntoon, J. (1998). Trauma pervasively elevates Brief Symptom Inventory profiles in inpatient women. *Psychological Reports*, 83, 499-513. doi:10.2466/pr0.1998.83.2.499
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., Rev.). Washington, DC: Author.
- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders, text revision* (4th ed.). Washington, D.C.: Author.
- Andrews, B. (1995). Bodily shame as a mediator between abusive experiences and depression. *Journal of Abnormal Psychology*, 104(2), 277-285. doi: 10.1037//0021-843X.104.2.277
- Andrews, B., & Brewin, C. R. (1990). Attributions of blame for marital violence: A study of antecedents and consequences. *Journal of Marriage and the Family*, 52, 757-767. doi:10.2307/352940
- American Psychological Association *Dictionary of Psychology*. (2007). Washington, DC, US: American Psychological Association, Washington, DC.
- Arata, C. M. (1999). Coping with rape: The roles of prior sexual abuse and attributions of blame. *Journal of Interpersonal Violence*, 14, 62-78. doi:10.1177/088626099014001004
- Arata, C. M., & Burkhart, B. R. (1996). Post-traumatic stress disorder

among college student victims of acquaintance assault. *Journal of Psychology and Human Sexuality*, 8, 79-92.

doi:10.1300/J056v08n01_06

Arias, I., & Pape, K. T. (1999). Psychological abuse: Implications for adjustment and commitment to leave violent partners. *Violence & Victims*, 14, 55-67.

Aroian, K. J., & Norris, A. E. (2000). Resilience, stress and depression among Russian immigrants to Israel. *Western Journal of Nursing Research*, 22, 54-67. doi:10.1177/01939450022044269

Asendorpf, J. B. (1998). Personality effects on social relationships. *Journal of Personality & Social Psychology*, 74, 1531-44. doi:10.1037//0022-3514.74.6.1531

Asendorpf, J. B., Borkenau, P., Ostendorf, F., & Van Aken, Marcel A. G. (2001). Carving personality description at its joints: Confirmation of three replicable personality prototypes for both children and adults. *European Journal of Personality*, 15(3), 169-198. doi:10.1002/per.408

Ashton, M. C., & Lee, K. (2005). Honesty-humility, the Big Five, and the Five-Factor Model. *Journal of Personality*, 73, 1321-1353.

doi:10.1111/j.1467-6494.2005.00351.x

Ashton, M. C., Lee, K., & Goldberg, L. R. (2007). The IPIP-HEXACO scales: An alternative, public-domain measure of the personality constructs in the HEXACO model. *Personality and Individual Differences*, 42, 1515-1526. doi:10.1016/j.paid.2006.10.027

Ashton, M. C., Lee, K., & Paunonen, S. V. (2002). What is the central feature of extraversion? Social attention versus reward sensitivity.

Journal of Personality & Social Psychology, 83, 245–52.

doi:10.1037/0022-3514.83.1.245

Asmundson, G. J. G., Stapleton, J. A., & Taylor, S. (2004). Are avoidance and numbing distinct PTSD symptom clusters? *Journal of Traumatic Stress*, 17, 467–475. doi:10.1007/s10960-004-5795-7

Astin, M. C., Lawrence, K. J., & Foy, D. W. (1993). Posttraumatic stress disorder among battered women: Risk and resiliency factors. *Violence & Victims*, 8, 17-28.

Australian Bureau of Statistics (2005). Australian social trends: Women's experience of partner violence. www.abs.gov.au

Australian Public Health Association. (1990). *Domestic violence*. Canberra: Australian Public Health Association.

Avolio, B. J., Yammarino, F. J., & Bass, B. M. (1991). Identifying common method variance with data collected from a single source: An unresolved sticky issue. *Journal of Management*, 17, 571-587. doi: 10.1177/014920639101700303.

Bachman, R. (1999). Epidemiology of intimate partner violence and other family violence involving adults. In R.T. Ammerman & M.Hersen (Eds.). *Assessment of Family Violence: A clinical and legal sourcebook*, 2nd ed. (pp.107-123). USA: John Wiley & Sons Inc.

Back, S. E., Sonne, S. C., Killeen, T., Dansky, B. S., & Brady, K. T. (2003). Comparative profiles of women with PTSD and comorbid cocaine or alcohol dependence. *American Journal of Drug & Alcohol Abuse*, 29, 169–189. doi:10.1081/ADA-120018845

- Baldry, A. (2003). "Sticks and stones hurt my bones but his glance and words hurt more": The impact of psychological abuse and physical violence by current and former partners on battered women in Italy. *International Journal of Forensic Mental Health*, 2, 47-57.
doi:10.1080/14999013.2003.10471178
- Barley, W. D., Buie, S. E., Peterson, E. W., Hollingsworth, A. S., Griva, M., Hickerson, S. C., Lawson, J. E., & Bailey, B. J. (1993). Development of an Inpatient Cognitive-Behavioral Treatment Program for Borderline Personality Disorder. *Journal of Personality Disorders*, 7, 232-240. doi:10.1521/pedi.1993.7.3.232
- Barnett, O., Miller-Perrin, C. L., & Perrin, R. D. (2005). *Family violence across the lifespan: An introduction* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Bartone, P. T. (1999). Hardiness protects against war-related stress in Army reserve forces. *Consulting Psychology Journal*, 51, 72–82.
doi:10.1037//1061-4087.51.2.72
- Bartone, P. T. (2006). Resilience Under Military Operational Stress: Can Leaders Influence Hardiness? *Military Psychology*, 18, 131–148.
doi:10.1207/s15327876mp1803s_10
- Basile, K. C., Arias, I., Desai, S., & Thompson, M. (2004). The differential association of intimate partner physical, sexual, psychological, and stalking violence and posttraumatic stress symptoms in a nationally

- representative sample of women. *Journal of Traumatic Stress*, 17, 413-421. doi:10.1023/B:JOTS.0000048954.50232.d8
- Basoglu, M., Ekbal, S., Baarnhielm, S., & Livanou, M. (2004). Cognitive-Behavioural treatment of tortured asylum seekers: A case study. *Journal of Anxiety Disorders*, 18, 357-379.
- Beck, A. T. (1970). Cognitive therapy: Nature and relation to behaviour therapy. *Behaviour Therapy*, 1, 184-200. doi:10.1016/S0005-7894(70)80030-2
- Beck, J. G., Coffey, S. F., Palyo, S. A., Gudmundsdottir, B., Miller, L. M., & Colder, C. R. (2004). Psychometric properties of the Posttraumatic Cognitions Inventory (PTCI): A replication with motor vehicle accident survivors. *Psychological Assessment*, 16, 289-298. doi:10.1037/1040-3590.16.3.289
- Bernat, J. A., Ronfeldt, H. M., Calhoun, K. S., & Arias, I. (1998). Prevalence of traumatic events and peritraumatic predictors of posttraumatic stress symptoms in a nonclinical sample of college students. *Journal of Traumatic Stress*, 11 (4), 645-664. doi:10.1023/A:1024485130934
- Biderman, M. D., Nguyen, N. T., Cunningham, C. J., & Ghorbani, N. (2011). The ubiquity of common method variance: The case of the Big Five. *Journal of Research in Personality*, 45, 417-429. doi:10.1016/j.jrp.2011.05.001
- Bifulco, A., Moran, P. M., Baines, R., Bunn, A., & Stanford, K. (2002). Exploring psychological abuse in childhood: II. Association with other

abuse and clinical depression. *Bulletin of the Menninger Clinic*, 66, 241-258. doi:10.1521/bumc.66.3.241.23366

Black, M.C., Basile, K.C., Breiding, M.J., Smith, S.G., Walters, M.L., Merrick, M.T., Chen, J., & Stevens, M.R. (2011). The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

Blanchard, E. B., Hickling, E. J., Devineni, T., Veazey, C. H., Galovski, T. E., Mundy, E., Malta, L. S., & Buckley, T. S. (2003). A controlled evaluation of cognitive behavioural therapy for posttraumatic stress disorder in motor vehicle accident survivors. *Behaviour Research and Therapy*, 41, 79-96. doi:10.1016/S0005-7967(01)00131-0

Bogar, C. B., & Hulse-Killacky, D. (2006). Resiliency determinants and resiliency processes among female adult survivors of childhood sexual abuse. *Journal of Counselling and Development*, 84, 318-327. doi:10.1002/j.1556-6678.2006.tb00411.x

Bolger, N., & Zuckerman, A. (1995). A framework for studying personality in the stress process. *Journal of Personality and Social Psychology*, 69, 890-890. doi:10.1037//0022-3514.69.5.890

Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, 59, 20–28. doi: 10.1037/0003-066X.59.1.20

- Bonanno, G. A. (2005). Adult resilience to potential trauma. *Current directions in Psychological Science*, *14*, 135–138. doi:10.1111/j.0963-7214.2005.00347.x
- Bonanno, G. A., Galea, S., Bucciarelli, A. & Vlahov, D. (2006). Psychological resilience after disaster: New York City in the aftermath of the September 11th Terrorist attack. *Psychological Science*, *17*, 181–186. doi:10.1111/j.1467-9280.2006.01682.x
- Bonanno, G. A., Ho, S. M. Y., Chan, J. C. K., Kwong, R. S. Y., Cheung, C. K. Y., Wong, C. P. Y., & Wong, V. C. W. (2008). Psychological resilience and dysfunction among hospitalized survivors of the SARS epidemic in Hong Kong: A latent class approach. *Health Psychology*, *27*, 659–667. doi:10.1037/0278-6133.27.5.659
- Bonanno, G. A. & Kaltman, S. (2001). The varieties of grief experience. *Clinical Psychology Review*, *21*, 705–734. doi:10.1016/S0272-7358(00)00062-3
- Bonanno, G. A. & Keltner, D. (1997). Facial expression of emotion in the course of conjugal bereavement. *Journal of Abnormal Psychology*, *106*, 126–137. doi:10.1037//0021-843X.106.1.126
- Bonanno, G. A., Keltner, D., Holen, A. & Horowitz, M. J. (1995). When avoiding unpleasant emotions might not be such a bad thing: Verbal-autonomic response dissociation and midlife conjugal bereavement. *Journal of Personality and Social Psychology*, *69*, 975–989. doi:10.1037/0022-3514.69.5.975

- Bonanno, G. A., Keltner, D., Noll, J. G., Putnam, F. W., Trickett, P. K., & LeJeune, J. (2002). When the face reveals what words do not: Facial expressions of emotion, smiling, and the willingness to disclose childhood sexual abuse. *Journal of Personality and Social Psychology*, 83, 94–110. doi:10.1037//0022-3514.83.1.94
- Bonanno, G. A., & Mancini, A. D. (2010). Beyond resilience and PTSD: Mapping the heterogeneity of responses to potential trauma. *Psychological Trauma: Theory, Research, Practice, and Policy*. Advance online publication. doi: 10.1037/a0017829
- Bonanno, G. A., Moskowitz, J. T., Papa, A., & Folkman, S. (2005). Resilience to loss in bereaved spouses, bereaved parents and bereaved gay men. *Journal of Personality and Social Psychology*, 88, 827–843. doi:10.1037/0022-3514.88.5.827
- Bonanno, G. A., Papa, A., Lalande, K.O., Westphal, M., & Coifman, K. (2004). The importance of being flexible; the ability to both enhance and suppress emotional expression predicts long-term adjustment. *Psychological Science*, 15, 482–487. doi:10.1111/j.0956-7976.2004.00705.x
- Bonanno, G. A., Rennie, C. & Dekel, S. (2005). Self-Enhancement among high-exposure survivors of the September 11th terrorist attack: Resilience of social maladjustment? *Journal of Personality and Social Psychology*, 88, 984–998. doi:10.1037/0022-3514.88.6.984

- Bonanno, G. A., Wortman, C.B., Lehman, D. R. , Tweed, R. G., Haring, M. & Sonnega, J. et al. (2002). Resilience to loss and chronic grief: A prospective study from preloss to 18-months postloss. *Journal of Personality Social Psychology*, 83, 1150–1164. doi:10.1037/0022-3514.83.5.1150
- Bonanno, G. A., Wortman, C. B., & Nesse, R. M. (2004). Prospective patterns of resilience and maladjustment during widowhood. *Psychology and Aging*, 19, 260–271. doi:10.1037/0882-7974.19.2.260
- Bolger, N., & Zuckerman, A. (1995). A framework for studying personality in the stress process. *Journal of Personality & Social Psychology*, 69, 890–902. doi:10.1037//0022-3514.69.5.890
- Bowling, N., Beehr, T., & Swader, W. (2005). Giving and receiving social support at work: the roles of personality and reciprocity. *Journal of Vocational Behaviour*, 67,476–89. doi:10.1016/j.jvb.2004.08.004
- Bradley, R., Schwartz, A. C., & Kaslow, N. J. (2005). Posttraumatic stress disorder symptoms among low-income, African American women with a history of intimate partner violence and suicidal behaviours: Self-esteem, social support, and religious coping. *Journal of Traumatic Stress*,18, 685-696. doi:10.1002/jts.20077
- Braver, M., Bumbery, J., Green, K., & Rawson, R. (1992). Childhood abuse and current psychological functioning in a university counselling centre population. *Journal of Counselling Psychology*, 39, 252-257. doi:10.1037/0022-0167.39.2.252

- Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology, 68*, 748–766. doi:10.1037//0022-006X.68.5.748
- Brewin, C. R., & Holmes, E. A. (2003). Psychological theories of posttraumatic stress disorder. *Clinical Psychology Review, 23*, 339–376. doi:10.1016/S0272-7358(03)00033-3
- Brewin, C. R., MacCarthy, B., & Furnham, A. (1989). Social support in the face of adversity: The role of cognitive appraisal. *Psychological Review, 103*, 670–686. doi:10.1016/0092-6566(89)90007-X
- Brezo, J., Paris, J., & Turecki, G. (2006). Personality traits as correlates of suicidal ideation, suicide attempts, and suicide completions: A systematic review. *Acta Psychiatrica Scandinavica, 113*, 180–206. doi:10.1111/j.1600-0447.2005.00702.x
- Briere, J., & Jordan, C. E. (2004). Violence against women: Outcome complexity and implications for assessment and treatment. *Journal of Interpersonal Violence, 19*, 1252–1276. doi:10.1177/0886260504269682
- Briere, J., & Runtz, M. (1990). Differential adult symptomatology associated with three types of child abuse histories. *Child Abuse & Neglect, 14*, 357–364. doi:10.1016/0145-2134(90)90007-G
- Bussey, M., & Wise, J. (Eds.). (2007). *Trauma Transformed: An Empowerment Response*. New York: Columbia University Press.

- Byrne, C. A., Resnick, H. S., Kilpatrick, D. G., Best, C. L., & Saunders, B. E. (1999). The socioeconomic impact of interpersonal violence on women. *Journal of Consulting and Clinical Psychology, 67*(3), 362-366. doi: 10.1037/0022-006X.67.3.362.
- Caetano, R., Vaeth, P., & Ramisetty-Mikler, S. (2008). Intimate partner violence victim and perpetrator characteristics among couples in the United States. *Journal of Family Violence, 23*, 507-518. doi:10.1007/s10896-008-9178-3
- Calhoun, L. G., Cann, A., Tedeschi, R. G., & McMillan, J. (1998). Traumatic events and generational differences in assumptions about a just world. *Journal of Social Psychology, 138*, 789-791. doi:10.1080/00224549809603265.
- Calvent, E., Corral, S., & Estevez, A. (2008). Coping as a mediator and moderator between intimate partner violence and symptoms of anxiety and depression. *Violence Against Women, 14*, 886-904.
- Campbell, J. (2002). Health consequences of intimate partner violence. *The Lancet, 359*, 1331-1336. doi:10.1016/S0140-6736(02)08336-8
- Campbell, R., Ahrens, C. E., Sefl, T., Wasco, S. M., & Barnes, H. E. (2001). Social reactions to rape victims: Healing and hurtful effects on psychological and physical health outcomes. *Violence and Victims, 16*, 287-302. doi:10.1177/088626001016012002

- Campbell, J. C., & Soeken, K. L. (1999). Women's responses to battering over time. *Journal of Interpersonal Violence, 14*, 21-40. doi: 10.1177/088626099014001002.
- Campbell, R., Sullivan, C. M., & Davidson, W. S. (1995). Women who use domestic violence shelters. *Psychology of Women Quarterly, 19*, 237-237. doi:10.1111/j.1471-6402.1995.tb00290.x
- Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour Research and Therapy, 44*, 585-599. doi:10.1016/j.brat.2005.05.001
- Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioural Medicine, 4*, 92-100. doi:10.1207/s15327558ijbm0401_6
- Carver, C. S., & Conner-Smith, J. (2010). Personality and coping. *Annual Review of Psychology, 61*, 679-704. doi:10.1146/annurev.psych.093008.100352
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*, 267-283. doi:10.1037//0022-3514.56.2.267
- Cascardi, M., & O'Leary, K. D. (1992). Depressive symptomatology, self-esteem, and self-blame in battered women. *Journal of Family Violence, 7*(4), 249-259. doi: 10.1007/BF00994617.

- Caspi, A., Roberts, B. W., & Shiner, R.L. (2005). Personality development: stability and change. *Annual Review of Psychology*, 56, 453–84.
doi:10.1146/annurev.psych.55.090902.141913
- Caspi, A., & Shiner, R. L. (2006). Personality development. In W. Damon, R. Lerner, & N. Eisenberg (Eds.), *Handbook of Child Psychology, Social, Emotional, and Personality Development, Vol. 3*, (pp. 300–65). New York: Wiley.
- Cattell, R. B. (1957). *Personality and Motivation Structure and Measurement*. New York: World Book.
- Chapman, D. P., Whitfield, C. L., Felitti, V. J., Dube, S. R., Edwards, V. J., & Anda, R. F. (2004). Adverse childhood experiences and the risk of depressive disorders in adulthood. *Journal of Affective Disorders*, 82, 217-225. doi:10.1016/j.jad.2003.12.013
- Christopher, K. A. (2000). Determinants of psychological well-being in Irish immigrants. *Western Journal of Nursing Research*, 22, 123–43.
doi:10.1177/01939450022044322
- Chung, M. C., Dennis, I., Easthope, Y., Werrett, J., & Farmer, S. (2005). A multiple-indicator multiple-cause model for posttraumatic stress reactions: Personality, coping, and maladjustment. *Psychosomatic Medicine*, 67(2), 251-259. doi: 10.1097/01.psy.0000155675.56550.5f.
- Cicchetti, D., & Curtis, W. J. (2006). The developing brain and neuroplasticity: Implications for normality, psychopathology, and resilience. In D. Cicchetti & D. J. Cohen (Eds.). *Developmental*

psychopathology: Vol 2. Developmental neuroscience. (2nd ed., pp. 1-64), Hoboken, NJ: Wiley.

Cicero, D. C., & Kerns, J. G. (2011). Unpleasant and pleasant referential thinking: Relations with self-processing, paranoia, and other schizotypal traits. *Journal of Research in Personality*, 45, 208-218. doi:10.1016/j.jrp.2011.02.002

Claussen, A. H., & Crittenden, P. M. (1991). Physical and psychological maltreatment: Relations among types of maltreatment. *Child Abuse & Neglect*, 15, 5-18. doi:10.1016/0145-2134(91)90085-R

Clements, C. M., & Sawhney, D. K. (2000). Coping with domestic violence: Control attributions, dysphoria, and hopelessness. *Journal of Traumatic Stress*, 13(2), 219-240. doi: 10.1023/A:1007702626960.

Cohen, S., & Edwards, J. R. (1989). Personality characteristics as moderators of the relationship between stress and disorder. In S. Cohen & J. R. Edwards (Eds.), *Advances in the investigation of psychological stress* (pp. 235-283). Oxford, England: John Wiley & Sons, Oxford.

Coifman, K. G., Bonanno, G. A., Ray, R. D. & Gross, J. J. (2007). Does repressive coping promote resilience? Affective-autonomic response discrepancy during bereavement. *Journal of Personality & Social Psychology*, 92, 745-758. doi:10.1037/0022-3514.92.4.745

Coker, A. L., Davis, K. E., Arias, I., Desai, S., Sanderson, M., Brandt, H. M., & Smith, P. H. (2002). Physical and mental health effects of intimate partner violence for men and women. *American Journal of*

Preventative Medicine, 23, 260-268. doi:10.1016/S0749-3797(02)00514-7

Coker, A. L., Smith, P., McKeown, R. E., & King, M. (2000). Frequency and correlates of intimate partner violence by type: Physical, sexual and psychological battering. *American Journal of Public Health*, 90, 553-559.

Coker, A. L., Weston, R., Creson, D. L., Justice, B., & Blakeney, P. (2005). PTSD symptoms among men and women survivors of intimate partner violence: the role of risk and protective factors. *Violence and Victims*, 20, 625-643. doi:10.1891/vivi.20.6.625

Compas, B. E., Connor-Smith, J. K., & Jaser, S. S. (2004). Temperament, stress reactivity, and coping: implications for depression in childhood and adolescence. *Journal of Clinical Child & Adolescent Psychiatry*, 33, 21–31. doi:10.1207/S15374424JCCP3301_3

Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor–Davidson Resilience Scale (CDRISC). *Depression and Anxiety*, 18, 76–82. doi:10.1002/da.10113

Costa, P. T. & McCrae, R. R. (1985). *The NEO Personality Inventory Manual*. Odessa, FL: Psychological Assessment Resource.

Costa, P. T., Jr., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological Assessment*, 4, 5-13. doi:10.1037//1040-3590.4.1.5

Costa, P. T., Jr., & McCrae, R. R. (1999). Reply to Goldberg. In I.

- Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality psychology in Europe* (Vol. 7, pp. 29–31). Tilburg, The Netherlands: Tilburg University Press.
- Creamer, M. (1993). Recent developments in posttraumatic stress disorder. *Behaviour Change, 10*, 219-227.
- Crespo, M., & Arinero, M. (2010). Assessment of the efficacy of a psychological treatment for women victims of violence by their intimate male partner. *The Spanish Journal of Psychology, 13*(2), 849-863.
- Cukor, D., & McGinn, L. K. (2006). History of child abuse and severity of adult depression: The mediating role of cognitive schemata. *Journal of Child Sexual Abuse, 15*, 19-34. doi:10.1300/J070v15n03_02
- Cunradi, C. B., Caetano, R., & Schafer, J. (2002). Religious affiliation, denominational homogamy, and intimate partner violence among U.S. couples. *Journal for the Scientific Study of Religion, 41*(1), 139-151. doi:10.1111/1468-5906.00106
- Cuthbert, B. N., Lang, P. J., Strauss, C., Drobles, D., Patrick, C. J., & Bradley, M. M. (2003). The psychophysiology of anxiety disorder: fear memory imagery. *Psychophysiology, 40*(3), 407-22. doi:10.1111/1469-8986.00043
- Davidson, K., Norrie, J., Tyrer, P., Gumley, A., Tata, P., Murray, H., & Palmer, S. (2006). The effectiveness of cognitive behaviour therapy for borderline personality disorder: Results from the Borderline Personality Disorder study of cognitive therapy (BOSCOT) trial.

Journal of Personality Disorders, 20, 450-465.

doi:10.1521/pedi.2006.20.5.450

Davis, P. T., & Cummings, E. M. (2006). Interpersonal discord, family process, and developmental psychopathology. In D. Cicchetti & D. J. Cohen (Eds.). *Developmental psychopathology: Vol. 3. Risk, disorder, and adaptation* (pp.86-128), Hoboken, NJ: Wiley.

Davis, R. E. (2002). The strongest women. Exploration of the inner resources of abused women. *Qualitative Health Research*, 12, 1248-1263. doi:10.1177/1049732302238248

Davey, M., Eaker, D. G., & Walters, L. H. (2003). Resilience processes in adolescents: personality profiles, self-worth, and coping. *Journal of Adolescent Research*, 18, 347 – 62.
doi:10.1177/0743558403018004002

Delahanty, D. L., Herberman, H. B., Craig, K. J., Hayward, M. C., Fullerton, C. S., Ursano, R. J., & Baum, A. S. (1997). Acute and chronic distress and posttraumatic stress disorder as a function of responsibility for serious motor vehicle accidents. *Journal of Consulting and Clinical Psychology*, 65(4), 560-567. doi: 10.1037//0022-006X.65.4.560.

deRoos-Cassini, T. A., Mancini, A. D., Rusch, M. D., & Bonanno, G. A. (2010). Psychopathology and resilience following traumatic injury: A latent growth mixture model analysis. *Rehabilitation Psychology*, 55, 1–11. doi:10.1037/a0018601.

- Depue, R. A., & Collins, P. F. (1999). Neurobiology of the structure of personality: dopamine, facilitation of incentive motivation, and extraversion. *Journal of Behavioural & Brain Science*, 22, 491–517. doi:10.1017/S0140525X99002046
- Depue, R.A., & Morrone-Strupinsky, J. V. (2005). A neurobehavioral model of affiliative bonding: implications for conceptualizing a human trait of affiliation. *Journal of Behavioural & Brain Science*, 28, 313–95. doi:10.1017/S0140525X05000063
- Derryberry, D., Reed, M. A., & Pilkenton-Taylor, C. (2003). Temperament and coping: advantages of an individual differences perspective. *Developmental Psychopathology*, 15, 1049–66. doi:10.1017/S0954579403000439
- Derogatis, L.R. (1983). *SCL-90-R. Administration, scoring, and procedures manual – II*. Towson, M.D: Clinical Psychometric Research.
- Dickstein, B. D., Suvak, M., Litz, B. T., & Adler, A. B. (2010). Heterogeneity in the course of posttraumatic stress disorder: Trajectories of symptomatology. *Journal of Traumatic Stress*, 23, 331–339. doi:10.1002/jts.20523
- Diest, I. L., Winters, W., Deveriese, S., Vercamst, E., Han, J. N., van de Woestijne, K. P., van den Bergh, O. (2001). Hyperventilation beyond fight or flight: Respiratory responses during emotional imagery. *Psychophysiology*, 38, 961–968. doi:10.1111/1469-8986.3860961
- Digman, J. M. (1990). Personality structure: emergence of the five-factor

model. *Annual Review of Psychology*, 41, 417–40.

doi:10.1146/annurev.psych.41.1.417

Digman, J. M. & Inouye, J. (1986). Further specification of the five robust factors of personality. *Journal of Personality & Social Psychology*, 50, 116–23. doi:10.1037//0022-3514.50.1.116

Duckworth, A. L., Steen, T. A., & Seligman, M. E. P. (2005). Positive psychology in clinical practice. *American Review of Clinical Psychology*, 1, 629–651.

Dunmore, E., Clark, D. M., & Ehlers, A. (1997). Cognitive factors in persistent versus recovered post-traumatic stress disorder after physical or sexual assault: a pilot study. *Behavioural and Cognitive Psychotherapy*, 25, 147–159. doi:10.1017/S135246580001835X

Dunmore, E., Clark, D. M., & Ehlers, A. (1999). Cognitive factors involved in the onset and maintenance of posttraumatic stress disorder (PTSD) after physical or sexual assault. *Behaviour Research and Therapy*, 37, 809–829. doi:10.1016/S0005-7967(98)00181-8

Dunmore, E., Clark, D. M., & Ehlers, A. (2001). A prospective investigation of the role of cognitive factors in persistent posttraumatic stress disorder (PTSD) after physical or sexual assault. *Behaviour Research and Therapy*, 39, 1063–1084. doi:10.1016/S0005-7967(00)00088-7

Dunn, D. (1994). Resilient reintegration of married women with dependent children: Employed and unemployed. Unpublished doctoral

dissertation, University of Utah.

Dutton, M. A., Goodman, L. A., & Bennett, L. (1999). Court-involved battered women's response to violence: The role of psychological, physical and sexual abuse. *Violence & Victims, 14*, 89-104.

Dutton, M. A., Hohnacker, L. C., Halle, P. M., & Burghardt, K. J. (1994). Traumatic responses among battered women who kill. *Journal of Traumatic Stress, 7*(4), 549-564. doi: 10.1007/BF02103006

Earvolino-Ramirez, M. (2007). Resilience: A concept analysis. *Nursing Forum, 42*, 73-82. doi:10.1111/j.1744-6198.2007.00070.x

Ebert, A., & Dyck, M. J. (2004). The experience of mental death: The core feature of complex posttraumatic stress disorder. *Clinical Psychology Review, 24*, 617-635. doi:10.1016/j.cpr.2004.06.002

Echeburúa, E., Corral, P., Sarasua, B., & Zubizarreta, I. (1996). Cognitive-behavioral treatment of chronic posttraumatic stress in victims of domestic violence: A pilot study. *Análisis y Modificación de Conducta, 22*, 627-654.

Egeland, B. (2007). Understanding developmental processes of resilience and psychopathology: Implications for policy and practice. In A. S. Masten (Ed.). *Multilevel dynamics in developmental psychopathology*, (pp.83-117). Mahwah, NJ: Erlbaum.

Ehlers, A., & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy, 38*(4), 319-345. doi:10.1016/S0005-7967(99)00123-0.

- Ehlers, A., Hackmann, A. & Michael, T. (2004). Intrusive re-experiencing in posttraumatic stress disorder: Phenomenology, theory, and therapy. *Memory*, 12, 403-415. doi:10.1080/09658210444000025
- Ehlers, A., Maercker, A. & Boos, A. (2000). PTSD following political imprisonment: The role of mental defeat, alienation, and permanent change. *Journal of Abnormal Psychology*, 109, 45-55.
doi:10.1037//0021-843X.109.1.45
- Ehlers, A., Mayou, R. A., & Bryant, B. (1998). Psychological predictors of chronic PTSD after motor vehicle accidents. *Journal of Abnormal Psychology*, 107, 508-519. doi:10.1037//0021-843X.107.3.508
- Ehlers, A., Michael, T., Chen, Y. P., Payne, E., & Shan, S. (2006). Enhanced perceptual priming for neutral stimuli in a traumatic context: A pathway to intrusive memories? *Memory*, 14, 316-328.
doi:10.1080/09658210500305876
- Ehlers, A., & Steil, R. (1995). Maintenance of intrusive memories in posttraumatic stress disorder: a cognitive approach. *Behavioural and Cognitive Psychotherapy*, 23, 217-249.
doi:10.1017/S135246580001585X
- Ehring, T., Ehlers, A., & Glucksman, E. (2008). Do cognitive models help in predicting the severity of posttraumatic stress disorder, phobia and depression after motor vehicle accidents? A prospective longitudinal study. *Journal of Consulting and Clinical Psychology*, 76, 219-230.
doi:10.1037/0022-006X.76.2.219

- Endler, N. S., & Parker, J. D. A. (1990). Multidimensional assessment of coping: A critical evaluation. *Journal of Personality & Social Psychology*, 58, 844-854. doi:10.1037//0022-3514.58.5.844
- Engdahl, B. E., Harkness, A. R., Eberly, R. E., Page, W. F., & Bielinski, J. (1993). Structural models of captivity trauma, resilience, and trauma response among former prisoners of war 20 to 40 years after release. *Social Psychiatry and Psychiatric Epidemiology*, 28(3), 109-115. doi: 10.1007/BF00801740
- Evans, D. E., & Rothbart, M. K. (2007). Developing a model for adult temperament. *Journal of Research in Personality*, 41(4), 868-888. doi: 10.1016/j.jrp.2006.11.002
- Falsetti, S. A., Monnier, J., Davis, J. L., & Resnick, H. S. (2002). Intrusive thoughts in posttraumatic stress disorder. *Journal of Cognitive Psychotherapy*, 16, 127-143. doi:10.1891/jcop.16.2.127.63993
- Feinauer, L. L., & Stuart, D. A. (1996). Blame and resilience in women sexually abused as children. *American Journal of Family Therapy*, 24, 31-40. doi:10.1080/01926189508251014
- Felton, B. J., Revenson, T. A., & Hinrichsen, G. A. (1984). Stress and coping in the explanation of psychological adjustment among chronically ill adults. *Social Science and Medicine*, 18(10), 889-898. doi:10.1016/0277-9536(84)90158-8
- Ferguson, K. S., & Dacey, C. M. (1997). Anxiety, depression, and dissociation in women health care providers reporting a history of

childhood psychological abuse. *Child Abuse & Neglect*, 21, 941-952.

doi:10.1016/S0145-2134(97)00055-0

Fergusson, D. M., Horwood, L. J., & Lynskey, M. T. (1994). The childhoods of multiple problem adolescents: a 15-year longitudinal study. *Journal of Child Psychology and Psychiatry*, 35, 1123-1140.

doi:10.1111/j.1469-7610.1994.tb01813.x

Field, C. A., & Caetano, R. (2004). Ethnic differences in intimate partner violence in the U.S. general population: The role of alcohol use and socioeconomic status. *Trauma, Violence, & Abuse: A Review Journal*, 5(4), 303-317. doi: 10.1177/1524838004269488

Fiore Lerner, C., & Kennedy, L. T. (2000). Stay-leave decision-making in battered women: Trauma, coping, and self-efficacy. *Cognitive Therapy and Research*, 24, 215-232. doi:10.1023/A:1005450226110

Fisher, T. D. & McNulty, J. K. (2008). Neuroticism and marital satisfaction: The mediating role played by the sexual relationship. *Journal of Family Psychology*, 22, 112-122. doi:10.1037/0893-3200.22.1.112

Fisk, S. T., & Taylor, S. E. (1991). *Social Cognition*. New York: McGraw-Hill.

Flach, F. (1988). *Resilience: Discovering a new strength at times of stress*. New York: Ballantine.

Flach, F. F. (1997). *Resilience: How to bounce back when the going gets tough*. New York: Hatherleigh Press.

- Foa, E. B. (2009). *Effective Treatments for PTSD: Practice Guidelines from the International Society for Traumatic Stress Studies* (2nd edition.). New York, USA: Guilford.
- Foa, E. B., Cashman, L. A., Jaycox, L., & Perry, K. (1997). The validation of a self-report measure of posttraumatic stress disorder: The Posttraumatic Diagnostic Scale. *Psychological Assessment*, 4, 445–451. doi:10.1037//1040-3590.9.4.445
- Foa, E. B., Ehlers, A., Clark, D. M., Tolin, D. F., & Orsillo, S. M. (1999). The Posttraumatic Cognitions Inventory (PTCI): Development and validation. *Psychological Assessment*, 11, 303-314. doi:10.1037/1040-3590.11.3.303
- Foa, E. B., Feske, U., Murdock, T. B., Kozak, M. J., & McCarthy, P. R. (1991). Processing of threat-related information in rape victims. *Journal of Abnormal Psychology*, 100, 156-162. doi:10.1037//0021-843X.100.2.156
- Foa, E. B., Hembree, E. A., Cahill, S. P., Rauch, S. A., Riggs, D. S., Feeny, N. C., & Yadin, E. (2005). Randomized trial of prolonged exposure for posttraumatic stress disorder with and without cognitive restructuring: Outcome at academic and community clinics. *Journal of Consulting & Clinical Psychology*, 73, 953-964. doi: 10.1037/0022-006X.73.5.953
- Foa, E. B., & Kozak, M. J., (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin*, 99, 22-35. doi:10.1037//0033-2909.99.1.20

- Foa, E. B., & Rauch, S. A. M. (2004). Cognitive changes during prolonged exposure versus prolonged exposure plus cognitive restructuring in female assault survivors with Posttraumatic Stress Disorder. *Journal of Consulting and Clinical Psychology*, 72, 879–884. doi:10.1037/0022-006X.72.5.879
- Foa, E. B., & Riggs, D. S. (1993). Post-traumatic stress disorder in rape victims. In J. Oldham, M. B. Riba, & A. Tasman (Eds.), *American Psychiatric Press Review of Psychiatry*, 12, (pp. 273–303). Washington, DC: American Psychiatric Press.
- Foa, E. B., & Rothbaum, B. O. (1998). *Treating the trauma of rape: cognitive behavioural therapy for PTSD*. New York: Guilford Press.
- Foa, E. B., Steketee, G., & Rothbaum, B. O. (1989). Behavioural/cognitive conceptualisations of post-traumatic stress disorder. *Behaviour Therapy*, 20, 155-176. doi:10.1016/S0005-7894(89)80067-X
- Follette, V., Ruzek, J., & Abueg, F. (1998). *Cognitive-behavioural therapies for trauma*. New York, USA: Guilford.
- Follingstad, D. R., Hause, E. S., Rutledge, L. L., & Polek, D. S. (1992). Effects of battered women's early responses on later abuse patterns. *Violence and Victims*, 7(2), 109-28.
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in middle-aged community sample. *Journal of Health and Social Behaviour*, 21, 219-239. doi:10.2307/2136617
- Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion.

Journal of Personality and Social Psychology, 54, 466-475.

doi:10.1037//0022-3514.54.3.466

Folkman, S. & Moskowitz, J. T. (2000). Positive affect and the other side of coping. *American Psychologist*, 55, 647–54. doi:10.1037//0003-066X.55.6.647

Ford-Gilboe, M., Wuest, J., Varcoe, C., Davies, L., Merritt-Gray, M., Campbell, J., & Wilk, P. (2009). Modelling the effects of intimate partner violence and access to resources on women's health in the early years after leaving an abusive partner. *Social Science & Medicine*, 68, 1021–1029. doi:10.1016/j.socscimed.2009.01.003

Frazier, P. (1990). Victim attributions and post-rape trauma. *Journal of Personality and Social Psychology*, 59, 298–304. doi:10.1037//0022-3514.59.2.298

Frazier, P. (2000). The role of attributions and perceived control in recovery from rape. *Journal of Personal and Interpersonal Loss*, 5, 203–225. doi:10.1080/10811440008409753

Frazier, P., Berman, M., & Steward, J. (2002). Perceived control and posttraumatic stress: A temporal model. *Applied & Preventive Psychology*, 10, 207–223.

Frazier, P., & Schauben, L. (1994). Causal attributions and recovery from rape and other stressful life events. *Journal of Social and Clinical Psychology*, 13, 1–14. doi:10.1521/jscp.1994.13.1.1

- Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psychology*, 2, 300–319. doi:10.1037//1089-2680.2.3.300
- Fredrickson, B. L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science*, 13(2), 172-175. doi: 10.1111/1467-9280.00431
- Friborg, O., Barlaug, D., Martinussen, M., Rosenvinge, J.H., & Hjemdal, O. (2005). Resilience in relation to personality and intelligence. *International Journal of Methods in Psychiatric Research*, 14, 29–42. doi:10.1002/mpr.15
- Furnham, A., & Cheng, H. (1999). Personality as predictor of mental health and happiness in the East and West. *Personality & Individual Differences*, 395– 403. doi:10.1016/S0191-8869(98)00250-5
- Furnham, A., Crump, J., & Whelan, J. (1997). Validating the NEO Personality Inventory using assessor's ratings. *Personality & Individual Differences*, 22, 669 – 75. doi:10.1016/S0191-8869(96)00261-9
- Garbarino, J., Guttman, E., & Seeley, J. (1986). *The psychologically battered child*. San Francisco: Jossey-Bass.
- Garcia-Moreno, C., Jansen, H., Heise, L., Watts, C.H. (2006). Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. *The Lancet*, 368, 1260-1269. doi:10.1016/S0140-6736(06)69523-8

- Garnezy, N. (1974). The study of competence in children at risk for severe psychopathology. In E. J. Anthony & C. Koupernik (Eds.), *The child in his family: Vol. 3. Children at psychiatric risk* (pp. 77-97). New York: Wiley.
- Garnezy, N. (1991). Resiliency and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioural Scientist*, 34, 416-430. doi:10.1177/0002764291034004003
- Garnezy, N. (1993). Children in poverty: Resilience despite risk. *Psychiatry*, 56, 127-136.
- Garnezy, N., Masten, A., & Tellegen, A. (1984). The study of stress and competence in children: A building block for developmental psychology. *Child Development*, 55, 97-111. doi:10.2307/1129837
- Gervis, M., & Dunn, N. (2004). The emotional abuse of elite child athletes by their coaches. *Child Abuse Review*, 13, 215-223. doi:10.1002/car.843
- Gibb, B. E., Alloy, L. B., Abramson, L. Y., Rose, D. T., Whitehouse, W. G., Donovan, P., Hogan, M. E., Cronholm, J., & Tierney, S. (2001). History of childhood maltreatment, negative cognitive styles, and episodes of depression in adulthood. *Cognitive Therapy and Research*, 25, 425-446. doi:10.1023/A:1005586519986
- Goldberg, L. R. (1981). Language and individual differences: the search for universals in personality lexicons. In L. Wheeler (Ed.), *Review of*

Personality and Social Psychology, (Vol. 2, pp. 141–65). Beverly Hills, CA: Sage

Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*, 4, 26–42. doi:10.1037//1040-3590.4.1.26

Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several Wve-factor models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality psychology in Europe* (Vol. 7, pp. 7–28). Tilburg, The Netherlands: Tilburg University Press.

Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. G. (2006). The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality*, 40, 84–96. doi:10.1016/j.jrp.2005.08.007

Golding, J. M. (1999). Intimate partner violence as a risk factor for mental disorders: A meta-analysis. *Journal of Family Violence*, 14, 99–132. doi:10.1023/A:1022079418229

Goodman, L. A., Thompson, K. M., Weinfurt, K., Corl, S., Acker, P., Mueser, K. T., et al. (1999). Reliability of reports of violent victimization and posttraumatic stress disorder among men and women with serious mental illness. *Journal of Traumatic Stress*, 12, 587–599. doi:10.1023/A:1024708916143

- Gore-Felton, C., Gill, M., Koopman, C., & Spiegel, D. (1999). A review of acute stress reactions among victims of violence: Implications for early intervention. *Aggression and Violent Behaviour, 4*, 293-306.
doi:10.1016/S1359-1789(98)00002-0
- Graham-Bermann, S., Gruber, G., Howell, K. H., & Girz, L. (2009). Factors discriminating among profiles of resilience and psychopathology in children exposed to intimate partner violence (IPV). *Child Abuse & Neglect, 33*, 648-660. doi:10.1016/j.chiabu.2009.01.002
- Grant, S., & Langan-Fox, J. (2007). Personality and the occupational stressor-strain relationship: the role of the Big Five. *Journal of Occupational & Health Psychology, 12*, 20–33. doi:10.1037/1076-8998.12.1.20
- Grav, S., Hellzèn, O., Romild, U., & Stordal, E. (2012). Association between social support and depression in the general population: The HUNT study, a cross-sectional survey. *Journal of Clinical Nursing, 21*(1-2), 111-120. doi: <http://dx.doi.org/10.1111/j.1365-2702.2011.03868.x>
- Graziano, W. G., & Eisenberg, N. H. (1999). Agreeableness as a dimension of personality. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of Personality*, (pp. 795–825). San Diego, CA: Academic.
- Graziano, W. G., Habashi, M. M., Sheese, B. E., & Tobin, R. M. (2007). Agreeableness, empathy, and helping: a person X situation perspective.

Journal of Personality & Social Psychology, 93, 583–99.

doi:10.1037/0022-3514.93.4.583

Green, J. (1996). Mothers in "incest families". *Violence Against Women*, 2, 322-348. doi:10.1177/1077801296002003006

Gunthert, K. C., Cohen, L. H., & Armeli, S. (1999). Role of neuroticism in daily stress and coping. *Journal of Personality & Social Psychology*, 77, 1087–100. doi:10.1037/0022-3514.77.5.1087

Hage, S. M. (2006). Profiles of women survivors: The development of agency in abusive relationships. *Journal of Counseling and Development*, 84, 83-94. doi:10.1002/j.1556-6678.2006.tb00382.x

Haj-Yahia, M. M., & Tamish, S. (2001). The rates of child sexual abuse and its psychological consequences as revealed by a study among Palestinian university students. *Child Abuse & Neglect*, 25, 1303-1237. doi:10.1016/S0145-2134(01)00277-0

Halligan, S. L., Michael, T., Clark, D. M., & Ehlers (2003). Posttraumatic stress disorder following assault: The role of cognitive processing, trauma memory, and appraisals. *Journal of Consulting and Clinical Psychology*, 71, 419-431. doi:10.1037/0022-006X.71.3.419

Harper, F., & Arias, I. (2004). The role of shame in predicting adult anger and depressive symptoms among victims of child psychological maltreatment. *Journal of Family Violence*, 19, 367-375. doi:10.1007/s10896-004-0681-x

- Harvey, A. G., Bryant, R. A., & Tarrier, N. (2003). Cognitive behaviour therapy for posttraumatic stress disorder. *Clinical Psychology Review, Special Post Traumatic Stress Disorder*, 23, 501-522.
doi:10.1016/S0272-7358(03)00035-7
- Hasler, G., Drevets, W. C., Manji, H. K., & Charney, D. S. (2004). Discovering endophenotypes for major depression. *Neuropsychopharmacology*, 29, 1765-81. doi: 10.1038/sj.npp.1300506
- Heilemann, M. S. V., Lee, K., & Kury, F. S. (2003). Psychometric properties of the Spanish version of the Resilience Scale. *Journal of Nursing Measurement*, 11, 61–72. doi:10.1891/jnum.11.1.61.52067
- Heise, L., & Garcia-Moreno, C. (2002). *Violence by intimate partners*. In Krug, E. G., Dahlberg, L. L., Mercy, J. A., et al, (Eds.). World report on violence and health. Geneva, World Health Organization.
doi:10.1016/S0140-6736(02)11133-0
- Herman, J. L. (1992). *Trauma and Recovery*. New York: Basic Books.
- Hines, D. A., & Saundion, K. J. (2008). Personality and intimate partner aggression in dating relationships: The role of the “Big Five”. *Aggressive Behaviour*, 34, 593–604. doi:10.1002/ab.20277
- Hinton, D. E., Pham, T., Tran, M., Safren, S. A., Otto, M. W., & Pollack, M. H. (2004). CBT for Vietnamese refugees with treatment-resistant PTSD and panic attacks: A pilot study. *Journal of Traumatic Stress*, 17, 429-433. doi:10.1023/B:JOTS.0000048956.03529.fa

- Horowitz, M. J. (1976). *Stress response syndromes*. New York: Jason Aronson.
- Horowitz, M. J. (1986). *Stress response syndromes* (2nd ed.). New York: Jason Aronson.
- Horowitz, M. J., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective stress. *Psychosomatic Medicine*, 41, 209-218.
- Howell, K. H. (2011). Resilience and psychopathology in children exposed to family violence. *Aggression and Violent Behaviour*, 16 (6), 562-569. doi:10.1016/j.avb.2011.09.001
- Hughes, M., & Jones, L. (2000). Women, domestic violence, and Post Traumatic Stress Disorder. *Family Therapy*, 27, 125–139.
- Humphreys, J. (2003). Resilience in sheltered battered women. *Issues in Mental Health Nursing*, 24, 137-152. doi:10.1080/01612840305293
- Hunter, A. J., & Chandler, G. E. (1999). Adolescent resilience. *Journal of Nursing Scholarship*, 31, 243-247. doi:10.1111/j.1547-5069.1999.tb00488.x
- Husain, N., Gater, R., Tomenson, B., & Creed, F. (2004). Social factors associated with chronic depression among a population-based sample of women in rural Pakistan. *Social Psychiatry and Psychiatric Epidemiology*, 39(8), 618-624. doi: <http://dx.doi.org/10.1007/s00127-004-0781-1>

- Ide, N., & Paez, A. (2000). Complex PTSD: A review of the current literature. *International Journal of Emergency Mental Health*, 2, 43-51.
- Iverson, K. M., Gradus, J. L., Resick, P. A., Suvak, M. K., Smith, K. F., & Monson, C. M. (2011). Cognitive-behavioural therapy for PTSD and depression symptoms reduces risk for future intimate partner violence among interpersonal trauma survivors. *Journal of Consulting and Clinical Psychology*, 79, 193-202. doi:10.1037/a0022512
- Iwaniec, D., Larkins, E., & Higgins, S. (2006). Research review: Risk and resilience in cases of emotional abuse. *Child and Family Social Work*, 11, 73-82. doi:10.1111/j.1365-2206.2006.00398.x
- Jacelon, C. S. (1997). The trait and process of resilience. *Journal of Advanced Nursing*, 25 (1), 123–129. doi: 10.1046/j.1365-2648.1997.1997025123.x
- Jaffee, S. R. (2005). Family violence and parent psychopathology: Implications for children's socioemotional development and resilience. In Goldstein S., Brooks R. B. (Eds.), *Handbook of resilience in children*, (pp. 149-163). New York, NY, US.
- Janoff-Bulman, R. (1979). Characterological versus behavioural self-blame: Inquiries into depression and rape. *Journal of Personality and Social Psychology*, 37, 1798-1809. doi:10.1037//0022-3514.37.10.1798

- Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma*. New York: Free Press.
- Janoff-Bulman, R., & Frieze, L. H. (1983). A theoretical perspective for understanding reactions to victimisation. *Journal of Social Issues*, 39, 1-17. doi:10.1111/j.1540-4560.1983.tb00138.x
- Janoff-Bulman, R., & Wortman, C. B. (1977). Attributions of blame and coping in the 'real world': Severe accident victims react to their lot. *Journal of Personality and Social Psychology*, 35, 351-363.
- Jaycox, L. H., Foa, E. B., Morral, A. R. (1998). Influence of emotional engagement and habituation on exposure therapy for PTSD. *Journal of Consulting and Clinical Psychology*, 66, 185-192. doi: 10.1037/0022-006X.66.1.185
- Jensen-Campbell, L. A., & Graziano, W. G. (2001). Agreeableness as a moderator of interpersonal conflict. *Journal of Personality*, 69, 323-362. doi:10.1111/1467-6494.00148
- Jessor, R. (1996). Ethnographic methods in contemporary perspective. In R. Jessor, A. Colby, & R. A. Shweder (Eds.), *Ethnography and Human Development: Context and Meaning in Social Inquiry*, (pp. 3-14). Chicago: University of Chicago Press.
- Jing-Qi, C., & Wei, L. (2005). Childhood non-contact corporal punishment revealed in the questionnaire survey of technical secondary school students. *Chinese Mental Health Journal*, 19, 243-246.

- Johnson, M. P. (2006). Violence and abuse in personal relationships: Conflict, terror, and resistance in intimate partnerships. In A. L. Vangelisti, & D. Perlman (Eds.), *The Cambridge handbook of personal relationships* (pp. 557–576). New York, NY: Cambridge University Press.
- Jones, L., Hughes, M., & Unterstaller, U. (2001). Posttraumatic stress disorder (PTSD) in victims of domestic violence: A review of the research. *Trauma, Violence, & Abuse*, 2, 99-119.
doi:10.1177/1524838001002002001
- Joseph, S. A., Brewin, C. R., Yule, W., & Williams, R. (1991). Causal attributions and psychiatric symptoms in survivors of the Herald of Free Enterprise disaster. *British Journal of Psychiatry*, 159, 542-546.
doi:10.1192/bjp.159.4.542
- Joseph, S. A., Williams, R., & Yule, W. (1995). Psychosocial perspective on post-traumatic stress. *Clinical Psychology Review*, 15, 515-544.
doi:10.1016/0272-7358(95)00029-O
- Joseph, S. A., Yule, W., & Williams, R. (1993). Post-traumatic stress: Attributional aspects. *Journal of Traumatic Stress*, 6, 501-513.
doi:10.1002/jts.2490060407
- John, O. P., & Srivastava, S. (1999). In Pervin L. A., & John O. P. (Eds.), *The big five trait taxonomy: History, measurement, and theoretical perspectives*. New York, NY, US: Guilford Press.

- Johnson, D. M., Zlotnick, C., & Perez, S. (2011). Cognitive behavioural treatment of PTSD in residents of battered women's shelters: Results of a randomized clinical trial. *Journal of Consulting and Clinical Psychology, 79*(4), 542-551. doi: 10.1037/a0023822
- Keane, T. M., Zimmerling, R. T., & Caddell, J. M. (1985). A behavioural formulation of post-traumatic stress disorder in Vietnam veterans. *The Behaviour Therapist, 8*, 9-12.
- Keashly, L., & Harvey, S. (2005). Emotional abuse in the workplace. In S. Fox & P. E. Spector (Eds.). *Counterproductive work behaviour: Investigations of actors and targets*. (pp. 201-235). Washington, DC: American Psychological Association.
- Keltner, D. & Bonanno, G. A. (1997). A study of laughter and dissociation: Distinct correlates of laughter and smiling in bereavement. *Journal of Personality and Social Psychology, 73*, 687-702. doi:10.1037/0022-3514.73.4.687
- Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the national comorbidity survey. *Archives of General Psychiatry, 52*, 1048-1060. doi:10.1001/archpsyc.1995.03950240066012
- Kilpatrick, D. G., Veronen, L. J., & Resick, P. A. (1979). The aftermath of rape: Recent empirical findings. *American Journal of Orthopsychiatry, 49* (4), 658-669. doi:10.1111/j.1939-0025.1979.tb02651.x

- Kilpatrick, D. G., Best, C. L., Saunders, B. E., & Veronen, L. J. (1988). Rape in marriage and in dating relationships: How bad is it for mental health? *Annals of the New York Academy of Sciences*, 528, 335-344. doi:10.1111/j.1749-6632.1988.tb50875.x
- King, D. W., Leskin, G. A., King, L. A., & Weathers, F. W. (1998). Confirmatory factor analysis of the clinician-administered PTSD Scale: Evidence for the dimensionality of posttraumatic stress disorder. *Psychological Assessment*, 10, 90–96. doi:10.1037//1040-3590.10.2.90
- Kocot, T., & Goodman, L. (2003). The roles of coping and social support in battered women's mental health. *Violence Against Women*, 9(3), 323-346. doi: 10.1177/1077801202250075
- Koss, M. P., Figueredo, A. J., & Prince, R. J. (2002). Cognitive mediation of rape's mental, physical, and social health impact: Tests of four models in cross-sectional data. *Journal of Consulting and Clinical Psychology*, 70(4), 926-941. doi: 10.1037//0022-006X.70.4.926
- Krause, E. D., Kaltman, S. I., Goodman, L. A., & Dutton, M. A. (2007). Longitudinal factor structure of posttraumatic stress symptoms related to intimate partner violence. *Psychological Assessment*, 19(2), 165-175. doi: 10.1037/1040-3590.19.2.165.
- Krause, E., Kaltman, S., Goodman, L., & Dutton, M. (2006). Role of distinct PTSD symptoms in intimate partner re-abuse: A prospective study. *Journal of Traumatic Stress*, 19, 507–516. doi:10.1002/jts.20136

- Kubany, E. S., Hill, E. E., & Owens, J. A. (2003). Cognitive trauma therapy for battered women with PTSD: Preliminary findings. *Journal of Traumatic Stress, 16*, 81-91.
- Kushner, M. G., Riggs, D. S., Foa, E. B., & Miller, S. M. (1993). Perceived controllability and the development of posttraumatic stress disorder (PTSD) in crime victims. *Behaviour Research and Therapy, 31*(1), 105-110. doi: 10.1016/0005-7967(93)90048-Y
- Laing, L. & Bobic, N. (2002). *Economic Costs of domestic violence: Literature review*. Australian Domestic and Family Violence Clearinghouse, University of New South Wales, Sydney, April.
- Lam, J. N., & Grossman, F. K. (1997). Resiliency and adult adaptation in women with and without self-reported histories of childhood sexual abuse. *Journal of Traumatic Stress, 10*, 175-196.
doi:10.1002/jts.2490100203
- Lamb, S. (1999). *New versions of victims: Feminists struggle with the concept*. New York: New York University Press.
- Lamprecht, F., & Sack, M. (2002). Posttraumatic stress disorder revisited. *Psychosomatic Medicine, 64*, 222-237.
- Lang, P. J. (1979). A bio-informational theory of emotional imagery. *Psychophysiology, 16*, 485-512. doi:10.1111/j.1469-8986.1979.tb01511.x
- Layne, C. M., Warren, J., Shaley, A., & Watson, P. (2007). Risk, vulnerability, resistance, and resilience: Towards an integrative

- conceptualization of posttraumatic adaptation. In M. J. Friedman, T. M. Kean, & P. A. Resick (Eds.), *PTSD: Science and practice: A comprehensive handbook*, (pp. 497–520). New York, Guilford Press.
- Lazarus, R. (1993). Coping theory and research: Past, present, and future. *Psychosomatic Medicine*, 55, 234-247.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Publishing Company.
- Lee-Baggley, D., Preece, M., & DeLongis, A. (2005). Coping with interpersonal stress: role of Big Five traits. *Journal of Personality*, 73, 1141–80. doi:10.1111/j.1467-6494.2005.00345.x
- Lengua, L. J, Sandler, I. N., West, S. G., Wolchik, S. A., & Curran, P. J. (1999). Emotionality and self-regulation, threat appraisal, and coping in children of divorce. *Developmental Psychopathology*, 11, 15–37. doi:10.1017/S0954579499001935
- Lev-Wiesel, R., & Amir, M. (2003). The effects of similarity versus dissimilarity of spouses' traumatic childhood events on psychological well-being and marital quality. *Journal of Family Issues*, 24, 737-752. doi:10.1177/0192513X03255326
- Litz, B. T. (1992). Emotional numbing in combat-related post-traumatic stress disorder: a critical review and reformulation. *Clinical Psychology Review*, 12, 417–432. doi:10.1016/0272-7358(92)90125-R

- Lode, K., Larsen, J. P., Bru, E., Klevan, G., Myhr, K. M., & Nyland, H. (2007). Patient information and coping styles in multiple sclerosis. *Multiple Sclerosis, 13*(6), 792-9. doi: 10.1177/1352458506073482.
- Lonigan, C. J., & Phillips, B. M. (2001). Temperamental basis of anxiety disorders in children. In M. W. Vasey & M.R. Dadds (Eds.), *The Developmental Psychopathology of Anxiety*, (pp. 60–91). New York: Oxford University Press.
- Lutgen-Sandvik, P. (2003). The communicative cycle of employee emotional abuse. *Management Communication Quarterly, 16*, 471-501. doi:10.1177/0893318903251627
- Luthar, S. S. (1991). Vulnerability and resilience: A study of high-risk adolescents. *Child Development, 62*, 600-616. doi:10.1111/j.1467-8624.1991.tb01555.x
- Luthar, S. S. (1999). Measurement issues in the empirical study of resilience: An overview. In M. Glanz, & J.L. Johnston (Eds.). *Resiliency and development: positive life adaptations* (pp. 129-160). New York: Plenum.
- Luthar, S. S. (2006). Resilience in development: A synthesis of research across five decades. In D. Cicchetti & D. J. Cohen (Eds.). *Developmental psychopathology: Vol. 3. Risk, disorder, and adaptation* (pp. 739-795), Hoboken, NJ: Wiley.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child*

Development, 71(3), 543-562. doi: 10.1111/1467-8624.00164

Maercker, A., & Herrle, J. (2003). Long-term effects of the Dresden bombing: Relationships to control beliefs, religious belief, and personal growth. *Journal of Traumatic Stress*, 16(6), 579-587. doi: 10.1023/B:JOTS.0000004083.41502.2d

Malouff, J. M., Thorsteinsson, E. B., Rooke, S. E., & Schutte, N. S. (2007). Alcohol involvement and the five-factor model of personality: a meta-analysis. *Journal of Drug Education*, 37, 277–294. doi:10.2190/DE.37.3.d

Malouff, J. M., Thorsteinsson, E. B., & Schutte, N. S. (2005). The relationship between the five-factor model of personality and symptoms of clinical disorders: a meta-analysis. *Journal of Psychopathology & Behaviour Assessment*, 27, 101–114. doi:10.1007/s10862-005-5384-y

Mancini, A. D., Bonanno, G. A., & Clark, A. E. (2009). Stepping off the hedonic treadmill: Individual differences in response to marriage, divorce, and spousal bereavement. Manuscript submitted for publication.

Margolin, G., John, R. S., & Foo, L. (1998). Interactive and unique risk factors for husbands' emotional and physical abuse of their wives. *Journal of Family Violence*, 13, 315-344. doi:10.1023/A:1022880518367

Marhoefer-Dvorak, S., Resick, P. A., Hutter, C. K., & Girelli, S. A. (1988).

Single- versus multiple-incident rape victims: A comparison of psychological reactions to rape. *Journal of Interpersonal Violence*, 3(2), 145-160. doi:10.1177/088626088003002002.

Marmar, C. R., Weiss, D. S., Metzler, T. J., & Delucchi, K. L. (1996).

Characteristics of emergency services personnel related to peritraumatic dissociation during critical incident exposure. *American Journal of Psychiatry*, 153 (7), 94-102.

Martinez-Torteya, C., Bogat, G. A., Eye, A. v., Levendosky, A. A., &

Davidson, William S., II. (2009). Women's appraisals of intimate partner violence stressfulness and their relationship to depressive and posttraumatic stress disorder symptoms. *Violence and Victims*, 24(6), 707-722. doi: 10.1891/0886-6708.24.6.707

Mash, E. J., & Wolfe, D. A. (2002). *Abnormal Child Psychology* (2nd ed.).

USA: Wadsworth.

Masten, A. S. (1999). Resilience comes of age: Reflections on the past and

outlook for the next generation of research. In M. D. Glantz, J.

Johnson, & L. Huffman (Eds.), *Resilience and development: Positive life adaptations* (pp. 282-296). New York: Plenum.

Masten, A. S. (2001). Ordinary magic: Resilience processes in

development. *American Psychologist*, 56, 227-238. doi:10.1037//0003-066X.56.3.227

Masten, A. S., Garmezy, N., Tellegen, A., Pellegrini, D. S., Larkin, K., &

Laren, A. (1988). Competence and stress in school children: The

moderating effects of individual and family qualities. *Journal of Child Psychology and Psychiatry*, 29, 745-764. doi:10.1111/j.1469-7610.1988.tb00751.x

Masten, A. S., & Obradovic, J. (2006). Competence and resilience in development. *Annals of New York Academy of Science*, 1094, 13-27. doi:10.1196/annals.1376.003

Masten, A. S. & Powell, J. L. (2003). A resiliency framework for research, policy and practice. In S. Luthar (ed.) *Resiliency and vulnerability: Adaptation in the context of childhood adversity*, (pp.1-29). Cambridge University Press: Cambridge.

Masten, A. S. & Shaffer, A. (2006). How families matter in child development. In A. Clarke-Stewart & J. Dunne (Eds.). *Families count: Effects on child and adolescent development* (pp. 5-25). New York: Cambridge University Press.

Matorin, A. I., & Lynn, S. J. (1998). The development of a measure of correlates of child sexual abuse: The traumatic sexualization survey. *Journal of Traumatic Stress*, 11, 261-281. doi:10.1023/A:1024499019860

McCann, I. L., & Pearlman, L. A. (1990). *Psychological trauma and the adult survivor: Theory, therapy, and transformation*. New York, NY: Brunner/Mazel.

McClure, F. H., Chavez, D. V., Agars, D., Peacock, M. J., & Matosian, A. (2008). Resilience in sexually abused women: Risk and protective

- factors. *Journal of Family Violence*, 23, 81–88. doi:10.1007/s10896-007-9129-4
- McCrae, R. R. (1990). Controlling neuroticism in the measurement of stress. *Stress Medicine*, 6, 237–241. doi:10.1002/smi.2460060309
- McCrae, R. R. (1996). Social consequences of experiential openness. *Psychological Bulletin*, 120, 323–337. doi:10.1037//0033-2909.120.3.323
- McCrae, R. R., & Costa, P. T. (2003). *Personality in Adulthood: A Five-Factor Theory Perspective* (2nd ed.). New York: Guilford.
- McCrae, R. R., & John, O. P. (1992). Introduction to the five-factor model and its applications. *Journal of Personality*, 60, 175–215. doi:10.1111/j.1467-6494.1992.tb00970.x
- McFarlane, A. C. (1988). The longitudinal course of posttraumatic morbidity: The range of outcome and their predictors. *Journal of Nervous and Mental Disease*, 176, 30–39. doi:10.1097/00005053-198801000-00004
- Mechanic, M. B., Weaver, T. L., & Resnick, P. A. (2008). Mental health consequences of intimate partner abuse: A multidimensional assessment of four different forms of abuse. *Violence Against Women*, 14, 634–654. doi:10.1177/1077801208319283
- Meier, B. P., & Robinson, M. D. (2004). Does quick to blame mean quick to anger? The role of agreeableness in dissociating blame and anger.

Personality & Social Psychology Bulletin, 30, 856–67.

doi:10.1177/0146167204264764

Meier, B. P., Robinson, M.D., & Wilkowski, B. M. (2006). Turning the other cheek: Agreeableness and the regulation of aggression-related primes. *Psychological Sciences*, 17, 136–142. doi:10.1111/j.1467-9280.2006.01676.x

Meiser-Stedman, R., Smith, P., Bryant, R., Salmon, K., Yule, W., Dalgleish, T., Nixon, R. D. V. (2009). Development and validation of the Child Post-Traumatic Cognitions Inventory (CPTCI). *Child Psychology and Psychiatry and Allied Disciplines*, 50, 432-440. doi:10.1111/j.1469-7610.2008.01995.x

Mertin, P., & Mohr, P. B. (2000). Incidence and correlates of posttraumatic stress disorder in Australian victims of domestic violence. *Journal of Family Violence*, 15, 411–422. doi:10.1023/A:1007510414571

Metzl, E.S. (2009). The role of creative thinking in resilience after Hurricane Katrina. *Psychology of Aesthetics, Creativity, and the Arts*, 3, 112–123. doi:10.1037/a0013479

Meyer, B., & Taylor, S. (1986). Adjustment to rape. *Journal of Personality & Social Psychology*, 50, 1226–1234. doi:10.1037//0022-3514.50.6.1226

Michael, T., Ehlers, A., Halligan, S. L. (2005). Enhanced priming for trauma-related material in posttraumatic stress disorder. *Emotion*, 5, 103-112. doi:10.1037/1528-3542.5.1.103

- Michael, T., Ehlers, A., Halligan, S.L., & Clark, D. M. (2005). Unwanted memories of assault: What intrusion characteristics are associated with PTSD? *Behaviour Research & Therapy*, 43, 612-628.
doi:10.1016/j.brat.2004.04.006
- Middleton, W., Moylan, A., Raphael, B., Burnett, P., & Martinek, N. (1993). An international perspective on bereavement related concepts. *Australian and New Zealand Journal of Psychiatry*, 27, 457-463.
doi:10.3109/00048679309075803
- Mihalic, S. W., & Elliot, D. (1997). A social learning theory model of marital violence. *Journal of Family Violence*, 12(1), 21-47.
- Miles, J. N. V, & Hempel, S. (2003). The Eysenck personality scales: The Eysenck Personality Questionnaire-Revised (EPQ-R) and the Eysenck Personality Profiler (EPP). In M. Hersen, M. Hilsenroth, & D. Segal, (Eds), *Comprehensive Handbook of Psychological Assessment: Personality Assessment*, (pp. 99-107). New York: Wiley.
- Millear, P., Liossis, P., Shochet, I. M., Biggs, H., & Donald, M. (2008). Being on PAR: Outcomes of a pilot trial to improve mental health and wellbeing in the workplace with the Promoting Adult Resilience (PAR) program. *Behaviour Change*, 25, 215-228.
doi: <http://dx.doi.org/10.1375/beh.25.4.215>
- Miller, M. W., Patrick, C. J., & Levenston, G. K. (2002). Affective imagery and the startle response: Probing mechanisms of modulation during pleasant scenes, personal experiences, and discrete negative

emotions. *Psychophysiology*, 39, 519–529.

doi:10.1017.S0048577202394095

Mitchell, R. E., & Hodson, C. A. (1983). Coping with domestic violence:

Social support and psychological health among battered women.

American Journal of Community Psychology, 11(6), 629-654.

doi:10.1007/BF00896600

Moeller, T. P., Bachman, G. A., & Moeller, J. R. (1993). The combined

effects of physical, sexual, and emotional abuse during childhood:

Long-term consequences for women. *Child Abuse & Neglect*, 17, 623-

640. doi:10.1016/0145-2134(93)90084-I

Mouzos, J., & Makkai, T. (2004). *Women's experiences of male violence:*

findings from the Australian component of the International Violence

Against Women Survey (IVAWS). Research and Public Policy Series

(56), Australian Institute of Criminology, Canberra

Mowrer, O. H. (1960). *Learning theory and behaviour*. New York: Wiley.

Müller, J., Wessa, M., Rabe, S., Dorfel, D., Knaevelsrud, C., Flor, H.,

Maercker, A., & Karl, A. (2010). Psychometric properties of the

Posttraumatic Cognitions Inventory (PTCI) in a German sample of

individuals with a history of trauma. *Trauma Theory Research Practice*

and Policy, 2, 116-125. doi:10.1037/a0018603

Muran, J. C., Safran, J. D., Samstag, L.W., & Winston, A. (2005).

Evaluating an alliance-focused treatment for personality disorders.

Psychotherapy: Theory, Research, Practice, Training, 42, 532-545.

doi:10.1037/0033-3204.42.4.532

Muris, P. (2006). Unique and interactive effects of neuroticism and effortful control on psychopathological symptoms in nonclinical adolescents.

Personality & Individual Differences, 40, 1409–1419.

doi:10.1016/j.paid.2005.12.001

Muris P., de Jong, P. J., & Engelen, S. (2004). Relationships between neuroticism, attentional control, and anxiety disorders symptoms in nonclinical children. *Personality & Individual Differences*, 37, 789–797. doi:10.1016/j.paid.2003.10.007

Murphy, S. M., Kilpatrick, D. G., Amick-McMullan, A., Veronen, L. J., et al. (1988). Current psychological functioning of child sexual assault survivors: A community study. *Journal of Interpersonal Violence*, 3, 55-79. doi:10.1177/088626088003001005

National Centre for Injury Prevention and Control—NCIPC. (2003). *Costs of intimate partner violence against women in the United States*.

Atlanta (GA): Center for Disease Control and Prevention.

Neufeld, J., McNamara, J. R., & Ertl, M. (1999). Incidence and prevalence of dating partner abuse and its relationship to dating practices. *Journal of Interpersonal Violence*, 14, 125-137.

doi:10.1177/088626099014002002

Nixon, R. D. V., Resick, P. A., & Nishith, P. (2004). An exploration of comorbid depression among female victims of intimate partner

violence with posttraumatic stress disorder. *Journal of Affective Disorders*, 82(2), 315-320. doi: 10.1016/j.jad.2004.01.008.

Norris, F., & Kaniasty, K. (1994). Psychological distress following criminal victimization in the general population: Cross-sectional, longitudinal, and prospective analyses. *Journal of Consulting and Clinical Psychology*, 62, 111–123. doi:10.1037//0022-006X.62.1.111

Norris, F. H., Tracy, M., & Galea, S. (2009). Looking for resilience: Understanding the longitudinal trajectories of responses to stress. *Social Science & Medicine*, 68, 2190–2198. doi:10.1016/j.socscimed.2009. 03.043

Nurius, P. S., Macy, R. J., Bhuyan, R., Holt, V. L., Kernic, M. A., & Rivara, F. P. (2003). Contextualizing depression and physical functioning in battered women: Adding vulnerability and resources to the analysis. *Journal of Interpersonal Violence*, 18(12), 1411-1431. doi: 10.1177/0886260503258033.

Nygren, B., Alex, L., Jonsen, E., Gustafson, Y., Norberg, A., & Lundman, B. (2005). Resilience, sense of coherence, purpose in life and self-transcendence in relation to perceived physical and mental health among the oldest old. *Aging and Mental Health*, 12, 354–62. doi:10.1080/1360500114415

O'Brien, T. B., & DeLongis, A. (1996). The interactional context of problem-, emotion-, and relationship-focused coping: The role of the Big Five personality factors. *Journal of Personality*, 64, 775–813.

doi:10.1111/j.1467-6494.1996.tb00944.x

- O'Hagan, K. P. (1995). Emotional and psychological abuse: Problems of definition. *Child Abuse & Neglect, 19*, 449-461. doi:10.1016/0145-2134(95)00006-T
- O'Leary, V. (1998). Strength in the face of adversity: Individual and social thriving. *Journal of Social Issues, 54*, 425-446. doi:10.1111/j.1540-4560.1998.tb01228.x
- O'Neill, M. L., & Kerig, P. K. (2000). Attributions of self-blame and perceived control as moderators of adjustment in battered women. *Journal of Interpersonal Violence, 15*(10), 1036-1049. doi:10.1177/088626000015010002
- Oke, M. (2008). Remaking self after domestic violence: Mongolian and Australian women's narratives of recovery. *Australian and New Zealand Journal of Family Therapy, 29*, 148-155. doi:10.1375/anft.29.3.148
- Osterweis, M., Solomon, F., & Green, F. (1984). *Bereavement: Reactions, consequences, and care*. Washington, DC: National Academy Press.
- Ovara, T. A., McLeod, P. J., & Sharpe, D. (1996). Perception of control, depressive symptomatology and self-esteem in women in transition from abusive relationships. *Journal of Family Violence, 11*, 167-186.
- Ozer, E. J., Best, S. R., Lipsey, T. L., & Weiss, D. S. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: A meta-analysis. *Psychological Bulletin, 129*, 52-73. doi:10.1037//0033-2909.129.1.52

- Penley, J. A., & Tomaka, J. (2002). Associations among the Big Five, emotional responses, and coping with acute stress. *Personality & Individual Differences*, 32, 1215–1228. doi:10.1016/S0191-8869(01)00087-3
- Penley, J. A., Tomaka, J., & Wiebe, J.S. (2002). The association of coping to physical and psychological health outcomes: A meta-analytic review. *Journal of Behavioural Medicine*, 25, 551-603. doi:10.1023/A:1020641400589
- Pennebaker, J. W. (1993). Putting stress into words: Health, linguistic, and therapeutic implications. *Behaviour Research and Therapy*, 31, 539–548. doi:10.1016/0005-7967(93)90105-4
- Pennebaker, J. W., & Francis, M. E. (1996). Cognitive, emotional, and language processes in disclosure. *Cognition and Emotion*, 10, 601–626. doi:10.1080/026999396380079
- Pennebaker, J. W., Mayne, T. J., & Francis, M. E. (1997). Linguistic predictors of adaptive bereavement. *Journal of Personality and Social Psychology*, 72, 863–871. doi:10.1037//0022-3514.72.4.863
- Personal Safety Survey. (2005). Canberra, Australia. *Australian Bureau of Statistics*. Accessed from www.abs.gov.au
- Pico-Alfonso, M. A. (2005). Psychological intimate partner violence: The major predictor of posttraumatic stress disorder in abused women. *Neuroscience and Behavioral Reviews*, 29, 181–193. doi:10.1016/j.neubiorev.2004.08.010

- Pico-Alfonso, M., Garcia-Linares, M., Celda-Navarro, N., Blasco-Ros, C., Echeburúa, E., & Martinez, M. (2006). The impact of physical, psychological, and sexual intimate male partner violence on women's mental health: Depressive symptoms, posttraumatic stress disorder, state anxiety, and suicide. *Journal of Women's Health, 15*(5), 599-611. doi: 10.1089/jwh.2006.15.599
- Pink, B. (2009). Conceptual framework for domestic and family violence: Australia. *Australian Bureau of Statistics*. Accessed from www.abs.gov.au. (No. 4529.0).
- Pitman, R. K. (1989a). Post-traumatic stress disorder, conditioning and network theory. *Psychiatric Annals, 18*, 182-189. doi:10.1016/0006-3223(89)90033-4
- Pitman, R. K. (1989b). Post-traumatic stress disorder, hormones and memory. *Biological Psychiatry, 26*, 221-223. doi:10.1016/0006-3223(89)90033-4
- Pittman, J. F., & Lee, C. S. (2004). Comparing different types of child abuse and spouse abuse offenders. *Violence & Victims, 19*, 137- 156. doi:10.1891/vivi.19.2.137.64098
- Raj, A., Silverman, J. G., & Amaro, H. (2004). Abused women report greater male partner risk and gender-based risk for HIV: Findings from a community-based study with Hispanic women. *AIDS Care, 16* (4), 519-529. doi:10.1080/09540120410001683448
- Rammstedt, B., Riemann, R., Angleitner, A., & Borkenau, P. (2004).

- Resilients, overcontrollers, and undercontrollers: The replicability of the three personality prototypes across informants. *European Journal of Personality*, 18(1), 1-14. doi:10.1002/per.495
- Rachman, S. (1980). Emotional processing. *Behaviour Research & Therapy*, 18, 51-60.
- Rando, T. A. (1992). The increasing prevalence of complicated mourning: The onslaught is just beginning. *Omega*, 26, 43-59. doi:10.2190/7MDL-RJTF-NA2D-NPQF
- Resick, P. A., Nishith, P., Weaver, T. L., Astin, M. C., & Feuer, C. A. (2002). A comparison of cognitive-processing therapy with prolonged exposure and a waiting condition for the treatment of chronic posttraumatic stress disorder in female rape victims. *Journal of Consulting and Clinical Psychology*, 70, 867-879. doi: 10.1037/0022-006X.70.4.867
- Rew, L., Taylor-Seehafer, M., Thomas, N. Y., & Yockey, R. D. (2001). Correlates of resilience in homeless adolescents. *Journal of Nursing Scholarship*, 33, 33-40. doi:10.1111/j.1547-5069.2001.00033.x
- Rich, D. J., Gingerich, K. J., & Rosen, L. A. (1997). Childhood emotional abuse and associated psychopathology in college students. *Journal of College Student Psychotherapy*, 11, 13-28. doi:10.1300/J035v11n03_04
- Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, 58, 307-321. doi:10.1002/jclp.10020

- Rincón, P. P. (2003). Posttraumatic stress disorder in victims of domestic violence: Assessment of intervention programs. Universidad Complutense, Spain.
- Rioli, L., Savicki, V., & Cepani, A. (2002). Resilience in the face of catastrophe: optimism, personality and coping in the Kosovo crisis. *Journal of Applied Social Psychology*, 32, 1604 – 27.
doi:10.1111/j.1559-1816.2002.tb02765.x
- Rivara, F. P., Anderson, M. L., Fishman, P., Bonomi, A. E., Reid, R. J., Carrell, D., & Thompson, R. S. (2007). Healthcare utilization and costs for women with a history of intimate partner violence. *American Journal of Preventive Medicine*, 32(2), 89-96.
doi:10.1016/j.amepre.2006.10.001
- Rosenberg, S. D., Mueser, K. T., Jankowski, M. K., Salyers, M. P., & Acker, K. (2004). Cognitive-behavioural treatment of PTSD in severe mental illness: Results of a pilot study. *American Journal of Psychiatric Rehabilitation*, 7, 171-186.
doi:10.1080/15487760490476200
- Roth, S., Newman, E., Pelcovitz, D., van der Kolk, B., & Mandel, F. S. (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.
doi:10.1002/jts.2490100403
- Rothbart, M. K., & Hwang, J. (2005). Temperament and the development

- of competence and motivation. In A. J. Elliot & C.S. Dweck (Eds.), *Handbook of Competence and Motivation*, (pp. 167–184). New York: Guilford.
- Rothman, E. F., Butchart, A., & Cerda, M. (2003). Intervening with perpetrators of intimate partner violence: A global perspective. *World Health Organisation*, Geneva.
- Rudd, M. D., Joiner, T., & Rajab, M. T. (2001). *Treating suicidal behaviour: An effective time-limited approach*. New York: Guildford.
- Ruscio, A. M., Weathers, F. W., King, L. A., & King, D. W. (2002). Male war-zone veterans' perceived relationships with their children: The importance of emotional numbing. *Journal of Traumatic Stress*, 5, 351–357. doi:10.1023/A:1020125006371
- Rusbult, C. E., & Martz, J. M. (1995). Remaining in an abusive relationship: An investment model analysis of nonvoluntary dependence. *Personality and Social Psychology Bulletin*, 21(6), 558-558. doi:10.1177/0146167295216002
- Russell, R., & Jory, M.K. (1997). An evaluation of group intervention programs for violent and abusive men. *Australian and New Zealand Journal of Family Therapy*, 18, 126-136.
- Rutter, M. (1979). Maternal deprivation, 1972-1978: New findings, new concepts, new approaches. *Child Development*, 20, 283-305. doi:10.2307/1129404
- Rutter, M. (1985). Resilience in the face of adversity: Protective factors and

- resistance to psychiatric disorder. *British Journal of Psychiatry*, 147, 598-611. doi:10.1192/bjp.147.6.598
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, 57, 316-333. doi:10.1111/j.1939-0025.1987.tb03541.x
- Sack, M. (2004). Diagnostic and clinical aspects of complex posttraumatic stress disorder. *Nervenarzt*, 75, 451-459. doi:10.1007/s00115-003-1612-4
- Saladin, M. E., Brady, K. T., Dansky, B. S., & Kilpatrick, D. G. (1995). Understanding comorbidity between PTSD and substance use disorders: Two preliminary investigations. *Addictive Behaviours*, 20, 643-655. doi:10.1016/0306-4603(95)00024-7
- Saniah, A. R., & Zainal, N. Z. (2010). Anxiety, Depression and Coping Strategies in Breast Cancer Patients on Chemotherapy. *Malaysian Journal of Psychiatry*, 19 (2). Retrieved from <http://www.mjpsychiatry.org/index.php/mjp/article/view/99>
- Saunders, D. G. (1994). Posttraumatic stress symptom profiles of battered women: A comparison of survivors in two settings. *Violence and Victims*, 9, 31-44.
- Schumm, J. A., Briggs-Phillips, M., & Hobfoll, S. E. (2006). Cumulative interpersonal traumas and social support as risk and resiliency factors in predicting PTSD and depression among inner-city women. *Journal of Traumatic Stress*, 19(6), 825-836. doi: 10.1002/jts.20159

- Schwartzberg, S. S., & Janoff-Bulman, R. (1991). Grief and the search for meaning: Exploring the assumptive worlds of bereaved college students. *Journal of Social and Clinical Psychology, 10*, 270-288.
doi:10.1521/jscp.1991.10.3.270
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*, 316-331.
doi:10.1037//0003-066X.55.1.5
- Shalev, A. Y. (2002). Acute stress reactions in adults. *Biological Psychiatry, 51*, 532-543. doi:10.1016/S0006-3223(02)01335-5
- Shepard, M. F., & Campbell, J. A. (1992). The Abusive Behaviour Inventory: A measure of psychological and physical abuse. *Journal of Interpersonal Violence, 7*, 291-305.
doi:10.1177/088626092007003001
- Slatton, K. D., & Lyddon, W.J. (2000). Cognitive-experiential reprocessing and rape: A case study. *Journal of Cognitive Psychotherapy, 18*, 189-200.
- Shichang, Y., Yalin, Z., & Guoping, H. (2004). A preliminary study on personality characteristics of the abused child. *Chinese Mental Health Journal, 18*(9), 617-619.
- Smith, J. R. (1982). Personal responsibility in traumatic stress reactions. *Psychiatric Annals, 12*(11), 1021-1030.
- Smith Landsman, I. S. (2002). Crises of meaning in trauma and loss. In J. Kauffman (Ed.), *Loss of the Assumptive World: A Theory of Traumatic Loss*, (pp. 13-30.). Brunner-Routledge.

- Smith-Osbourne, A. (2007). Life span and resiliency Theory: A critical review. *Advances in Social Work*, 8, 152-168.
- Soldz, S., & Vaillant, G. E. (1999). The Big Five personality traits and the life course: A 45-year longitudinal study. *Journal of Research on Personality*, 33, 208–232. doi:10.1006/jrpe.1999.2243
- Solomon, Z., & Prager, E. (1992). Elderly Israeli holocaust survivors during the Persian Gulf War: A study of psychological distress. *The American Journal of Psychiatry*, 149 (12), 1707-1710.
- Southwick, S. M., Vythilingam, M., & Charney, D. S. (2005). The psychobiology of depression and resilience to stress: Implications for prevention and treatment. *Annual Review of Clinical Psychology*, 1, 255-291. doi:10.1146/annurev.clinpsy.1.102803.143948
- Spaccarelli, S. (1994). Stress, appraisal, and coping in child sexual abuse: A theoretical and empirical review. *Psychological Bulletin*, 116, 340–362. doi:10.1037//0033-2909.116.2.340
- Spertus, I. L., Yehuda, R., Wong, C. M., Halligan, S., & Seremetis, S. V. (2003). Childhood emotional abuse and neglect as predictors of psychological and physical symptoms in women presenting to a primary care practice. *Child Abuse & Neglect*, 27, 1247-1258. doi:10.1016/j.chiabu.2003.05.001
- Stallard, P. (2009). Cognitive behaviour therapy with children and young people. In H. Beinart, P. Kennedy & S. Llewelyn (Eds.), (pp. 117-126).

Leicester Malden, England: British Psychological Society Blackwell Publishing.

- Stallard, P., Simpson, N., Anderson, A., Carter, T., Osborn, C., & Bush, S. (2005). An evaluation of the FRIENDS programme: a cognitive behaviour therapy intervention to promote emotional resilience. *Archives of Disease in Childhood, 90*, 1016-1019.
doi:10.1136/adc.2004.068163
- Startup, M., Makgekgenene, L., & Webster, R. A. (2007). The role of self-blame for trauma as assessed by the posttraumatic cognitions inventory (PTCI): A self-protective cognition? *Behaviour Research and Therapy, 45*(2), 395-403. doi: 10.1016/j.brat.2006.02.003
- Steel, P., Schmidt, J., & Shultz, J. (2008). Refining the relationship between personality and subjective well-being. *Psychological Bulletin, 134*, 138–61. doi:10.1037/0033-2909.134.1.138
- Steil, R., & Ehlers, A. (2000). Dysfunctional meaning of posttraumatic intrusions in chronic PTSD. *Behaviour Research and Therapy, 38*, 537–558. doi:10.1016/S0005-7967(99)00069-8
- Stewart, S. H., Conrod, P. J., Pihl, R. O., & Dongier, M. (1999). Relations between posttraumatic stress symptom dimensions and substance dependence in a community-recruited sample of substance-abusing women. *Psychology of Addictive Behaviours, 13*, 78–88.
doi:10.1037//0893-164X.13.2.78

- Strauchler, O., McCloskey, K., Malloy, K., Sitaker, M., Grigsby, N., & Gillig, P. (2004). Humiliation, manipulation and control: Evidence of centrality in domestic violence against an adult partner. *Journal of Family Violence, 19*, 339-354. doi:10.1007/s10896-004-0679-4
- Straus, M. A. (1976). Sexual inequality, cultural norms, and wife-beating. *Victimology: An International Journal, 1*, 54-70.
- Straus, M. A. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) Scales. *Journal of Marriage and the Family, 41*, 75-88. doi:10.2307/351733
- Straus, M. A., & Field, C. J. (2003). Psychological aggression by American parents: National data on prevalence, chronicity, severity. *Journal of Marriage and Family, 65*, 795-808. doi:10.1111/j.1741-3737.2003.00795.x
- Street, A. E., & Arias, I. (2001). Psychological abuse and posttraumatic stress disorder in battered women: Examining the role of shame and guilt. *Violence & Victims, 16*, 65-78.
- Strube, M. J., & Barbour, L. S. (1983). The decision to leave an abusive relationship: Economic dependence and psychological commitment. *Journal of Marriage and the Family, 45*(4), 785-793. doi:10.2307/351791
- Suls, J., & Martin, R. (2005). The daily life of the garden-variety neurotic: reactivity, stressor exposure, mood spillover, and maladaptive coping.

Journal of Personality, 73, 1485–509. doi:10.1111/j.1467-6494.2005.00356.x

Sutherland, C. A., Bybee, D. I., & Sullivan, C. M. (2002). Beyond bruises and broken bones: The joint effects of stress and injuries on battered women's health. *American Journal of Community Psychology*, 30 (5), 609-636. doi:10.1023/A:1016317130710

Swett, C., & Halpert, M. (1993). Reported history of physical and sexual abuse in relation to dissociation and other symptomatology in women psychiatric inpatients. *Journal of Interpersonal Violence*, 8, 545-555.

Taft, C. T., Murphy, C. M., King, L. A., Dedeyn, J. M., & Musser, P. H. (2005). Posttraumatic stress disorder symptomatology among partners of men in treatment for relationship abuse. *Journal of Abnormal Psychology*, 114, 259-268. doi:10.1177/088626093008004009

Taft, C. T., Resick, P. A., Panuzio, J., Vogt, D.S., & Mechanic, M. B. (2007). Coping among victims of relationship abuse: A longitudinal examination. *Violence & Victims*, 22, 408-418. doi:10.1891/088667007781553946

Tedeschi, R.G., & Calhoun, L.G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15, 1-18. doi:10.1207/s15327965pli1501_01

Teegan, F., & Schrieffer, J. (2002). Complex traumatic stress disorders: An investigation of the diagnostic construct in a sample of abused women.

Zeitschrift Klinische Psychologie, Psychiatrie und Psychotherapie, 50, 219-233.

Tolman, R. M. (1989). The development of a measure of psychological maltreatment of women by their male partners. *Violence and Victims*, 4, 159–177.

Tong, E. M., Bishop, G. D., Diong, S. M., Enkelmann, H. C., Why, Y. P., et al. (2004). Social support and personality among male police officers in Singapore. *Personality & Individual Differences*, 36, 109–123.
doi:10.1016/S0191-8869(03)00072-2

Trapmann, S., Hell, B., Hirn, J. W., & Schuler, H. (2007). Meta-analysis of the relationship between the Big Five and academic success at university. *Journal of Psychology*, 215, 132–51. doi:10.1027/0044-3409.215.2.132

Tucker, P., Pfefferbaum, B., Doughty, D. E., Jones, D. E., Jordan, F. B., & Nixon, S. J. (2002). Body handlers after terrorism in Oklahoma City: Predictors of posttraumatic stress and other symptoms. *American Journal of Orthopsychiatry*, 72, 469–475. doi:10.1037//0002-9432.72.4.469

Tugade, M. M. & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*, 86, 320–333.
doi:10.1037/0022-3514.86.2.320

- Tupes, E. C., & Christal, R. E. (1992). Recurrent personality factors based on trait ratings. *Journal of Personality*, 60, 225–251.
- Ulrich, Y. C. (1991). Women's reasons for leaving abusive spouses. *Health Care for Women International*, 12, 465-473.
doi:10.1080/07399339109515970
- Unger, M. (2004). A constructionist discourse on resilience: Multiple contexts, multiple realities among at-risk children and youth. *Youth & Society*, 35, 341-365.
- Valentiner, D. P., Foa, E., Riggs, D. S., & Gershuny, B. S. (1996). Coping strategies and posttraumatic stress disorder in female victims of sexual and nonsexual assault. *Journal of Abnormal Psychology*, 105, 455-458. doi:10.1037//0021-843X.105.3.455
- Van der Kolk, B. A. (2001). The psychobiology and psychopharmacology of PTSD. *Human Psychopharmacology*, 16, 49-64.
doi:10.1002/hup.270
- Van der Kolk, B. A. (2007). The body keeps score: Approaches to the psychobiology of Posttraumatic Stress Disorder. In B. A. van der Kolk, A. C. McFarlane, & L. Weiaeth (Eds.), *Traumatic Stress: The effects of overwhelming experience on mind, body, and society*, (pp. 214-241). The Guildford Press: New York, London.
- VicHealth. (2009). *National survey on community attitudes to violence against women 2009: Changing cultures, changing attitudes—*

preventing violence against women. Carlton South: Victorian Health Promotion Foundation.

Virueda, M., & Payne, J. (2010). *Homicide in Australia: 2007–08 National Homicide Monitoring Program annual report*. Monitoring Report no 13, Australian Institute of Criminology, Canberra

Vrana, S., R., Cuthbert, B. N., & Lang, P. J. (1986). Fear imagery and text processing. *Psychophysiology*, 23, 247-253. doi:10.1111/j.1469-8986.1986.tb00626.x

Vollrath, M. (2001). Personality and stress. *Scandinavian Journal of Psychology*, 42, 335–347. doi:10.1111/1467-9450.00245

Vollrath, M., & Torgersen, S. (2000). Personality types and coping. *Personality & Individual Differences*, 29, 367–378. doi:10.1016/S0191-8869(99)00199-3

Wagnild, G. (2009). A review of the Resilience Scale. *Journal of Nursing Measurement*, 17, 105-113. doi:10.1891/1061-3749.17.2.105

Wagnild, G. M., & Young, H. M. (1993). Development and psychometric validation of the Resilience Scale. *Journal of Nursing Measurement*, 1, 237-248.

Waldrop, A. E., & Resick, P. A. (2004). Coping among adult female victims of domestic violence. *Journal of Family Violence*, 19(5), 291-302. doi:10.1023/B:JOFV.0000042079.91846.68

Walker, L. E. (1979). *The battered woman*. New York: Harper & Row.

- Walker, L. E. (1984). *The Battered Woman Syndrome*, Springer, New York.
- Walker, R. J. (1996). Resilient reintegration of adult children of perceived alcoholic parents. Unpublished doctoral dissertation, University of Utah.
- Wang, J., & Patten, S. B. (2002). The moderating effects of coping strategies on major depression in the general population. *The Canadian Journal of Psychiatry*, 47(2), 167-173.
- Watson, C. G., Barnett, M. S., Nikunen, L., Schultz, C., Randolph-Elgin, T., Mendez, C. (1997). Lifetime Prevalences of Nine Common Psychiatric/Personality Disorders in Female Domestic Abuse Survivors. *Journal of Nervous & Mental Disease*, 185 (10), 645-647. doi:10.1097/00005053-199710000-00011
- Watson, D., & Hubbard, B. (1996). Adaptational style and dispositional structure: Coping in the context of the five-factor model. *Journal of Personality*, 64(4), 737-774. doi:10.1111/j.1467-6494.1996.tb00943.x
- Weaver, T. L., & Clum, G. A. (1995). Psychological distress associated with interpersonal violence: A meta-analysis. *Clinical Psychology Review*, 15(2), 115-140. doi: 10.1016/0272-7358(95)00004-9.
- Weiss, D.S., & Marmar, C.R. (1997). The Impact of Event Scale-Revised. In J.P. Wilson & T.M. Keane (Eds.). *Assessing Psychological Trauma and PTSD* (pp. 399-411). Boston, USA: Guilford.
- Wenzlaff, E. M., & Wegner, D. M. (2000). Thought suppression. *Annual Review of Psychology*, 51, 59–91. doi:10.1146/annurev.psych.51.1.59

- Werner, E. E., & Smith, R. S. (1982). *Vulnerable but invincible: A longitudinal study of resilient children and youth*. New York: McGraw-Hill.
- Werner, E. E. & Smith, R. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Ithaca, New York: Cornell University Press.
- Werner-Wilson, R. J., Schindler Zimmerman, T., & Whalen, D. (2000). Resilient response to battering. *Contemporary Family Therapy*, 22, 161-188. doi:10.1023/A:1007777702757
- Westra, H. A. (2004). Managing resistance in cognitive behavioural therapy: The application of motivational interviewing in mixed anxiety and depression. *Cognitive Behaviour Therapy*, 33, 161-175. doi:10.1080/16506070410026426
- Whatley, M. A. (1993). For better or worse: The case of marital rape. *Violence and Victims*, 8, 29-39. doi:10.1177/088626093008004005
- Wingo, A.P., Wrenn, G., Pelletier, T., Gutman, A. R., Bradley, B., & Ressler, K. (2010). Moderating effects of resilience on depression in individuals with a history of childhood abuse or trauma exposure. *Journal of Affective Disorders*, 126 (3), 411-414. doi:10.1016/j.jad.2010.04.009
- Woods, S. J. (2000). Prevalence and patterns of posttraumatic stress disorder in abused and post-abused women. *Issues in Mental Health Nursing*, 21(3), 309-324. doi: 10.1080/016128400248112.

World Health Organization. (2005). WHO multi-country study on women's health and domestic violence: Report of initial results on prevalence, health outcomes and women's responses. Geneva: WHO.

Wuest, J., Ford-Gilboe, M., Merritt-Gray, M., & Berman, H. (2003). Intrusion: the central problem for family health promotion among children and single mothers after leaving an abusive partner. *Qualitative Health Research*, 13(5), 597–622. doi:10.1177/1049732303013005002

Yoshihama, M., & Gillespie, B. W. (2002). Age adjustment and recall bias in the analysis of domestic violence data: Methodological improvements through the application of survival analysis methods. *Journal of Family Violence*, 17(3), 199-221. doi: 10.1023/A:1016001211182

Zelikovsky, N., Schast, A.P., & Jean-Francois, D. (2007). Parent stress and coping: Waiting for a child to receive a kidney transplant. *Journal of Clinical Psychology in Medical Settings*, 14, 320-329. doi:10.1007/s10880-007-9084-5

Zoellner, L. A., Foa, E. B., & Brigidi, B. D. (1999). Interpersonal friction and PTSD in female victims of sexual and nonsexual assault. *Journal of Traumatic Stress*, 12, 689–700. doi:10.1023/A:1024777303848

Appendix A

Participant Information Sheet

Abusive Behaviour Inventory (ABI)

Resilience Scale (RS)

Impact of Event Scale – Revised (IES-R)

Brief COPE

Items from the International Personality Item Pool (IPIP)

Posttraumatic Cognitions Inventory (PCTI)



UNIVERSITY
OF TASMANIA

PARTICIPANT INFORMATION SHEET

An examination of factors that influence resilience in female victims of intimate partner violence.

The current study is being undertaken in partial fulfilment of the requirements for a Doctorate of Psychology for Danielle Riley and is being conducted by Associate Professor Frances Martin and Dr Kimberley Norris who are the supervisors of Ms Danielle Riley at the School of Psychology at the University of Tasmania. The purpose of this study is to investigate different factors that may influence a resilient, adaptive response to exposure to intimate partner violence and protect against the development of psychopathology.

Who can participate?

We are seeking Australian women aged 18 years and over to participate in this questionnaire study. Specifically we are looking for two groups of women:

1. Women who are or have been in an intimate relationship and have never been in an abusive (psychological, physical, or sexual) relationship.
2. Women who have previously been in an abusive (psychological or physical or sexual) intimate relationship. To protect the wellbeing of participants, if you are currently in an abusive relationship you should not volunteer for this study.

We hope that the information obtained from this study will increase our knowledge about the way different types of abuse impact on people and the factors that facilitate resilient responses.

How long will it take?

Participation in this study is completely voluntary. A maximum time commitment of one hour will be required to complete the questionnaire study. One hour of course credit will be available for Psychology students if required.

What will be required?

If you would like to participate, you will be asked to complete the Abusive Behaviour Inventory, the Resilience Scale, the International Personality Item Pool, SCL-90-R, Impact of Event Scale -Revised, the Posttraumatic

Cognitions Inventory, and the Brief COPE and then return the questionnaires to the School of Psychology in the envelope provided or place them in the box provided in the student liaison officer's room if you are a Psychology student. Questionnaire packages that are not fully completed will be excluded from the study.

One of the questionnaires we will ask you to complete will ask you about the type of intimate partner violence you might have experienced. Some people may find that it is difficult thinking about their traumatic experience as it may cause anxiety. If this is the case for you, we recommend that you do not participate in this project. If at any point you become distressed whilst completing the questionnaire we strongly advise you to discontinue participation. We do not wish for participation in the project to be distressing for you.

Support services for victims of intimate partner violence

Should you wish to discuss your traumatic experience with someone unaffiliated with the project, we would suggest that you contact the Family Violence Counselling and Support Service (ph: 1800 608 122; 9am – 12am weekdays, 4pm-12am weekends and public holidays), S.H.E (ph: 6278 9090), the Sexual Assault Support Service (ph: 6231 1811; 24 hour crisis line: 6231 1817), or Centacare (ph: 6278 1660). If you require immediate assistance, please let us know as we would be happy to provide support. 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.

Confidentiality

We will maintain the strictest of confidence in relation to this study. All written information and computer data files will be stored anonymously and we will not know who filled in any questionnaire. The data will be secured in a locked cabinet or on password protected computers in the School of Psychology and will be securely destroyed five years after the study has been published.

If you wish to further discuss the study; before, during, or after participation, please contact;

Danielle Riley at Danielle.Riley@utas.edu.au.

or

Associate Professor Frances Martin

(03) 6226 2262

F.Martin@utas.edu.au

Dr Kimberley Norris

(03) 6226 7199

Kimberley.Norris@utas.edu.au

This study has been approved by the Tasmanian Social Sciences Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study you should contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 7479 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated

to receive complaints from research participants. You will need to quote [H11107].

Overall results will be available in electronic form on the School of Psychology website at the completion of the project if you are interested (www.scieng.utas.edu.au/psychol/).

Your completion and submission of the questionnaires signifies your consent to participate in the study.

Thank you.

Abusive Behaviour Inventory

Here is a list of behaviours that many women report they have experienced within an intimate relationship. We would like you to estimate how often these behaviours occurred during a former intimate relationship. Your answers are strictly confidential. CIRCLE a number of each of the items listed below to show your closest estimate of how often it happened in your relationship with your former partner. For example, if you have never experienced a particular behaviour listed, circle "1", and if you have experienced a particular behaviour listed very frequently circle "5", etc.

	Never	Very Frequently			
	1	2	3	4	5
1. Called you names and/or criticized you.	1	2	3	4	5
2. Tried to keep you from doing something you wanted to do (example: going out with friends, going to meetings).	1	2	3	4	5
3. Gave you angry stares or looks.	1	2	3	4	5
4. Prevented you from having money for your own use.	1	2	3	4	5
5. Ended a discussion with you and made the decision himself.	1	2	3	4	5
6. Threatened to hit or throw something at you.	1	2	3	4	5
7. Pushed, grabbed or shoved you.	1	2	3	4	5
8. Put down your family and friends.	1	2	3	4	5
9. Accused you of paying too much attention to someone or something else.	1	2	3	4	5
10. Put you on an allowance.	1	2	3	4	5
11. Used the children to threaten you (example: told you that you would lose custody, said he would leave town with the children).	1	2	3	4	5
12. Became very upset with you because dinner, housework, or laundry was not ready when he wanted it done or done the way he thought it should be.	1	2	3	4	5
13. Said things to scare you (examples: told you something "bad" would happen, threatened to commit suicide).	1	2	3	4	5
14. Slapped, hit or punched you.	1	2	3	4	5
15. Made you do something humiliating or degrading(example: begging for forgiveness, having to ask his permission to use the car or do something).	1	2	3	4	5
16. Checked up on you (examples: listened to your phone calls, checked the mileage on your car, called you repeatedly at work).	1	2	3	4	5
17. Drove recklessly when you were in the car.	1	2	3	4	5
18. Pressured you to have sex in a way that you didn't like or want.	1	2	3	4	5
19. Refused to do housework or childcare.	1	2	3	4	5
20. Threatened you with a knife, gun, or other weapon.	1	2	3	4	5
21. Spanked you.	1	2	3	4	5
22. Told you that you were a bad parent.	1	2	3	4	5

23. Stopped you or tried to stop you from going to work or school	1	2	3	4	5
24. Threw, hit, kicked, or smashed something.	1	2	3	4	5
25. Kicked you.	1	2	3	4	5
26. Physically forced you to have sex.	1	2	3	4	5
27. Threw you around.	1	2	3	4	5
28. Physically attacked the sexual parts of your body.	1	2	3	4	5
29. Choked or strangled you.	1	2	3	4	5
30. Used a knife, gun, or other weapon against you.	1	2	3	4	5

The Resilience Scale™

Please read the following statements. To the right of each you will find seven numbers, ranging from "1" (Strongly Disagree) on the left to "7" (Strongly Agree) on the right. Circle the number which best indicates your feelings about that statement. For example, if you strongly disagree with a statement, circle "1" and if you strongly agree, circle "7", etc. Wherever possible try to avoid circling "4", unless this is the only accurate response for you.

	Strongly Disagree							Strongly Agree
1. When I make plans, I follow through with them.	1	2	3	4	5	6	7	
2. I usually manage one way or another.	1	2	3	4	5	6	7	
3. I am able to depend on myself more than anyone else.	1	2	3	4	5	6	7	
4. Keeping interested in things is important to me.	1	2	3	4	5	6	7	
5. I can be on my own if I have to.	1	2	3	4	5	6	7	
6. I feel proud that I have accomplished things in life.	1	2	3	4	5	6	7	
7. I usually take things in stride.	1	2	3	4	5	6	7	
8. I am friends with myself.	1	2	3	4	5	6	7	
9. I feel that I can handle many things at a time.	1	2	3	4	5	6	7	
10. I am determined.	1	2	3	4	5	6	7	
11. I seldom wonder what the point of it all is.	1	2	3	4	5	6	7	
12. I take things one day at a time.	1	2	3	4	5	6	7	
13. I can get through difficult times because I've Experienced difficulty before.	1	2	3	4	5	6	7	
14. I have self-discipline.	1	2	3	4	5	6	7	
15. I keep interested in things.	1	2	3	4	5	6	7	
16. I can usually find something to laugh about.	1	2	3	4	5	6	7	
17. My belief in myself gets me through hard times.	1	2	3	4	5	6	7	
18. In an emergency, I'm someone people can generally rely on.	1	2	3	4	5	6	7	
19. I can usually look at a situation in a number of ways.	1	2	3	4	5	6	7	
20. Sometimes I make myself do things whether I want to or not.	1	2	3	4	5	6	7	
21. My life has meaning.	1	2	3	4	5	6	7	
22. I do not dwell on things that I can't do anything about.	1	2	3	4	5	6	7	
23. When I'm in a difficult situation, I can usually find my way out of it.	1	2	3	4	5	6	7	
24. I have enough energy to do what I have to do.	1	2	3	4	5	6	7	
25. It's okay if there are people who don't like me.	1	2	3	4	5	6	7	
26. I am resilient.	1	2	3	4	5	6	7	

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Impact of Event Scale – Revised

Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then indicate how distressing each difficulty has been for you with respect to the experiences you reported above within the past 7 days. For example, if you have not experienced any distress in relation to a particular statement, circle "0" and if you have experienced an extreme level of distress in relation to a particular statement, circle "4", etc.

	Not at all			Extremely		
	0	1	2	3	4	
1. Any reminder brought back feelings about it.	0	1	2	3	4	
2. I had trouble staying asleep.	0	1	2	3	4	
3. Other things kept making me think about it.	0	1	2	3	4	
4. I felt irritable and angry.	0	1	2	3	4	
5. I avoided letting myself get upset when I thought about it or was reminded of it.	0	1	2	3	4	
6. I thought about it when I didn't mean to.	0	1	2	3	4	
7. I felt as if it hadn't happened or wasn't real.	0	1	2	3	4	
8. I stayed away from reminders of it.	0	1	2	3	4	
9. Pictures about it popped into my mind.	0	1	2	3	4	
10. I was jumpy and easily startled.	0	1	2	3	4	
11. I tried not to think about it.	0	1	2	3	4	
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.	0	1	2	3	4	
13. My feelings about it were kind of numb.	0	1	2	3	4	
14. I found myself feeling or acting like I was back at that time.	0	1	2	3	4	
15. I had trouble falling asleep.	0	1	2	3	4	
16. I had strong waves of feeling about it.	0	1	2	3	4	
17. I tried to remove it from my memory.	0	1	2	3	4	
18. I had trouble concentrating.	0	1	2	3	4	
19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea or a pounding heart.	0	1	2	3	4	
20. I had dreams about it.	0	1	2	3	4	
21. I felt watchful and on-guard.	0	1	2	3	4	
22. I tried not to talk about it.	0	1	2	3	4	

Brief COPE

These items deal with ways you've been coping with your experience of intimate partner violence and/or difficulties experienced within an intimate relationship. There are many ways to try to deal with problems. These items ask what you've been doing to cope with this one. Each item says something about a particular way of coping. I want to know to what extent you've been doing what the item says. How much or how frequently. Don't answer on the basis of whether it seems to be working or not—just whether or not you're doing it. Use these response choices. Try to rate each item separately in your mind from the others. For example, if you strongly disagree with a statement, circle "1" and if you strongly agree, circle "4", etc. Make your answers as true FOR YOU as you can.

	Not at all		A lot	
1. I've been turning to work or other activities to take my mind off things.	1	2	3	4
2. I've been concentrating my efforts on doing something about the situation I'm in.	1	2	3	4
3. I've been saying to myself "this isn't real".	1	2	3	4
4. I've been using alcohol or other drugs to make myself feel better.	1	2	3	4
5. I've been getting emotional support from others.	1	2	3	4
6. I've been giving up trying to deal with it.	1	2	3	4
7. I've been taking action to try to make the situation better.	1	2	3	4
8. I've been refusing to believe that it has happened.	1	2	3	4
9. I've been saying things to let my unpleasant feelings escape.	1	2	3	4
10. I've been getting help and advice from other people.	1	2	3	4
11. I've been using alcohol or other drugs to help me get through it.	1	2	3	4
12. I've been trying to see it in a different light, to make it seem more positive.	1	2	3	4
13. I've been criticizing myself.	1	2	3	4
14. I've been trying to come up with a strategy about what to do.	1	2	3	4
15. I've been getting comfort and understanding from someone.	1	2	3	4
16. I've been giving up the attempt to cope.	1	2	3	4
17. I've been looking for something good in what is happening.	1	2	3	4
18. I've been making jokes about it.	1	2	3	4
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.	1	2	3	4
20. I've been accepting the reality of the fact that it has happened.	1	2	3	4
21. I've been expressing my negative feelings.	1	2	3	4
22. I've been trying to find comfort in my religion or spiritual beliefs.	1	2	3	4
23. I've been trying to get advice or help from other people about what to do.	1	2	3	4
24. I've been learning to live with it.	1	2	3	4

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| 25. I've been thinking hard about what steps to take. | 1 | 2 | 3 | 4 |
| 26. I've been blaming myself for things that happened. | 1 | 2 | 3 | 4 |
| 27. I've been praying or meditating. | 1 | 2 | 3 | 4 |
| 28. I've been making fun of the situation. | 1 | 2 | 3 | 4 |

How Accurately Can You Describe Yourself?

Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Indicate for each statement whether it is 1 = Very Inaccurate, 2 = Moderately Inaccurate, 3 = Neither Accurate Nor Inaccurate, 4 = Moderately accurate, or 5 = Very Accurate. Wherever possible try to avoid circling "3", unless this is the only accurate response for you.

	Very Inaccurate			Very Accurate	
1. I am the life of the party.	1	2	3	4	5
2. I feel little concern for others.	1	2	3	4	5
3. I am always prepared.	1	2	3	4	5
4. I get stressed out easily.	1	2	3	4	5
5. I have a rich vocabulary.	1	2	3	4	5
6. I don't talk a lot.	1	2	3	4	5
7. I am interested in people.	1	2	3	4	5
8. I leave my belongings around.	1	2	3	4	5
9. I am relaxed most of the time.	1	2	3	4	5
10. I have difficulty understanding abstract ideas.	1	2	3	4	5
11. I feel comfortable around people.	1	2	3	4	5
12. I insult people.	1	2	3	4	5
13. I pay attention to details.	1	2	3	4	5
14. I worry about things.	1	2	3	4	5
15. I have a vivid imagination.	1	2	3	4	5
16. I keep in the background.	1	2	3	4	5
17. I sympathise with others' feelings.	1	2	3	4	5
18. I make a mess of things.	1	2	3	4	5
19. I seldom feel blue.	1	2	3	4	5
20. I am not interested in abstract ideas.	1	2	3	4	5
21. I start conversations.	1	2	3	4	5
22. I am not interested in other people's problems.	1	2	3	4	5
23. I get chores done right away.	1	2	3	4	5
24. I am easily disturbed.	1	2	3	4	5
25. I have excellent ideas.	1	2	3	4	5
26. I have little to say.	1	2	3	4	5
27. I have a soft heart.	1	2	3	4	5
28. I often forget to put things back in their proper place.	1	2	3	4	5
29. I get upset easily.	1	2	3	4	5
30. I do not have a good imagination.	1	2	3	4	5
31. I talk to a lot of different people at parties.	1	2	3	4	5
32. I am not really interested in others.	1	2	3	4	5
33. I like order.	1	2	3	4	5
34. I change my mood a lot.	1	2	3	4	5
35. I am quick to understand things.	1	2	3	4	5
36. I don't like to draw attention to myself.	1	2	3	4	5

	Very Inaccurate			Very Accurate	
37. I take time out for others.	1	2	3	4	5
38. I shirk my duties.	1	2	3	4	5
39. I have frequent mood swings.	1	2	3	4	5
40. I use difficult words.	1	2	3	4	5
41. I don't mind being the centre of attention.	1	2	3	4	5
42. I feel other's emotions.	1	2	3	4	5
43. I follow a schedule.	1	2	3	4	5
44. I get irritated easily.	1	2	3	4	5
45. I spend time reflecting on things.	1	2	3	4	5
46. I am quiet around strangers.	1	2	3	4	5
47. I make people feel at ease.	1	2	3	4	5
48. I am exacting in my work.	1	2	3	4	5
49. I often feel blue.	1	2	3	4	5
50. I am full of ideas.	1	2	3	4	5

Posttraumatic Cognitions Inventory

We are interested in the kind of thoughts which you may have had after your experience of intimate partner violence and/or difficulties experienced within an intimate relationship. Below are a number of statements that may or may not be representative of your thinking. Please read each statement carefully and tell us how much you AGREE or DISAGREE with each statement. People react to traumatic events in many different ways. There are no right or wrong answers to these statements. For example, if you strongly disagree with a statement, circle "1" and if you strongly agree, circle "7", etc. Wherever possible try to avoid circling "4", unless this is the only accurate response for you. Wherever possible try to avoid circling "4", unless this is the only accurate response for you.

	Totally Disagree	Totally Agree
1. The event happened because of the way I acted.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
2. I can't trust that I will do the right thing.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
3. I am a weak person.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
4. I will not be able to control my anger and will do something terrible.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
5. I can't deal with even the slightest upset.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
6. I used to be a happy person but now I am always miserable.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
7. People can't be trusted.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
8. I have to be on guard all the time.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
9. I feel dead inside.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
10. You can never know who will harm you.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
11. I have to be especially careful because you never know what can happen next.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
12. I am inadequate.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
13. I will not be able to control my emotions, and something terrible will happen.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
14. If I think about the event, I will not be able to handle it.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
15. The event happened to me because of the sort of person I am.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
16. My reactions since the event mean that I am going crazy.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
17. I will never be able to feel normal emotions again.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
18. The world is a dangerous place.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
19. Somebody else would have stopped the event from happening.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
20. I have permanently changed for the worse.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
21. I feel like an object, not like a person.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
22. Somebody else would not have gotten into this situation.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
23. I can't rely on other people.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
24. I feel isolated and set apart from others.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
25. I have no future.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
26. I can't stop bad things from happening to me.	1 2 3 4 5 6 7	1 2 3 4 5 6 7

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| 27. People are not what they seem. | 1 2 3 4 5 6 7 |
| 28. My life has been destroyed by the trauma. | 1 2 3 4 5 6 7 |
| 29. There is something wrong with me as a person. | 1 2 3 4 5 6 7 |
| 30. My reactions since the event show that I am a
lousy coper. | 1 2 3 4 5 6 7 |
| 31. There is something about me that made the event
happen. | 1 2 3 4 5 6 7 |
| 32. I will not be able to tolerate my thoughts about the
event, and I will fall apart. | 1 2 3 4 5 6 7 |
| 33. I feel like I don't know myself anymore. | 1 2 3 4 5 6 7 |
| 34. You never know when something terrible will
happen. | 1 2 3 4 5 6 7 |
| 35. I can't rely on myself. | 1 2 3 4 5 6 7 |
| 36. Nothing good can happen to me anymore. | 1 2 3 4 5 6 7 |