Interpersonal Emotional Responses in Violent Offenders: (Re) examining the role of Empathy.

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The first to be acknowledgement should, indeed must, be my daughter. Ooboo, thanks for the encouragement, the patience, and for dutifully eating more than your fair share of take away food.

To my supervisors –

    Angela, your compulsive scribbling was always appreciated – even when I didn’t appear that enthusiastic.

    Guy, your praise was motivational – even when I appeared less convinced than you.

    To both of you – thanks for your complete honesty (making assumptions here), dedication, and tolerance.

To my parents – well, it looks like I finally finished!

To Anne Pedersen. My research partner (when I should have been doing my PhD).

Thanks for your friendship, and for being someone I’m proud to call my colleague.
Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma in any other university and, to the best of my knowledge or belief, contains no material previously published or written by another person, except when due reference is made in the text.

____________________________
Jaimie Beven

April 2006
Preface

It is necessary to provide an explanation of the presentation style of this thesis. The work for this thesis was completed via article submission and in order to reflect that appropriately, each article has been presented in its entirety. Therefore, some chapters consist wholly of a single article; while other chapters include preambles, theoretical expansion of the article and the like. For ease of reading, each article is presented with tables and figures inserted into the text and with end references removed. The final reference list contains references for the whole thesis. A cover page has been left attached to each article along with the abstract. Additionally, the full reference for each article is presented in a footnote on the appropriate cover page.
Abstract

The study of empathy has had a long history in both psychology and philosophy; however, debate has continued in relation to the exact nature of the construct. Several distinct variants of empathy have evolved over time, with some researchers viewing the construct as cognitive, while others emphasise the affective nature of empathy. An examination of the history of the construct reveals evidence which supports both positions. Multidimensional models of empathy, such as that posed by Davis (1994), encompass both cognitive and affective accounts of empathy, as well as their interaction. Despite the apparent acceptance of multidimensional models of empathy, confusion still remains as to the definition of empathy. This has restrained theories of the relationship between empathy and constructs such as aggression.

The current program of study sought to clarify the relationship between aggression and empathy, focusing on a multidimensional approach. It was argued that previous research relied on the assumed inhibitory nature of empathy on aggression, and although intuitive, had failed to acknowledge alternative explanations for a relationship between empathy and aggression. Three possible explanations to account for a possible relationship between empathy and aggression were therefore examined. Firstly, that the distress cues of another produce distress in the observer (personal distress) and that distress is interpreted as aversive. Personal distress produces a drive to reduce the aversive state which may result in the use of violence by some individuals. (Empathic arousal functioning as a facilitator of aggression); secondly, that the distress cues of another fail to produce an affective reaction in some observers. (Empathic arousal failing to function as an inhibitor of aggression); and
thirdly, that the distress cues of another produce an affective reaction in some observers, which is interpreted as an excitation (contrast empathy), and functions to reinforce the use of violence. (Empathic arousal functioning as a facilitator of aggression).

During phase 1 of the research the psychometric properties of the empathy measure, currently used with offenders, were examined in an offender sample. Results from 88 violent offenders indicated that the measure was not suitable for use with offender samples, and therefore new scales needed to be produced before research could continue. Two scales were constructed; the Negative Affect Intolerance Scale (NAIS) assessed offenders’ level of intolerance toward distress cues of others, while the Offender Contrast Affect Scale (OCAS) assessed offenders’ level of excitation and enjoyment of the distress cues of others. Once scale construction had been complete, the psychometric properties of the scales were examined using sample of 166 university students. These preliminary results indicated that both scales were reliable and valid.

Phase 2 of the research program began with a pilot study to examine the psychometric properties of the two newly constructed scales with sample of 49 incarcerated male offenders. Both scales once again produced results which supported their reliability and validity. A larger study was then conducted to examine the three theorised roles that empathy may play in either the production or maintenance of aggression. Cluster analysis identified 5 clusters in a sample of 106 sentenced male offenders, based on their responses to a set of scales (including the NAIS and OCAS). Each of these clusters was compared to a Western Australian community sample (43 low SES
males). Results supported all three explanations of a relationship between empathy and aggression, within different clusters of offenders.

The final phase of research involved postulating a theoretical role for cognitive aspects of empathy (perspective taking) in the production or inhibition of aggression. It was argued that, despite the apparent simplicity with which the construct has been dealt with in the literature, perspective taking should be considered a two dimensional construct (frequency & accuracy). When considered in this way, perspective taking may provide additional guidance in the study and treatment of human aggression.
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Chapter One

Empathy and Aggression
1.1 Overview

The central focus of this thesis is on the relationship between empathy and violence. The domain of empathy research has been plagued by definitional problems, and these are reviewed at the outset of this chapter. Following this, the current major theories relating empathy to prosocial behaviour are discussed, before turning to a review of the definitional problems inherent in the human violence and aggression literature. The current theories about human violence and aggression are then briefly reviewed. In the final sections of this chapter, a discussion of the literature regarding the relationship between empathy and violence is presented.

Two sets of central arguments are presented in this chapter. The first set surrounds the current definitions of empathy and violence; in both cases, definitional limitations have been, and continue to be, problematic for the development of a theory explaining the role of empathy in violence. The second set of centrally important arguments is directed toward the relationship between empathy and violence. Current theories generally posit that empathy inhibits violence. However, the evidence which links violence and empathy is mixed, and appears to be consistent with several different models, including but not only, the position that empathy acts to inhibit violent behaviour. The heterogeneity found in offender populations (Howells, Watt, Hall & Baldwin, 1997) may offer an explanation for these inconsistencies. For example, if the inhibitory empathy-aggression hypothesis is relevant for only one subgroup of violent offenders, then this effect will be diluted by the presence diversity within an empirical sample. It is argued here that a useful model of the relationship between empathy and violence must take account of possible offender subgroups, and also provide a description of disorders of, or deficits in, empathy in violent offenders. Such a model
will provide a theoretical underpinning for the development of concrete treatment options for violent offenders.

1.2 Empathy, the Elusive Construct

The history of empathy research has been marred by debate. Marred, rather than enhanced, because, as Hezewijk (2000) points out, these debates often seem endless and “if ever they end it is because they have evaporated instead of having been rationally decided upon. The arguments are about fundamentalist matters, they revolve about tacit presuppositions, about abstract assumptions and about definitions” (p. 101). Debate regarding definition; however, should not been seen as a worthless endeavor. Unless definitional agreement is achieved “we will not be able to understand each other” (Simon, 1982, p. 333).

1.2.1 Early Conceptions of Sympathy and Empathy

Much of the debate surrounding the definition of empathy stems from what may be seen as semantic confusion, specifically, between the concepts of empathy and sympathy. The constructs of empathy and sympathy have different origins although the differences between them are subtle.

1.2.1.1 The Conceptual Origins of Sympathy

Both Hume (1739) and Smith (1790) wrote about the compassion of one human being toward the suffering of another. In regards to sympathy, Hume stated that “No quality of human nature is more remarkable, both in itself and in its consequences, than that
propensity we have to sympathize with others, and to receive by communication their inclinations and sentiments, however different from, or even contrary to our own.” (II.I.XI). It was the similarity between human beings, which, according to Hume, enabled sympathy. The greater the similarity between two people, the greater the propensity to experience sympathy. “The stronger the relation is betwixt ourselves and any object, the more easily does the imagination make the transition” (II.I.XI). Hume, however, did not sufficiently clarify the concept of sympathy (Wispé, 1986) but his works were influential in Adam Smith’s later work on the subject.

Smith (1790) viewed sympathy as critical in his work “Theory of Moral Sentiments”. Smith wrote “How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it. Of this kind is pity or compassion, the emotion which we feel for the misery of others, when we either see it, or are made to conceive it in a very lively manner” (1790, I.I.1).

Both Hume (1739) and Smith (1790) perceived sympathy to be a process requiring the imagination. That is, comprehending the emotions of the other by imaginatively placing oneself in the position of the other. Smith saw this as a limitation to the intensity of sympathy, stating that “The thought of their own safety, the thought that they themselves are not really the sufferers, continually intrudes itself upon them; and though it does not hinder them from conceiving a passion somewhat analogous to what is felt by the sufferer, hinders them from conceiving any thing that approaches to the same degree of violence” (I.I.36). Therefore, the emotion in the observer was likely to be less intense than the actual emotion of the distress other.
Sympathy has been described as pre-reflexive (Switankowsky, 2000) and passive (Davis, 1994). In being moved by the misfortune of another, an individual experiences sympathy but that experience is fleeting. “That imaginary change of situation, upon which their sympathy is founded, is but momentary” (Smith, 1790; I.I.36).

1.2.1.2 The Conceptual Origins of Empathy

Empathy, in comparison to sympathy, is a far younger concept. The origin of the concept, in the psychological domain at least, has been accredited to the work of Theodore Lipps (1903) who used the German word Einfühlung, which referred to the act of projecting oneself into the target of observation (Davis, 1994). Titchener (1909) translated Einfühlung into the English term empathy using the Greek word empatheia, meaning affection or passion. Sawicki (1997), however, argues that Einfühlung is not empathy. Einfühlung originated in the German hermeneutical tradition, and was used by Lipps (1903, cited in Sawicki, 1997) in his description of human knowledge. Lipps maintained that there were three areas of knowledge: knowledge of things was achieved via sense perception; knowledge of the self was achieved via inner reflective perception; and knowledge of other human beings was achieved via Einfühlung. Einfühlung was an inner awareness of the other which could only be distinguished from the inner reflective perception of the self retrospectively. “I can then tell, reflectively, whether the I deployed in the experience has been my own or someone else’s” (Sawicki, 1997).
The mechanism underlying empathy, according to Titchener (1909, cited in Davis 1994) was analogous with modern models of motor mimicry and lead to a weaker version of the original affect in the observer. Empathy involves the perception of emotion in another that leads one to “feel or act them in the mind’s muscle” (Titchener, 1909, p 21, cited in Wispé, 1986). Davis’ review of the history of empathy highlights the deliberate nature of empathising with another, which involves effort to “step outside the self and ‘into’ the experiences of others” (p 5). Unlike the original Einfühlung described by Sawicki (1997), however, Titchener’s empathy maintained a distinction between the self and the other.

**1.2.1.3 Distinctions between Sympathy and Empathy**

The previous, brief outline of the origins of sympathy and empathy highlights that, although originating a century apart, there are many similarities between the two concepts. Both sympathy and empathy describe an individual’s response to the emotional displays of another and both involve the use of the imagination, which results in the observer experiencing affect. The distinctions, however, are important in that they help to explain some of the confusion surrounding modern definitions of empathy.

Sympathy is viewed as a passive process, while empathy is viewed as active. Furthermore early descriptions of empathy, or more accurately Einfühlung, describe a way of knowing and suggest a cognitive role in the process, while Smith’s (1790) sympathy was primarily thought to be an affective response. This distinction may help to explain the duality apparent in later definitions of empathy. While one interpretation of the construct of empathy revolved around affective responses (e.g.,
Stotland, 1969), others viewed empathy as being a cognitive mechanism (e.g., Chapin, 1942).

Several papers have been written on the distinction between empathy and sympathy. Wispé (1991) conducted an extensive review of this distinction, concluding, “In empathy, the self is the vehicle for understanding, and it never loses its identity. Sympathy, on the other hand, is concerned with communion rather than accuracy, and self-awareness is reduced rather than enhanced…The object of empathy is understanding. The object of sympathy is the other person’s well-being” (pp. 79-80). Despite such reviews, however, debate continues and is evident in Switankowsky’s (2000) review of attempts within the literature to separate these two constructs. Switankowsky does reiterate the distinction between empathy and sympathy on the basis of activity of the observer. Empathy requires effort, sympathy occurs passively. This distinction, then, appears to be a fairly robust and consistent distinction and one which will be adopted in the current text.

1.2.2 Operationalisation and Research

Once introduced to the field of psychology by Titchener (1909), empathy became a theoretically important construct. Interpersonal affective responses and the process of understanding our social peers had potential in several fields of study, quickly “becoming a ‘buzz’ word” (Olinick, 1984, p. 137). Researchers, however, needed to redefine empathy in operational terms in order to proceed with their investigations. These definitions varied and reflected interpretative differences as well as semantic confusion with the original construct of sympathy. Table 1.1 provides a summary of the some of the major definitions of empathy used in psychology.
Table 1.1: Progression of empathy definitions.

<table>
<thead>
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<th>Author(s)</th>
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<td>Titchener (1909, cited in Wispé, 1986)</td>
<td>“Not only do I see gravity and modesty and pride and courtesy and stateliness, but I feel or act them in the mind’s muscle” (p. 21)</td>
</tr>
<tr>
<td>Feshbach (1964)</td>
<td>“vicarious emotional response of a perceiver to the emotional experience of a perceived object” (p. 102)</td>
</tr>
<tr>
<td>Stotland (1969)</td>
<td>“an observer’s reacting emotionally because he perceives that another is experiencing or is about to experience an emotion” (p. 272)</td>
</tr>
<tr>
<td>Hogan (1969)</td>
<td>“Empathy refers only to the act of constructing for oneself another person’s mental state; the verisimilitude of the resulting construct is not a necessary part of the concept’s meaning” (p. 308)</td>
</tr>
<tr>
<td>Miller &amp; Eisenberg (1988)</td>
<td>“empathy is defined as an emotional response evoked by the affective state or situation of the other person. This emotion may be either identical or similar to the state of the other and involves at least a minimal degree of self-other differentiation” (p. 325)</td>
</tr>
<tr>
<td>Davis (1994)</td>
<td>“Empathy is broadly defined as a set of constructs having to do with the responses of one individual to the experiences of another” (p. 12)</td>
</tr>
<tr>
<td>Preston &amp; de Waal (2002)</td>
<td>“any process where the attended perception of the object’s state generates a state in the subject that is more applicable to the object’s state or situation than to the subject’s own prior state or situation” (p. 4)</td>
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As can be seen from the above table, definitions have varied in their reliance on the passive or active nature of empathy, as well as their acceptance of empathy as either a cognitive or an affective construct. Only Davis’ (1994) definition appears congruent with Titchener’s original description of empathy, in that it includes both affective and cognitive aspects, however Davis has broadened the definition to include passive responses while Titchener’s definition required an active response “in the mind’s muscle” (p. 21, cited in Wispé, 1986). It could be argued that by broadening the definition in this way, Davis has simply contributed toward the blurring of the distinction between empathy and sympathy. Davis, on the other hand, takes the position that defining empathy in strict terms has resulted in constructs, which are excluded by the definition, being “in some sense seen as peripheral” (p. 12). For
example, if empathy is defined in strictly affective terms, cognitive processes will not be included in subsequent research. Therefore, by broadening the definition of empathy, Davis has alleviated Wispé’s concerns that sympathy has become ignored by experimental psychology, even though it may have as much to offer as the more popular empathy.

It should also be noted that only Stotland’s (1969) and Davis’ (1994) definitions of empathy include non-congruent affective responses and therefore do not exclude aberrant emotional responses from the study of empathic responding. This is particularly useful for researchers investigating antisocial behaviour as it allows for a broader set of hypotheses to be studied instead of a simple inhibitory empathy-aggression hypothesis.

1.2.3 Settling on a Definition of Empathy

The information presented so far has outlined historic and modern definitions of empathy, which differ primarily in the level of restriction placed upon the concept. Early work by Titchener (1909, cited in Wispé, 1986) was relatively unrestricted compared to definitions presented by authors such as Miller and Eisenberg (1988). Davis’ (1994) multidimensional view of empathy has further expanded the definition of empathy to incorporate both affective and cognitive components, and to allow for the inclusion of personal distress to come under the umbrella of empathy. Davis’ definition, however, does not preclude the inclusion of empathic reaction which are incongruent with the observational target (contrast affect) even though this construct is not included in Davis’ account of empathy.
Stotland’s (1969) definition, although primarily affective, does provide for both affective and cognitive aspects of empathy in that the reaction of the individual is affective but relies upon the cognitive aspect of perception. Furthermore, Stotland’s definition does not prohibit emotional reactions that are different from those displayed by the target of that perception. This aspect is important for discussions relating to violence and aggression, as precluding aberrant affective reactions may conceal affective responses in offenders. Additionally, although the primary focus of this thesis is affective responses in offenders in response to the distress cues of victims, perspective taking should not be disregarded in any discussion of the relationship between empathy and aggression.

With this in mind, then, Stotland’s (1969) definition of empathy will be adopted for the purposes of the current work. It is acknowledged that “Empathy with other’s distress is but one aspect of this complex socioemotional landscape” (Brownell, Zerwas & Balaram, 2002), however, when discussing the role of empathy in interpersonal violence and aggression, the target’s emotion is restricted to distress cues. Attempting to incorporate the plethora of human emotional responses in an area interested in the distress cues of victims is only likely to obscure observed relationships and make theoretical associations overly complex.

1.2.3.1 Empathic Concern

Empathic Concern constitutes a subscale of Davis’s (1980) Interpersonal Reactivity Index (IRI), and represents the definition of empathy most commonly discussed in the psychological literature. Empathic concern relates to the feelings of concern and sympathy felt by an observer, in response to the distress cues of another (Davis,
Davis has added the distinguishing term of ‘concern’ to illuminate the other oriented nature of the construct and to help set apart this construct from other empathic responses such as personal distress.

The boundary between empathy and sympathy, as noted earlier, is blurred by Davis’s (1994) conception of Empathic Concern. However, this does not appear to limit the construct’s usefulness as a research oriented tool. For example, research has repeatedly demonstrated significant group differences using Empathic Concern (e.g., Davis, Hull, Young & Warren, 1987) as well as significant relationships with other constructs (e.g., narcissism; Watson, Biderman & Sawrie, 1994). In addition, it appears that Empathic Concern encapsulates the construct of interest when investigating an apparent lack of ‘empathy’ in individuals who engage in aggressive and violent behaviour. That is, concern or sympathy in response to the distress cues of a victim are posited to lead to an aggressor to experience distress at the consequences of their actions, and to desist their aggression (Feshbach & Feshbach, 1969). (See section 1.5.1 for an extended discussion of this point).

1.2.3.2 Personal Distress

Stotland originally put forward the construct of personal distress in 1969; however, it was Berger (1962) who first suggested that empathy could cause an individual to experience negative affect that may lead to avoidance of the distressed other. Personal distress is conceptualised as an instrumentally self-focused emotional response to the distress of another (Batson, 1990). Rather than feeling concerned for the target, an individual experiences feelings of discomfort and distress. Personal distress is a unique affective reaction distinguishable from empathic concern and sadness (Fultz,

1994).
Schaller, & Cialdini, 1988), which results from witnessing the negative affect of
others. Fultz and colleagues suggest that, while empathic arousal is neutral and other
oriented, distress is characterised by self-oriented negative feelings and high levels of
arousal. These three modes of affective interpersonal reaction (empathy, sadness &
distress) to a distressed other were found to be distinct but highly correlated with one
another. Furthermore, the mechanisms that underlie empathy, sadness and personal
distress may be similar. Perspective taking is thought to be an antecedent of empathy
(Coke, Batson & McDavies, 1978), but perspective taking can also lead to personal
distress and sadness (Cialdini, Brown, Lewis, Luce, & Neuberg 1987). Fultz et al.
concluded that victim orientation could increase all three response types.

What is unclear, however, is whether these emotional experiences facilitate accurate
understanding of another’s emotional state. Cialdini et al. (1987) failed to find
supporting evidence for this proposition. Levenson and Ruef (1992) did demonstrate
greater accuracy with greater congruency between observer and target emotional
states. The difference between these findings may be a result of specificity in
accuracy measures. While Blairy et al. had participants rate specific emotional states,
such as anger, sadness etc., Levenson and Ruef had participants rate degree of
positive versus negative state. Physiological congruence between observer and target
may help to facilitate an understanding of the valence and strength of emotional
experience, but does not facilitate an understanding of the exact nature of that
emotion.
1.2.3.3 Contrast Affect

Adopting Stotland’s (1969) definition of empathy means that aberrant empathic responses are not excluded from investigations of the relationship between empathy and aggression. Stotland proposed that some individuals, or some circumstances, would produce a subjective empathic arousal which was not congruent with the emotional experience of the other. For example, feelings of jealousy when another experiences joy at a favoured outcome. Stotland termed this type of empathic response as contrast empathy; however, the construct has been investigated more recently as counter-empathic responses (Bandura, 2002). Bandura asserts that counter-empathic responses are possible due to the heavy reliance of vicarious activation on cognitive conveyance. That is, an individual’s prior experiences dictate the way in which emotional arousal is interpreted by the individual. It is the subjective interpretation of the empathic arousal, along with the specifics of the situation, which dictate the eventual affective experience.

In general, however, very little research has been conducted on Contrast Empathy, which may be due to the research community’s reluctance to accept a construct which is in such opposition to currently accepted definitions of empathic responding. One way to avoid such problems may be to alter the term associated with the construct so that the distinction between the prosocial construct of empathy and the antisocial construct of counter-empathic responses is highlighted. The current work uses Stotland’s (1969) construct, but the term “Contrast Affect” has been adopted.

Putting aside definitional problems for the time being, the empirical investigation of empathy has also had a varied and interesting history. Two major areas of research
have emerged: individual difference and experimental manipulation techniques. Individual difference and trait theories of empathy will be addressed in the next section as they are of greater concern for the current text. The remainder of this section, however, will provide a brief outline of experimental manipulation techniques and findings.

It was Hume (1739) who provided the basis of one of the most commonly used manipulations used in empathy research. He stated that a greater similarity between an individual and the other the greater the degree of affective reaction as it would be easier to imagine the other’s situation. Ironically Hume was discussing sympathy, rather than empathy. Nevertheless, several experimenters have adopted this idea in an effort to understand empathy.

Stotland (1969) argued that the function of similarity in enhancing empathic responses was due to an individual believing that when another is similar to the self in one way, they are also similar to the self in other ways. This, according to Stotland, was a social schema that facilitated the understanding of another. Krebs (1975) investigated this proposition by randomly assigning participants to either a similar or dissimilar condition. Similarity was manipulated by informing participants that they and a confederate had similar personality scores and were given information that apparently convinced participants that the confederate shared similar interests and values. Participants then had to watch the confederate apparently receive electric shocks. Those participants in the similar condition showed greater physiological arousal than participants in the dissimilar condition.
Batson, Duncan, Ackerman, Buckley and Birch (1981) used a similarity manipulation comparable to that used by Kreb, in order to investigate the effect of ease of escape on helping behaviours. Batson and colleagues presumed that similarity would lead to greater empathising and participants would be less likely to choose to escape even when escape from watching another apparently receive electric shocks was easy. As predicted, participants who perceived the confederate to be similar to themselves, and presumably experienced greater levels of empathy, were likely to help regardless of the ease of escape manipulation.

Batson et al. (1981) suggest that similarity manipulations also increase participant’s perceptions that the other is more attractive as well as likable. It may, therefore, be that similarity increases the perceived value of the other rather than producing greater accuracy of imagination and resulting empathy as suggested by Hume (1739). Ohbuchi, Ohno and Mukai (1993), however, found no effect of likeability on strength of electric shock apparently delivered to a confederate. It remains unclear, therefore, if similarity manipulations result in an increase in empathy, or lead to participants viewing the confederate as more valuable. The value function of empathy has been hypothesised to be bi-directional, that is, we empathise with those whom we value and value those whom we empathise with (Batson, Turk, Shaw & Klien, 1995).

If similarity facilitates the imagination process, then one would expect that prior experience with a situation would also assist individuals to empathise more as they would be better able to imagine the responses of the other on the basis of their own experience. However, an investigation of this hypothesis indicated that increased empathy was not universal. Females reported greater empathy for another when they
had experienced a similar situation themselves, but males did not (Batson, et al. 1996).

Similarity manipulation has been the most common experimental manipulation in the study of empathy; however, other manipulation effects such as a fearful appeal for help have been investigated. Confederates who express fear at the prospect of electric shocks receive less severe shocks from participants than when participants do not hear any such fearful appeal, presumably as the appeal increases the level of empathy that participants feel (Ohbuchi et al. 1993).

Manipulation effects such as these highlight possible functions of empathy in facilitating prosocial and inhibiting antisocial behaviour. They do not, however, provide any explanation as to the extent or impact of dispositional individual differences in the strength or expression (concern versus distress) of empathic reactions.

1.2.4 Measures of Empathy

Empathy assessment in children has developed quite differently from that used to assess adults. As the purpose of this document it to address the issue of aggression and violence and its relationship with empathy in adults, only adult measures of empathy will be reviewed.

Measurement of individual differences in empathic responses has followed one of two fairly distinct paths. Several researchers have adopted a physiological approach to the study of empathy (e.g., Stotland, 1969). Others have approached empathy
measurement from a personality or dispositional trait perspective using self-report measures (e.g., Hogan, 1969). This section will begin with a review of physiological indicators of empathy followed by a review of self-report measures of individual differences in empathic responding.

1.2.4.1 Physiological Indicators

Typically, studies employing physiological indicators of empathy have involved participants observing a confederate undergoing either a positive or a negative experience while physiological measures are taken. The type of measure employed has varied greatly, and changed over time as new methods have become available. Early measures included palmar sweating and vasoconstriction measures (Stotland, 1969), but now include measures such as galvanic skin response, heart rate change (Eisenberg & Lennon, 1981), skin conductance, general somatic activity and finger pulse amplitude (Levenson & Ruef, 1992).

Early work involved instructional conditions such as ‘imagine-self’, ‘imagine-other’ and ‘watch’. It was assumed that, since the basis of empathy is presumed to be an imaginary process, the ‘imagine-self’ would evoke greater physiological arousal than the other two conditions and that the ‘imagine-other’ condition would evoke a greater response than simply watching the other. There does appear to be some evidence to support this suggestion, but not for all physiological indicators (Stotland, 1969).

Other early descriptions of empathy also indicated that non verbal motor mimicry (facial muscles movement in response to observing emotional displays) was
responsible for shared affect, and that the shared affect would be used by the observer to understand the other’s emotional experience (Lipps, 1907, cited in Blairy, Herrera & Hess, 1999). Blairy et al. provided evidence for the assumption that motor mimicry occurs using measures of corrugator supercilli (draws the brow in and down), orbicularis oculi (widens the eyes) and levator labii alaeque nasi (lifts upper lip) muscle movement. Furthermore, using self report measures they found that affect arousal occurred in observers, however no increase in participants accuracy in rating the other’s emotional state was observed. Levenson and Ruef (1992) used a combination of five physiological measures to assess emotional contagion and subsequent rating accuracy of the other’s emotional state. These authors did find a significant relationship between affect sharing and accuracy, however, unlike Blairy et al., Levenson and Ruef used general categories of affect such as negative and positive. Participants were asked to indicate the type of affect (positive versus negative) and the strength of the other’s emotional reaction. Blairy et al. asked participants to rate specific emotions, such as happy, sad, or angry. It may be that empathic responses only increase accuracy ratings of general emotional states.

Physiological indicators of empathic reactions have provided some indication as to the underlying mechanisms of empathy, in that motor mimicry appears to lead to shared affect, and that shared affect appears to increase rating accuracy of another’s emotional state at a superficial level. Several problems exist, however, with these findings and with physiological indicators in general.

Although most studies have employed self-report measures in order to clarify the meaning of physiological arousal (e.g., Stotland, 1969), it is still difficult to determine exactly what physiological responses really indicate. Eisenberg and Lennon (1981)
discuss the problem of differentiating between empathy and distress for example. These authors also highlight the problem of cognitive load, in that it also appears to have an impact on physiological measures and may explain why empathic reactions are evident in some physiological indicators but not others. Furthermore, although self-report measures of empathy may be used to help clarify physiological arousal, Levenson and Ruef (1992) found no relationship between such measures.

### 1.2.4.2 Self-report Measures

Self-report measures of empathic reactivity have not been without criticism. The questionnaire responses used in earlier physiological experiments were psychometrically non-validated adjective checklists (e.g., Stotland, 1969) and this method is still used by several authors (e.g., Batson, Dyck, Brandt, Batson, Powell, McMaster & Griffitt, 1988). The majority of self-report measures of empathy have been psychometrically validated, although as will be seen, they tend to differ in their interpretation of the empathy construct.

Hogan (1969) created the Empathy Scale, which later became known as the Empathy Measure (EM). Hogan defined empathy in cognitive terms, but was only interested in the act of understanding the other, not the accuracy of that perception. The construction of the EM was accomplished using an entirely empirical typology. A Q sort method was used to obtain a set of statements which described an empathic individual, and then observers rated participants undergoing personality testing on whether they were empathic or not. The rating of observed empathy was correlated with pre-existing personality test scores and those personality items that discriminated between high and low observed empathic groups were selected for the test. This
method led to a rather unusual collection of items which reflected the correlation between observed empathy rating and social competence, intellectual promise and feelings of self-worth. The EM displayed reasonable internal reliability and tended to discriminate between known groups, due to the empirical nature of the scale construction; however, the exact meaning of the scale was unclear. Davis (1994) claims the EM is not a measure of the cognitive perspective taking involved in empathy, rather it is a measure of “role taking mediated social skilfulness” (p. 54). The obvious restriction on the EM is that it does not take into account any affect in the empathic process.

Mehrabian and Epstein’s (1972) Questionnaire Measure of Emotional Empathy (QMEE) sought to fill the gap left by the EM. They argued that empathy had a distinctly affective flavour to it, although based on Stotland’s (1969) review and analysis this appears to be at the gross affective level (pleasant versus unpleasant). Unlike Hogan (1969), Mehrabian and Epstein adopted a theoretical typology to construct new items followed by an empirical examination of how those items performed. One criterion they used was non-existent correlations with social desirability, as well behavioural indicators theoretically relevant to the study of empathy, such as aggression and helping behaviours. The reliability for the QMEE ($\alpha = .84$) was somewhat better than that for the EM, although problems still existed with the way in which empathy had been construed. The scale measured the tendency of individuals to react emotionally to the emotional displays of others at the gross affective level, therefore only tapping into negative emotion to negative displays or positive emotion to positive emotional displays. The scale did have several subscales, which were purported to measure concepts such as susceptibility to emotional contagion, extreme emotional responsiveness, and a tendency to be moved by others’
negative emotion. These subscales have not been widely used in research, however, the majority of studies simply using the overall score and therefore have not taken advantage of the QMEE’s ability to discriminate between emotional response types (Davis, 1994).

The QMEE is currently still in use, however, Davis’ (1980) construction of a set of subscales to assess multiple constructs of empathy has generally been adopted by the research community. In an attempt to provide some consistency in empathy assessment, Davis (1980) developed a model of multidimensional empathy along with the Interpersonal Reactivity Index (IRI), an empathy scale which included both the cognitive and the affective aspects of empathy. Davis also included a measure of self-oriented responses in the form of personal distress, as suggested by Stotland (1969). A forth subscale, the fantasy scale, has not been used as much by the research community; however, this may be due to a lack of understanding as to the purpose of the subscale in relation to empathy.

The IRI was constructed using both a theoretical typology (construction of scale items based on theory and prior research) as well as empirical validation of the scale’s psychometric properties. As a result, the scale reliabilities are good (reported to range from .70 to .78) and Davis (1994) is very clear about what the scales do and do not assess. For example, the perspective taking (PT) subscale of the IRI was designed to assess the tendency of an individual to adopt another’s point of view but was not designed to provide an indication of the accuracy of their resultant perceptions. Davis’ scale is currently the most widely used adult measure of empathy, and his multidimensional model of empathy has been widely adopted; however, as will be
argued later in this chapter, additions to the model may help to clarify the relationship between empathy and antisocial behaviours.

1.2.5 Affective Empathy as a Special Case of Emotional Arousal

Ekman (2003) describes empathy as one of nine pathways for the generation of emotion; the stimuli being another person’s emotions. It may prove useful, then, to review some of the literature in relation to emotional arousal in general and to apply that knowledge to further understand empathy.

Emotion is generally elicited by stimuli in the environment, however, it is the subjective perception of the individual that dictates the presence of an emotional response, not the objective physicality of the stimulus (Birbaumer & Öhman, 1993). Birbaumer and Öhman argue that emotion elicitation relies on a largely automatic cognitive process rather than conscious thought. It is this automatic response that is believed to be a result of remembered information related to previous experiences, and therefore, emotional responses are likely to be unique to the individual. It is the meaning or significance to the person that is important for eliciting emotion. It is this subjective experience, which presents the primary difficulty in studying emotion (Birbaumer & Öhman). Mandler (1975) argued that a scientific theory of emotion required a distancing of itself from the limitations of the perspective given to emotions implicit in common language. However, since emotional experience is unique to the individual and physiological measures are not sufficiently refined to indicate subtle individual differences, this leaves researchers heavily reliant upon verbal reports of emotional experience.
Empathy faces the same difficulties in that an individual’s arousal to another’s emotional displays are likely to be influenced by that individual’s prior experience. Distinguishing between distress and concern, as mentioned earlier, is difficult using physiological measures (Eisenberg & Lennon, 1981) and therefore indicates the need to use self reports of emotional experience when assessing empathy. Overt behaviours may be used as an indicator of an empathic reaction; however, research indicates that this may also be inadequate to distinguish between concern and distress as both emotional experiences can lead to prosocial helping behaviours (e.g., Baton, 1990).

Wundt (cited in Birbaumer & Öhman, 1993) proposed a three dimensional model of emotion; valance (pleasure – aversion), arousal (activation – inhibition), and tension – relaxation. Valance and arousal appear dominant in verbal reports of emotional experience. Birbaumer and Öhman proposed that potency might be important also. For example anger and fear are both negatively valanced, high arousal but they differ in potency - anger is dominant while fear is submissive. Empathic arousal appears to comprise some of the same basic features. For example, in an attempt to distinguish between concern, distress and sadness, Fultz, Schaller and Cialdini (1998) described concern as characterised by low levels of arousal, while distress was characterised by high levels of arousal and a distinctly aversive valance. No evidence appears to be available which indicates the potency of distinct forms of empathic arousal.

1.2.6 Section Summary

To summarise, the construct of empathy has a long history, which has been plagued by definitional debate and semantic confusion. Much of this debate has subsided,
thanks to the introduction of models of empathy that incorporate both the cognitive and affective aspects found in earlier literature. These models, however, require a broadening of the definition of empathy and allow for the integration of affective reactions such as personal distress, which would not have previously been discussed in relation to empathic responding. The inclusion of these affective reactions will become important in later sections when discussing interpersonal violence and aggression.

1.3 Empathy and Prosocial Behaviour Research

Empathy is seen to serve a motivational function, in that it amplifies the motivation to help another in need (Batson, Turk, Shaw, & Klein, 1995). This section will review some of the literature on the relationship between empathy and prosocial behaviour. The methodologies used in the area, along with common findings will be reviewed, but first it is necessary to outline why a review of prosocial behaviour research is included in a discussion of empathy and violence.

1.3.1 Why Include a Discussion of Prosocial Behaviour?

Early discussion regarding human empathy focused on the moral underpinnings of the construct (e.g., Kant 1788/1949, cited in Eisenberg & Miller, 1987), and therefore, it should be acknowledged that this area of research was begun with a theoretical orientation which guided and informed later research. Empathy, an emotional reaction to the perceived emotional displays of another, does not imply a moral underpinning. Despite this, however, several authors have equated empathy with
constructs such as altruism (e.g., Batson, 1990) and invested much time and effort into establishing a link between empathy and prosocial behaviour.

The conceptual origins of empathy pose serious problems in relation to current research efforts to understand its relationship with antisocial behaviour, since much of the theorising in this area has been predicated on the notion of empathy having a moral dimension.

The origins of empathy research in prosocial behaviour have dictated both the methodology used to establish a link between empathy and aggression, as well as the process of hypothesis generation. No research could be found which sought to establish a link between high levels of empathy and aggression or violence. The historical view of empathy as a moral construct has led to it being examined in the context of prosocial behaviour and the formation of positive and rewarding interpersonal relationships (Davis, 1994). Violence, on the other hand, has been viewed as a negative construct resulting from maladaptive and antisocial behaviour and leading to the destruction of interpersonal relationships (Novaco & Welsh, 1989).

An intuitive theory ensues. If empathy leads to prosocial behaviour, then those who engage in violence must lack empathy. Additionally, empathy may have suffered the same injustice that anger has. Novaco and Welsh (1989) argue, “the view of anger promulgated by the Stoics … is overly negative” (p47). They argue that because of this dominant focus of researchers on the negative aspects of anger, its positive functions have been overlooked. In a similar way, the emphasis on the moral connotations of empathy has led to possible negative aspects of empathic responding being overlooked.
The original proposition put forward by Feshbach (1964) was more than a simple intuitive theory; however, both researchers and treatment providers appear to have adopted the premise that violent behaviour cannot coexist with empathic responses whole-heartedly. A position that has been undermined by a lack of accumulated evidence (especially with adult offenders) and a tendency for very few scientists to actually attempt to replicate the experiments they cite (Prelli, 1989).

With this in mind, it follows that an understanding of both the methodologies and hypotheses present in prosocial research is necessary to understand the hypothesis generation and methodology choices which occurred in antisocial research.

1.3.2 Empathy’s Guiding Role

As stated earlier, empathy is thought to motivate individuals to relieve the suffering of their fellow human beings (Batson, et al. 1995). According to Batson and his colleagues, this occurs because empathy also serves an informative function. Becoming empathically aroused by the suffering of another is interpreted by the individual as indicating that they care about the welfare of that person (or group of persons). A causal link between empathy and altruism has been widely accepted by the psychological community, although, as Eisenberg and Miller point out it is often difficult to establish if helping and prosocial behaviours are a result of “empathy, sympathy, personal distress or some other factor” (p. 92, 1987). Furthermore, these authors claim that establishing a way of distinguishing between these constructs is important since it is empathy not sympathy that has been theoretically linked to prosocial behaviour.
In reviewing the evidence for a link between empathy and prosocial behaviour, Eisenberg and Miller (1987) found that the strength and direction of the association depended upon the method of assessing empathy. Measures of empathy using picture/story stimuli produced no evidence for a link between the empathy and prosocial behaviour, however, self-report measures did. Furthermore, the strongest evidence for a relationship between empathy and prosocial behaviour was produced by self-report measures in association with experimental manipulations.

Several experimental manipulations have been used to establish a link between empathy and prosocial behaviour, primarily with similarity being manipulated to induce empathy and prosocial behaviour being indicated by a willingness to help a confederate (e.g. Batson et al. 1995). It should be noted, though, that of the 26 studies reviewed by Eisenberg and Miller, only 12 were conducted using adults, with 7 of those using college students.

Roberts and Strayer (1996) investigated the relationship between empathy, emotional expressiveness and prosocial behaviour using children from three age groups (5 yrs, 8 yrs, and 13 yrs). The children were instructed to watch video vignettes and to report their affective reactions along with their perceptions of the character’s emotional experience. Additionally, facial expressions were recorded and coded for emotional valence and intensity. General empathy was also assessed using the Bryant (1982) Index of Empathy for Children, along with direct observation, and teacher, parent and peer ratings of prosocial behaviours. For girls, no correlation above .30 between the vignette empathy measures and the prosocial behaviour indicators were achieved. There were several significant associations for boys, however.
Oswald (1996) investigated the relationship between empathy and prosocial behaviour among adults, using a self-report measure of empathy to a short video, when the participants were instructed either to pay attention to the characters feelings, thoughts, or an irrelevant detail. Following the empathy assessment, participants were told the study had concluded but were asked whether they would volunteer for an unrelated program to help individuals planning on returning to study. Participants reported more empathy when they had engaged in the affective perspective taking condition than the attend to an irrelevant detail condition. Additionally, participants volunteered for more hours of community service when they had engaged in the affective perspective taking condition than the other two conditions and volunteered for more hours of community service when they engaged in the cognitive perspective taking condition than the attend to an irrelevant detail condition. This study indicates that a willingness to volunteer was successfully influenced by the perspective taking manipulation, however, self-reported empathy levels did not differ significantly between the affective and cognitive perspective taking conditions even though willingness to volunteer did. It remains unclear if prosocial behaviour was increased through an increase in empathy, or whether the perspective taking manipulation simply increased an awareness of the other’s need.

Oswald (2002) attempted to replicate and expand these findings, by including a measure of personal distress as well as one of empathic concern. Once again, there was a manipulation effect in that participants who empathised with the target’s positive emotions volunteered significantly more than participants in any of the other conditions. Interestingly, videos that depicted negative affect did not produce high levels of helping behaviour and did not elicit data which showed a relationship
between reported feelings of empathic concern or personal distress and willingness to volunteer.

In a series of studies, Davis, Mitchell, Hall, Lothert, Snapp, and Meyer (1999) used a questionnaire-based study to investigate the relationship between empathic concern, personal distress, anticipated emotional experience and willingness to volunteer. The studies used various populations to test their hypotheses, with the last study using actual volunteers. The model presented predicted that individuals who are high in dispositional empathy would be more likely to anticipate sympathy when entering a need situation, while those high in dispositional personal distress would be more likely to expect distress. The results supported the proposition that individuals high in empathic concern are more inclined to expect feeling sympathy in need situations, and in turn, are more willing to enter into those situations. On the other hand, results tended to indicate that those individuals who are high in dispositional personal distress are more likely to expect distress in need situations, and are also less willing to enter those situations. The authors conclude “the decision to enter helping situations is as least to some degree a strategic choice based on a rational consideration of the affect likely to result” (p. 496). These studies indicate that the observed relationship between empathy and helping behaviours may be more tactical than theoretical accounts would suggest.

In summary, the relationship between empathy and prosocial behaviour in adults has predominantly focused on willingness to volunteer, although few studies have used actual volunteers. More often, college students have been asked to volunteer for either hypothetical activities or activities within the college system (which do not represent intense affective load on volunteers). Additionally, perspective taking focus
has been manipulated during the viewing of video material; however, no consistent relationship between empathic responding and helping behaviour has been reported.

1.4 Human Violence and Aggression

In a similar fashion to the construct of empathy, violence and aggression have also faced definitional debate. Difficulties have appeared to arise when attempts have been made to disentangle the two constructs, perhaps mirroring the debate surrounding the distinction between empathy and sympathy. This section will begin with a brief review of current definitions of both violence and aggression. Following this, a brief discussion of the perspectives of early theories of aggression and violence will be examined to illustrate the moral underpinning inherent in this area of research.

1.4.1 Defining Violence and Aggression

Aggression has been defined as the intent and attempt to harm another, while violence is defined as a form of destructive physical aggression (Bartol, 1995). Therefore, according to Bartol’s account, violence is a subset of aggression. Certainly, “The task of defining human aggression is surprisingly difficult” (Bartol, p. 182). However, distinguishing between the concepts of violence and aggression is perhaps more crucial than distinguishing between the concepts of empathy and sympathy. Differentiating between these concepts (violence and aggression) allows us to ponder whether one can occur in the absence of the other. If, as Brain (1997) has stated, violence is simply a synonym for aggression, then they are not separable. However, just as an individual can feel anger without intent to harm (Averill, 1982), it appears equally plausible that an individual could have an intent to harm without acting upon
that goal. Of more importance to the current discussion on the relationship between empathy and aggression or violence is whether a violent act can occur in the absence of an intent to harm. Take the phenomenon of baby-shaking, for example. Few would argue that baby-shaking is an accident rather than a violent act; however, the intent of the individual shaking the infant may not be harm to the infant.

Additional distinctions between the terms aggression and violence are found in the underlying moral and social dimensions. Aggression has a moral underpinning, in that it relies upon the notion of being unjustified and what is unjustified is inherently linked to social values (Blackburn, 1993). Additionally, Bandura (1973) has argued that aggression relies on both the intention of the perpetrator and the perception of the victim. In order for aggression to occur the victim must interpret the act as aggressive. However, this then excludes acts where there is intent to harm on the part of the perpetrator but that intent is not recognised by the victim. Violence, on the other hand, is defined by Blackburn as the “forceful infliction of physical injury” (p. 210), which he distinguishes from the term criminal violence which is the illegitimate use of such force. Despite this distinction, however, even a general use of the term violence has a legal underpinning.

Taking into account the consistent arguments surrounding the need for intent in definitions of aggression (Blackburn, 1993), for the purposes of the current work, aggression is defined as an intent or desire to inflict harm, which may or may not be acted upon. This definition is congruent with prior definitions, but allows for the possibility that aggression can occur, but not be acted upon. Secondly, consistent with prior definitions of aggression, there is no necessity for a resulting act to be in the form of actual physical use of force.
Violence, on the other hand, is defined as the actual physical or verbal behaviour, which inflicts harm on another individual or upon property. This definition, like those before it (e.g., Bartol, 1995) allows for the inclusion of physical force against objects. Additionally, there is no reference to intent in the definition indicating that violence may occur either in conjunction with aggression or in the absence of aggression.

It is acknowledged that the current attempt to disentangle aggression and violence is far from perfect. For example, it poses difficulties in categorising offences such as armed robbery, which under the current definitions would be considered violent (physical or verbal behaviour which inflicts harm) but not aggressive if the offender lack the intention to inflict that harm. It does serve a valuable role in the current work, in that it allows for a discussion of violent behaviours which result from high levels of empathic distress rather than a harmful intent.

1.4.2 Moral Overtones and Early Theories of Human Aggression

Early theories of human aggression and violence tended to be on the pessimistic side. Lorenz (1967) stated we are so accustomed to human violence and aggression that we fail to comprehend “how abjectly stupid and undesirable the historical mass behaviour of humanity actually is” (p. 203). He goes further, to state that human aggression predates history. “Peking man, the Prometheus who learned to preserve fire, used it to roast his brothers” (p. 205).

Lorenz (1967) wrote from an ethological viewpoint, arguing that the inhibitions for controlling aggression are most highly developed in animals that are naturally
equipped with effective weapons. Therefore, species that lack such weapons evolved without the need for strong aggression inhibition since the risk of fatally injuring a fellow member of their species was minimal. Human beings did not evolve a strong aggression inhibition. “One can only deplore the fact that man has definitely not got a carnivorous mentality! All his trouble arises from being a basically harmless omnivorous creature, lacking in natural weapons with which to kill big prey, and, therefore devoid of the built-in safety devices which prevent ‘professional’ carnivores from abusing their killing power to destroy fellow-members of their own species” (p. 207).

Like early theoretical development in the study of empathy, aggression originated from theories which had moral underpinnings. Unlike empathy, which was viewed as a positive moral construct contributing toward human relations, aggression was viewed as a negative moral construct destroying human relations. Furthermore, while early researchers believed empathy could be manipulated, aggression was viewed pessimistically and thought to be an innate negative aspect of humanity. This comparison serves to further highlight the acute difference in the origins of the two constructs.

1.4.3 The Importance of Emotion in Theories of Aggression and Violence

“Emotions determine the quality of our lives…They can save our lives, but they can also cause real damage. They lead us to act in ways that we think are realistic and appropriate, but our emotions can also lead us to act in ways we regret terribly afterward.” (Ekman, 2003, p xi).
In 1971 Feshbach stated that “there are many fundamental questions concerning the antecedents and properties of violence and aggression that remain unresolved” (p. 281). This statement is as relevant today as when it was made, however, one could argue that substantial progress has been made in specific areas of interest.

Novaco’s model of anger has been particularly influential in the study of human aggression and violence. “The inability to regulate anger constitutes a risk factor for both harm-doing to others and for multiple impairments affecting health, performance, and relationships” (Novaco & Welsh, 1989; p. 39). Novaco and Welsh argued that anger is essentially a normal emotional state; however, it is the failure to regulate that emotional state which becomes problematic. According to these authors, anger is not sufficient for the production of violence, nor is it always an antecedent.

Berkowitz (e.g., 1974) has also proved influential in the study of human aggression and violence. Specifically, Berkowitz has conducted several studies looking at the frustration-aggression hypothesis. Like Feshbach and Feshbach (1969), Berkowitz also distinguished between instrumental and impulsive forms of aggression. Berkowitz argued that, rather than the offender fully expecting the consequences and outcomes of their violence, many are ‘carried away’ as a result of an intense emotional state. The frustration-aggression hypothesis has been revised to account for instances where frustration, or thwarting of one’s goals, does not cause aggression. Bandura (1973) argued that frustration may lead to a general emotional arousal, but it is the individual’s social learning history that determined the production of aggression in response to this arousal. Caprara (1982) contended that an emotional susceptibility underlies the production of aggression in the presence of frustration.
A pattern begins to emerge when reviewing current theories of human aggression and violence. Excessive emotional arousal appears to play a crucial role in these theories. It is interesting to note that the only theories of human aggression which focus upon reduced emotional arousal are those theories that attempt to explain the presumed relationship with empathy. This line of reasoning, of course, results from an expectation that empathy will be associated with prosocial behaviours and therefore represent a possible inhibitory mechanism for aggression and violence. A failure to find a consistent relationship between empathic concern and helping behaviours, along with findings which support a relationship between self-oriented instrumental empathic responses and helping behaviour, undermine this line of reasoning. Furthermore, as will be shown in the next section, the original theory put forward by Feshbach and colleagues (e.g., Feshbach & Feshbach, 1969) was not a theory of reduced emotional arousal but rather one reliant upon the concept of appropriate emotional arousal.

1.5 Empathy and Antisocial Behaviour Research

1.5.1 Feshbach’s Empathic Arousal Model

Feshbach (1962) theorised that empathy represented one possible inhibitor of aggressive behaviour, but that the relationship would be dependent upon the type of empathic deficit and the type of aggression being displayed. In a series of studies, Feshbach and colleagues investigated the impact that empathy and fantasy training would have on children’s aggressive behaviour (Feshbach & Feshbach, 1982). Utilising a three component model of empathy, these authors presented a complex theory to account for the inverse relationship often found between empathy and
aggression. Feshbach and Feshbach proposed that empathy was a shared affective experience between two individuals and that it was dependent upon three components. Firstly, the observer needed to be able to identify and discriminate the feelings being experienced by the other. Additionally, the observer needed to be able to perceive the situation from the perspective of the other, and this perspective taking needed to lead to affective arousal in the observer. This model attempted to explain, not so much the resulting empathic experience, but the system responsible for that experience. By focusing upon the necessary factors for the production of empathy, Feshbach’s team effectively provided a means of designing and implementing treatment programs, for example with aggressive children. Furthermore, Feshbach and Feshbach provided an analysis of three types of aggression and theorised the effects that this three component system of empathy would have upon each type.

Emotional aggression, according to Feshbach and Feshbach’s (1982) examination, is associated with feelings such as frustration and anger. They argue that, although anger can occur without physical attack, it frequently leads to aggressive behaviour. Empathy should impact upon displays of emotional aggression, not by impacting on the aggressive behaviour itself, but by influencing the antecedents of anger. Individuals who are able to accurately take the perspective of the other would be less likely to misinterpret and more likely to understand the actions of others. Therefore, perspective taking (the cognitive component of empathy) would facilitate more effective communication and result in less frequent manifestations of anger.

When aggression is instrumental, that is the aggression is directed toward the attainment of goals such as money or power, then empathy would lead the aggressor to experience negative affective responses in reaction to observing the victim in
distress and pain. The result would be the aggressor desisting due to the unpleasant experience associated with the affective component of empathy.

The mechanism that underlies the relationship between empathy and hostile aggression, where the goal is to inflict pain on another, is thought to be the similar to that for instrumental aggression (Feshbach & Feshbach, 1982), although these authors warn that hostile aggression is complicated to treat. They further suggest that hostile aggression can be sadistic in nature and may be due to perspective taking occurring in the absence of an appropriate affective response. That is, rather than feeling concern or distress, the offender may interpret their emotional arousal as pleasurable resulting in the experience of contrast affect.

1.5.2 Evidence for a Relationship between Empathy and Aggression

If the link between empathic responding and prosocial action is tenuous, the link between a lack of empathic responding and aggressive or violent behaviour is feeble. After conducting a meta-analysis on studies that investigated the relationship between empathy and aggression, Miller and Eisenberg (1988) concluded that “analyses provide modest but not entirely consistent support for the notion that empathic responsiveness may be an inhibitor of aggression” (p. 339). Furthermore, the results were influenced by a number of factors including age of participants, method of assessing empathy, and the method of assessing antisocial behaviours.

One of the earliest proponents of an inhibitory effect of empathic responding on aggression was Feshbach and his colleagues (e.g., Feshbach & Feshbach, 1969). Although these authors conducted several studies, the findings failed to indicate a
consistent and reliable relationship between empathy and aggression in children. For example, Feshbach and Feshbach (1969) conducted an investigation into the impact of empathy training on children’s aggression, finding significantly lower levels of aggression in both boys and girls who were in the empathy training group. Unfortunately, however, this finding was only relevant for the younger group of children and the effect was not demonstrated in the older age group.

Other investigations into the link between empathy and aggression using young children have been equally inconsistent. Gill and Calkins (2003) investigated the presence or absence of empathy in aggressive and non-aggressive toddlers, finding that aggressive children displayed more empathy than did the non-aggressive children. Aggressive toddlers also demonstrated greater physiological arousal than the non-aggressive children, leading these authors to conclude that affect regulation may be an important factor, but developmental patterns in empathy development were likely to explain their counter-intuitive results. This point will be examined in more depth in the following section (1.5.3). Some research with children, however, has found results consistent with theory. For example, Kaukianinen et al. (1999) found a consistent and significant negative association between peer evaluated empathy and both physical and verbal aggression in 10, 12, and 14 year old children. These authors concluded that the “perpetrator of aggression must have a certain amount of impudence and insolence,” highlighting the judgmental bias underlying empathy research in this area.

Antisocial youth have been the target group of several investigations into the relationship between empathy and antisocial behaviour, with mixed findings. Sams and Truscott (2004) failed to find an association between self-reported empathy and
use of violence in adolescent males. Nor did they find any association between empathy and exposure to community violence, as would be expected if a desensitisation effect was occurring. Likewise, Bush, Mullis, and Mullis (2000) found no significant difference between offender and non-offender youth on any of the IRI subscales. LeSure-Lester (2000) did find a significant negative relationship between empathy and aggression in abused youth using the Balanced Emotional Empathy Scale (BEES). However, the BEES assesses several variants of empathic responding including affective empathy, personal distress and perspective taking. It is unclear, therefore, what the total score on the BEES actually represents. Like the Questionnaire Measure of Emotional Empathy (Mehrabian & Epstein, 1972), the BEES appears to be measuring general emotionality rather than specifying the exact nature of the resultant empathic experience, which makes interpretation of LeSure-Lester's findings difficult.

Much of the research conducted to examine the link between empathy and aggression in adults has been accomplished using non-offender samples, primarily convenience samples such as students. Ohbuchi, Ohno and Mukai (1993) investigated the effect of self-disclosure and fearful appeal on the level of electric shock chosen by Japanese university student participants. Both self-disclosure and fearful appeal resulted in lower shock levels, leading the authors to conclude that both conditions had evoked empathy in participants. However, no direct measure of empathy was used in the study so this conclusion was only tentative. Richardson, Hammock, Smith, Garner and Signo (1994), on the other hand, used the IRI to directly assess American university students’ empathy levels. There was a significant negative correlation between Empathic Concern and direct aggression (i.e., assault), while Perspective Taking was negatively correlated with indirect aggression, irritability, and verbal
aggression. Interestingly, direct aggression was positively associated with Perspective Taking. In a later study, Richardson, Green and Largo (1998) again used the IRI to assess empathy in university students, although only focusing on the Perspective Taking subscale. The results of this study indicated that Perspective Taking was related to the inhibition of aggression, unlike the previous study.

Several investigations into the influence of empathic responding in sex offenders have been conducted; however, few have been conducted using non-sexual violent offenders. A discussion of sex offending per se is beyond the scope of the current work, as well as the conceptualisation of sex victim empathy (as distinguished from individual empathic dispositions). For these reasons, only the literature relating to non-sexual violent offenders will be discussed here. Findings relating to sex offenders, however, will be included in subsequent chapters, where these findings are pertinent to the topic at hand.

Ireland (1999) conducted research to examine the relationship between bullying behaviour and empathy in both male and female adult prisoners. Using the IRI, Ireland found that prisoners who engaged in bullying behaviour scored significantly lower on both Perspective Taking and Empathic Concern than prisoners who were the victims of bullying. Mothers who were at high risk of physically abusing their children, however, reported equivalent levels of both Perspective Taking and Empathic Concern as mothers who were not at risk of abusing their children (Milner, Haley & Fultz, 1995).
1.5.3 Section Summary

In sum, the definition of empathy has been problematic and this has impacted on research attempting to establish a link between empathy and aggression. It should be pointed out, that in addition to definitional concerns within the research literature, the construct of empathy is further complicated by the use of the term in relation to areas such as clinical practice. Client/practitioner empathy, or therapeutic empathy, is likely to be a separate construct than that referred to in the current work. Rather than being a dispositional trait, therapeutic empathy is regarded as a clinical tool. Furthermore, in the area of sex offenders, some of the research literature is investigating empathy as a dispositional trait (i.e., Hudson & Ward, 2000; Pithers, 1999), while others attempt to investigate victim specific empathy (Elliott, Browne & Kilcoyne, 1995). Given all of the variants of empathy in psychological and criminological literature, it is therefore not surprising that Andrews (1995; p. 51) states that “I am confused”.

This, of course, is not the end of the difficulties in researching empathy and aggression. In addition to the definitional problems and the varied use of the term, it also appears to play a central role in the literature relating to psychopathy.

1.5.4 Psychopathy

Feshbach and Feshbach (1969) were working on the premise that empathy was related to aggression in general. That is, empathy functioned as an inhibitor of aggression in individuals, rather than a theory involving the absence of empathy in a specific group of aggressive or violent individuals. An alternative view has been that specific
individuals, such as those identified as psychopaths, have a reduced or absent capacity
to respond emotionally to others (Hare, 1996).

The origins of psychopathy have been credited to Phillipe Pinel (1801, cited in Arrigo
& Shipley 2001), who described a collection of symptoms as manie sans délire or
insanity without delirium. According to Arrigo and Shipley, Pinel’s representation
and labelling of psychopathy was morally neutral, while later re-labelling became
increasingly judgemental and pejorative. Rafter (2004) makes the assertion that the
moral insanity literature was “a yeasty primordial brew of ideas that became central to
19th-century thinking about deviance and control” (p. 982). Although this literature
can be though of in terms of the origins of criminological thought, it has also been
responsible for the “pathologicification of criminal behaviour” (p. 982).

Prichard, for example proposed a medical model to account for Pinel’s manie sans
délire, relabelling the disorder as moral insanity (1835, cited in Augstein, 1996).
According to Prichard, moral insanity was a form of “madness consisting in a morbid
perversion of the natural feelings, affections, indignations, temper, habits …” (p.312;
Augstein, 1996). Note that Prichard’s defining characteristics include an excess of
affect rather than a deficit. Indeed, many of the early descriptions included affective
excesses such as Pinel’s description of instinctive and abstract fury and Krafft-Ebing’s
account of hyperesthetic sexual emotion (Arrigo & Shipley, 2001). According to
Blackburn (1998), Prichard’s description of moral insanity has influenced European
conceptions of psychopathy to a greater extent than found in North America. The
result of which can be seen in differences between Europe and North America in
current discussions of psychopathy. Specifically, Blackburn highlights that European
conceptions of psychopathy focus on social deviance rather than personality
descriptions. North America, on the other hand, have tended to adopt Cleckley’s concept of the psychopathic personality which is a hybrid combining both personality descriptors and social deviance (Blackburn, 1998). The drift between these two schools of thought has resulted in the adoption of distinct semantics, that is antisocial versus psychopathic. Having said that, Cleckley’s psychopathic personality heavily influenced Hare’s description and measurement of psychopathy (Hare, 1991) and it is this conception that is most prevalent in the literature. It is also this conception which is most relevant to a discussion of empathy.

A distinction needs to be made in regards to the origins of these different conceptions of psychopathology in relation to empathy. Given some descriptions appeared to focus on an excess of antisocial affect (i.e., Pinel & Krafft-Ebing, cited in Arrigo & Shipley, 2001) while Cleckley (1976) and later Hare (1991) focus on a deficit of prosocial affect. Therefore, the lack of empathy descriptor is more relevant to discussions of psychopathy as conceptualised in North America.

1.5.4.1 Callous Unemotional Trait – The Psychopathic Centrepiece

Predominant in the literature relating to psychopathy is Hare’s two factor model, with Factor I being referred to as the callous/unemotional trait which includes descriptions of a lack of empathy in these offenders (Hare, 1996). This factor relates directly to descriptions of psychopathy by Cleckley (1976), who argued that the personality traits associated with a callous unemotional interpersonal style were the foundation of psychopathy.
In addition to claims that the callous/unemotional trait plays a central role in psychopathy (i.e., Hare 1996), it has also produced speculation as to whether “affective impairments of psychopaths raise genuine concerns over whether these agents are worthy of blame for their illicit conduct” (p. 63; Haji, 2003). Central to these types of issues, of course, is whether or not the callous/unemotional trait is the psychopathic centrepiece.

Kimonis, Frick and Barry (2004) suggest that delinquent youth who demonstrate a callous/unemotional trait are likely to engage in more severe and aggressive behaviour. However, Walters (2003) conducted a meta-analysis to ascertain the relative predictive power of the two factors associated with psychopathy (Factor I – callous/unemotional trait; Factor II – impulsive antisocial behaviour). Factor II demonstrated greater prediction of both violent and non-violent recidivism, undermining arguments of the importance of the callous/unemotional trait. Furthermore, the callous/unemotional trait failed to demonstrate any significant influence on the prediction of treatment outcomes for violent offenders (Skeem, Monahan, & Mulvey, 2002).

It is clear that more investigation and thought is required to determine what exactly is meant by the callous/unemotional trait, given the failure of this trait to provide predictive power for either recidivism or treatment outcome.

1.5.4.2 Distinguishing General Negative Affectivity and Empathy

The first distinction that needs to be made in relation to psychopathy’s Factor I and the study of empathy is the generality inherent in the callous/unemotional trait. While
empathy refers specifically to affective and/or cognitive responses produced during interpersonal exchanges, the callous/unemotional trait refers to a general emotional trait. That is, Factor I describes a general affective disorder, whereby the individual is believed to have a reduced capacity to experience negative affect (Hale, Goldstein, Abromowitz, Calamari & Kosson, 2004), rather than a specific empathic dysfunction. Although a reduced capacity to experience negative affect would have implications for the production of empathic responses to distress cues, it does call into question the bearing of psychopathy to a discussion of specific empathic dysfunctions. Therefore, while remaining cognisant of the potential relevance of psychopathy, it is not a primary focus of the current work.

1.5.5 No Emotion or Wrong Emotion?

A failure to find a consistent and reliable relationship between indices of aggression, violence or antisocial behaviour with empathy, is not an indication that empathy is not an important variable in the production and/or inhibition of these behaviours. Rather, the adoption of an intuitive view of the relationship between empathy and aggression by researchers along with methodological difficulties appears to have hindered understanding of empathy’s worth. Additionally, this over-reliance on intuitive theory appears to have impeded the production of alternative theories to account for research findings. For example, when faced with counter-intuitive results, Gill and Calkins (2003) generated intuitive hypotheses to account for them. The following sections outline two alternative theories to account for the influence of empathic responses on aggressive and violent behaviour.
1.5.5.1 Self-oriented Empathic Arousal and Aggression

It may be the case that violent offenders respond with a self-oriented empathic arousal to the distress cues of others. That is, violent offenders may experience an emotional arousal in response to the distress cues of victims, however, rather than resulting in a subjective experience of concern for the other, the result is a subjective experience of personal distress. Hoffman (1981) argued that empathy invoked distress is aversive and there is a drive to reduce that aversive experience. Indeed, individuals whose dominant pattern of responding is that of personal distress are more likely to seek escape from empathically arousing situations (Batson, 1990). Additionally, this position would account for findings that are inconsistent with the dominant theory of a lack of empathic responding, such as higher empathic responding in aggressive children (Gill & Calkins, 2003), and a failure to find a difference in Empathic Concern between offender and non-offender youth (Bush, Mullis, & Mullis, 2000), or mothers at risk of physically abusing their children and mothers not at risk (Milner, Haley & Fultz, 1995).

Milner, Haley and Fultz (1995) also found a relationship between the level of personal distress experienced by at risk mothers and their feelings of hostility. It may be that individuals who find empathic arousal aversive, and are unable to use escape to reduce this aversion, are more prone to feelings of anger and hostility and more likely to use violence as a means of aversion reduction. If this is the case, distress cues from victims would actually function to escalate violence rather than inhibit it. Thus, empathy training programs for violent offenders that seek to increase offender’s empathic arousal may actually be increasing risk rather than decreasing it.
Another concern exists in relation to empathic arousal and aggression. If their own emotional state is used to recognise the emotional state of the victim (Levenson & Ruef, 1992), and their experience of that emotional state is self-oriented resulting in hostile emotions, then it may be that they judge the victim to be experiencing similar hostile emotions. If this is the case, then empathic arousal may actually increase the likelihood of phenomena such as attribution of hostile intent (Dill, Anderson, Anderson, & Deuser, 1997).

1.5.5.2 Contrast Affect as a Case of Empathy Gone Wrong

Feshbach and Feshbach (1982) warn that hostile aggression, where the harm to the other is the intent, would be particularly difficult to treat and may be the result of perspective taking occurring in the absence of an appropriate emotional response to distress cues. This argument should not be taken to mean that the offender necessarily lacks an emotional response; rather it is possible that the offender is experiencing an aberrant or inappropriate emotional arousal.

The empathy literature has made reference to such an emotional response to another’s emotional displays. Contrast empathy, as defined earlier, is an emotional response to another’s emotional display, which is not congruent with the other’s emotional state (Stotland, 1969). In the case of hostile aggression, a contrasting empathic arousal may take the form of pleasure in response to the distress cues of the victim. Distress cues might then serve to reinforce the use of violence by the offender, by indicating the success of his/her actions.
Harm may not be the only goal, however. Violence may be used to obtain control and power over victims, with the offender gaining positive reinforcement when the use of violence has been successful. Berner, Berger and Hill (2003) argued that individuals may display sadistic tendencies which are non-sexual. The perpetrator may obtain a non-sexual gratification through the physiological arousal resulting from the use of violence. Hassine (2003) argued that some individuals may become ‘addicted’ to the fight or flight chemicals released during the course of violence, and that these individuals may use violence to stimulate the release of these chemicals.

The goal of personal gratification, through the use of violence, constitutes a contrasting empathic response when it is the distress cues of the other that are the stimuli and the resulting affective arousal is positively valanced. However, clinical observations of individuals who display such a pattern of empathic responding are likely to lead to the conclusion that these individuals lack empathy. Certainly this pattern of responses constitutes a lack of empathic concern or sympathy, but it does not conform to theories that proposed a failure to respond affectively to distress cues.

1.5.5.3 Offender Heterogeneity: Is Everything Right?

Howells, Watt, Hall and Baldwin (1997) presented a discussion of the heterogeneity present in offender populations and the likely impact that this heterogeneity may have on treatment options. They argued that effective treatment should involve an analysis of individual needs in order to address the diverse characteristics found in offender populations.
As well as impacting on the choice of treatment for offenders, heterogeneity in research samples is likely to impact upon results and may be responsible for the inconsistencies found in the empathy/aggression literature. The search for a relationship between a lack of empathy and aggression has not been completely fruitless. Enough of a relationship has been observed to lead some authors to conclude that the relationship does exist (Miller & Eisenberg, 1980). Rapkin and Luke (1993) however, argued that low correlations may indicate the presence of subgroups, and cluster analysis should be used to investigate this possibility.

1.6 General Aim of this Thesis.

The relationship between empathic responses and aggression or violence appears to be a complex one. It may be that there are some offenders who lack empathic responses to distress cues while other offenders display unregulated personal distress and still others display contrast affect. Correspondingly, three possibilities exist to explain the relationship between empathic responses and aggression. It is possible that the original theoretical framework which predicts a lack of empathy in aggressive and violent individuals is an accurate one (and therefore empathic responses inhibit aggression). It is also possible that aggressive and violent individuals fail to regulate their empathic arousal which leads to personal distress (and therefore empathic responses may facilitate aggression), while it is also possible that aggressive and violent individuals find empathic arousal gratifying (and therefore empathic responses may facilitate aggression). If subgroups of offenders exist in relation to their empathic responding profiles, it is possible that all three explanations of a relationship between empathy and aggression/violence are present in different subgroups.
Just as multidimensional definitions of empathy have been constructed (e.g., Davis, 1994) and accepted by the research community, so to is it possible that a multidimensional approach to the importance of empathic responses and the production/inhibition of aggression and violence may prove to be a useful approach. The current work seeks to investigate the presence or absence of empathic responses in violent offenders, as well as examining the form that those responses may take. Subgroups within offender populations will also be examined to establish if more than one explanation of aggression and violence, relating to empathic responses, is viable.

Specifically, the current work seeks to investigate the following variants of the empathy-aggression hypothesis;

- empathy is an inhibitor of aggression and therefore, aggressive individuals lack empathy,
- empathic distress is a facilitator of aggression and therefore, aggressive individuals experience high levels of personal distress, or
- contrast affect is a facilitator of aggression and therefore, aggressive individuals experience positive emotional arousal to another’s distress.

Furthermore, it is expected that subgroups will be identified within a sample of violent offenders, and that the different variants of the empathy-aggression hypothesis will be identified in those subgroups.

The first step in this program of study must be to evaluate the measure currently used to assess empathy in offenders. Although widely used in the area of violent offender research – the Interpersonal Reactivity Index (IRI) has yet to be critically evaluated for use with offenders. Given the original purpose of the scale was to investigate the role of empathy in marital satisfaction (Davis, 1994), there is no evidence to suggest
that the scale is capable of effectively moving from prosocial research to antisocial research.
Chapter Two

2.1 Overview

The purpose of this thesis is to contribute examine the role that empathic responses may have in inhibiting aggressive behaviour. In order to do this however, the assessment of these constructs in an offender population needs to be investigated. This chapter presents an article in its entirety, in which the psychometric properties of the Interpersonal Reactivity Index are examined when used with an offender sample to determine if the use of this instrument is appropriate for measuring empathy in offender populations.
2.2 Using the Interpersonal Reactivity Index to assess empathy in violent offenders

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Abstract

The Interpersonal Reactivity Index, developed by Davis (1980), provides an excellent multidimensional measure of empathy for the general adult population, the domain for which it was developed. Its use has subsequently expanded into other areas, for example criminal psychology. Indeed, for many researchers within the field of criminal psychology, the interpersonal reactivity index has become the instrument of choice for the assessment of empathy. However, the psychometric properties of the scale, when used with a criminal population, have not been investigated. This paper reports the results of an investigation into the reliability and component structure of the interpersonal reactivity index using a sample of violent offenders. The results suggest that two of the interpersonal reactivity index’s subscales were not reliable when used in an offender population. Furthermore, when used to assess offenders, principle components analysis did not confirm the four-subscale structure of the interpersonal reactivity index. Possible explanations for these findings are discussed in relation to offender assessment in general.
Theoretical developments in the field of empathy research have yielded two broad positions regarding the nature of empathy, namely affective and cognitive theories (see Davis, 1994, for an extensive review). Theories that emphasize the affective nature of empathy have maintained that empathy is revealed in an individual’s vicarious emotional response, which arises as a direct result of witnessing another’s emotion (Stotland, 1969). The relationship of this vicarious emotional response to the observed emotion has been a topic of debate. Some researchers suppose that the observer’s emotional response must be the same as that of the observed other (Eisenberg & Miller, 1987). Other researchers argue that any emotional response to another’s distress qualifies as an empathic response, even if that emotional experience differs from the emotion exhibited by the target (Stotland, 1969). Rather than emphasising affect, another school of thought has viewed empathy as a cognitive activity. Those who hold this point of view have emphasised an individual’s capacity to accurately perceive and understand another’s plight (Dymond, 1949).

Recently, some researchers (eg. Davis, 1994; Pithers, 1994), have called for empathy to be seen as a multidimensional construct, consisting of both affective and cognitive components. In addition, some researchers have called for a behavioural component to be included in the construct (Pithers, 1994).

Davis (1994) has proposed a model of multidimensional empathy, designed to include both affective and cognitive components of empathy, as well as addressing
the relationship between these components and behaviour. Additionally, Davis has
developed a self-report measure of empathy, the Interpersonal Reactivity Index to
reflect both cognitive and affective components of empathy. Many studies of
empathy now report using the Interpersonal Reactivity Index. Indeed, the
Interpersonal Reactivity Index is possibly the most widely used self-report measure
of empathy currently available.

**Empathy and Aggression**

Violent offenders are often described as having a lack of empathy. Empathy and
aggression have been seen as incompatible (Baron, 1983), and an empathic response
by an aggressor to an individual in distress appears to reduce displays of aggression
towards that person (Miller & Eisenberg, 1988). Feshbach (1964) attempted to
explain the mechanisms underlying this connection between empathy and aggressive
behaviour. According to Feshbach, seeing the consequences of aggression would
elicit distress in an empathic observer, even if that observer were the aggressor. In
these circumstances, the distress experienced becomes an unpleasant consequence of
the aggressive behaviour. Empathy, therefore, was hypothesized by Feshbach to act
as an inhibitor of aggression and violence.

Empathy has also been viewed as an intervening variable. The empathic distress
experienced by the aggressor, as a result of witnessing the other’s emotional distress,
is thought to be a precursor to the development of feelings of guilt (Baumeister,
1997). Although similar to Feshbach’s theory, according to this explanation
empathic distress does not reduce aggression directly, rather it facilitates feelings of guilt.

Regardless of the mechanisms underlying the apparent relationship between aggression and empathy, the assessment of the empathic capacities of offenders continues to be included in many routine assessments.

The Interpersonal Reactivity Index

The Interpersonal Reactivity Index has become the measure of choice for investigation into the empathic ability of offenders and is recommended for use by Polaschek & Reynolds (2000). Four subscales are contained within the Interpersonal Reactivity Index: Perspective Taking (Cognitive), Fantasy (Cognitive), Empathic Concern (Affective), and Personal Distress (Affective). The Perspective Taking (PT) subscale is purported to measure an individual’s dispositional tendency to adopt another’s perspective, although it does not provide an indication of the accuracy of that perspective taking activity (Davis, 1994). The Fantasy Subscale (FS) is intended to provide an indication of an individual’s propensity to become imaginatively involved with fictional characters and situations. The Empathic Concern (EC) subscale measures an individual’s self-reported tendency to experience feelings of concern for others, and the Personal Distress (PD) subscale was designed to measure the extent to which an individual feels distress as a result of witnessing another’s emotional distress. Unlike the other subscales of the Interpersonal Reactivity Index, Personal Distress assesses a negative empathic construct and has been shown to
correlate positively with measures of antisocial behaviour and aggression (Davis, 1994).

**Psychometric Properties of the Interpersonal Reactivity Index**

When the Interpersonal Reactivity Index was initially validated, it produced internal consistency indices ranging from .70 to .78 (Davis, 1994). Further reports of reliabilities of the Interpersonal Reactivity Index using university samples confirm these figures for at least three of the four subscales (Christopher, Owens & Stecker 1993: PT = .74, EC = .76, PD = .70, the reliability of the Fantasy subscale was not reported).

The assessment of offenders poses particular psychometric concerns. Primarily, many of the scales currently in use have not been validated for use with this population (Gudjonsson, 2000). Changes in recorded reliabilities may occur when instruments are moved from one population to another and reductions in the internal consistency of a scale seriously call into question the instrument’s validity. This is particularly true if the target population has excesses or deficits that interfere with successful psychological measurement. Offenders represent such a population, which is associated with a range of variables that can adversely impact on assessment (Gudjonsson). It cannot, therefore, be assumed that the reliability of the Interpersonal Reactivity Index is the same in both the general and offender populations. In order to overcome these difficulties associated with offender
assessment, researchers and clinicians need to routinely assess and report scale properties when used in the assessment of offenders.

As much as 87% of investigators fail to report the reliability of scales in relation to their own samples (Vacha-Haase, 1998), and offender assessment appears to experience the same problem. One of the most effective ways of accumulating evidence of scale performance with this population would be for researchers to consistently report obtained reliability indices as part of their studies. Some evidence exists, however, to suggest that the internal consistency of some of the Interpersonal Reactivity Index’s subscales may decline considerably with an offender sample. For example, Ireland (1999) used the Interpersonal Reactivity Index in her study on bullying behaviour in an incarcerated offender sample. The reliabilities reported in this study were lower than those reported for the general population (PT = .70, FS = .64, EC = .43, PD = .52).

The stability of Davis’ (1980) four subscale structure may also be questionable when the Interpersonal Reactivity Index is used to assess different populations. Yarnold, Bryant, Nightingale and Martin (1996) assessed the factor structure of the Index with both student and physician samples. Neither sample reproduced the original four subscales. Further, the factor structures in these two samples were not equivalent. The factor structure of the Interpersonal Reactivity Index has yet to be evaluated using an offender sample.
The aim of this study was to investigate the psychometric properties of the Interpersonal Reactivity Index in a population of incarcerated violent offenders. In particular, the reliability and component structure of the Interpersonal Reactivity Index was examined, along with the scales ability to discriminate between offenders and reported non-offender means in the expected direction. Specifically, offenders were expected to demonstrate lower levels of positive empathy constructs (Empathic Concern, Perspective Taking) and higher levels of the negative empathy construct (Personal Distress).

Method

Participants
Data was obtained from 88 violent offenders incarcerated in maximum-security prisons in Western Australia for serious non-sexual index offences (homicide, armed robbery, arson, aggravated assault). The offenders ranged in age from 21 to 64 years with a mean age of 34 years. Sentence lengths ranged from 3 years to life. All offenders had been identified as having a high risk of re-offending, based on the Level of Service Need Inventory (LOSNI). The LOSNI has a predictive accuracy for violent recidivism of between .72 to .76 with an offender population, and targets six recidivism predictors: level of drug use; level of alcohol use; age at first offence; history of generalised offending; highest degree of personal injury occurring in index, and past violent offences (Ward & Dockerill, 1999).
Materials

The Interpersonal Reactivity Index The Interpersonal Reactivity Index was administered in its original format (Davis, 1980). The scale consists of 28 items constituting four subscales of seven items each. Each of the 28 items was rated using a five point Likert scale, ranging from 0 (does not describe me well), to 4 (describes me very well).

The Criminal Sentiments Scale The Criminal Sentiments Scale provides an assessment of both pro-social and anti-social cognitions, attitudes or sentiments (Andrews & Wormith, 1984). This measure has three subscales; Law, Courts, Police, which assesses the level of positive attitudes an individual has to the criminal justice system; Tolerance for Law Violations, which provides an indication of the degree to which individuals accept the use of illegal means to gain their needs, and; Identification with Criminal Others, which assesses the level of identification with criminal peers.

Karolinska Two subscales of the Karolinska (Schalling, Asberg, Edman, & Oreland, 1987) were utilised, Impulsivity and Socialisation. Low scores on the Socialisation scale are purported to indicate psychopathy (Blackburn, 1993), while high scores on Impulsivity provide an indication of an individual’s tendency to act impulsively.

Procedure

Offenders who had been identified as having a high risk of re-offending, based on their LOSNI scores, completed an assessment battery prior to inclusion in a
treatment program for violent offending. The reported scales constituted part of this assessment battery. Staff psychologists administered all assessments.

Results

Comparison of the offender sample to reported non-offender means

In order to determine the Interpersonal Reactivity Index’s capability to discriminate offender groups from the general population, single sample t-tests were used to compare the data from the offender sample to means obtained from a sample of non-offender male factory workers (means reported by Davis, 1980). Male factory workers were chosen as the comparison group so as to match on gender and approximate education levels. Descriptive statistics for each of the four subscales are presented in Table 2.1.

Table 2.1: Mean Interpersonal Reactivity Index subscale scores for offenders and non-offender samples.

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Offenders</th>
<th>Non-Offenders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Distress</td>
<td>10.14 (4.46)</td>
<td>18.35 (4.40)</td>
</tr>
<tr>
<td>Perspective Taking</td>
<td>12.99 (5.00)</td>
<td>20.19 (4.25)</td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>12.83 (4.71)</td>
<td>13.4 (6.30)</td>
</tr>
<tr>
<td>Fantasy</td>
<td>9.28 (5.44)</td>
<td>11.09 (5.73)</td>
</tr>
</tbody>
</table>

Note: SD in parentheses

The offenders scored significantly lower than the mean of the non-offender sample on all of the four subscales (Perspective Taking: t(84) = 9.88, p<.001; Empathic Concern: t(83) = 14.32, p<.001; Fantasy: t(85) = 7.03, p<.001; Personal Distress: t(85) = 1.98, p=.05). For three of the four subscales, the Interpersonal Reactivity Index does appear to discriminate between the offender sample and the non-offender
means in the expected direction. However, the offenders reported lower levels of personal distress, which was in the opposite direction as to what would be expected.

**Reliabilities**

Cronbach’s Alpha was calculated separately for each of the four subscales. The Fantasy subscale was the only subscale that produced an acceptable internal consistency ($\alpha = .70$). Perspective Taking, Empathic Concern, and Personal Distress (PT, $\alpha = .64$; EC, $\alpha = .60$; PD, $\alpha = .59$) were all below the minimum recommended index of .70 (Gregory, 1996).

To further examine the internal consistency of the subscales, corrected item-total correlations (CITC) were also examined. CITCs provide an indication of the level of consistency that each item has with the rest of the subscale. DeVellis (1991) suggested that CITC above .30 indicate that the item is contributing toward internal consistency. This analysis enables the identification of individual items that may be reducing a scale’s reliability index. As can be seen from Table 2.2, the internal consistency of each of the four subscales was being adversely affected by the reversed items.
Table 2.2: The Corrected Item-Total Correlations for each item of the Interpersonal Reactivity Index. Corrected Item-Total Correlations above .3 indicate individual item is contributing to the subscale internal consistency.

<table>
<thead>
<tr>
<th>Empathic Concern</th>
<th>Perspective Taking</th>
<th>Fantasy</th>
<th>Personal Distress</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRI Item Number</td>
<td>CITC</td>
<td>IRI Item Number</td>
<td>CITC</td>
</tr>
<tr>
<td>2</td>
<td>0.39</td>
<td>8</td>
<td>0.47</td>
</tr>
<tr>
<td>9</td>
<td>0.52</td>
<td>11</td>
<td>0.61</td>
</tr>
<tr>
<td>20</td>
<td>0.48</td>
<td>21</td>
<td>0.57</td>
</tr>
<tr>
<td>22</td>
<td>0.39</td>
<td>25</td>
<td>0.50</td>
</tr>
<tr>
<td>4*</td>
<td>0.25</td>
<td>28</td>
<td>0.52</td>
</tr>
<tr>
<td>14*</td>
<td>0.04</td>
<td>3*</td>
<td>0.01</td>
</tr>
<tr>
<td>18*</td>
<td>0.20</td>
<td>15*</td>
<td>-0.12</td>
</tr>
</tbody>
</table>

Note: CITC = Corrected Item-Total Correlation; *= Reversed Item

Component Structure

Particular caution was used with the component analysis given the low n to item ratio. Principle components analysis (PCA) was used to analyse the subscale structure as this method is more robust to both errors of under-extraction and over-extraction (Fava & Velicer, 1996). Extracting all components with an eigenvalue greater than one tends to result in too many components being extracted, whereas the scree plot criterion tends to provide a more accurate solution (Tzeng, 1992). Consequently, the scree plot criterion for the number of components extracted was used here, and this indicated a three-component solution.

An oblique rotation was used to determine if the components were correlated. This was not the case, with the largest correlation being –.14. Therefore, an orthogonal, varimax rotation has been reported here (see Table 2.3).
Table 2.3: Individual item loadings for offender data on the Interpersonal Reactivity Index resulting from Principle Components extraction with Varimax Rotation.

<table>
<thead>
<tr>
<th>IRI Subscale</th>
<th>IRI Item Number</th>
<th>Component Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>EC</td>
<td>2</td>
<td>.747</td>
</tr>
<tr>
<td>PT</td>
<td>28</td>
<td>.724</td>
</tr>
<tr>
<td>FS</td>
<td>26</td>
<td>.721</td>
</tr>
<tr>
<td>PT</td>
<td>11</td>
<td>.706</td>
</tr>
<tr>
<td>PT</td>
<td>21</td>
<td>.706</td>
</tr>
<tr>
<td>PT</td>
<td>25</td>
<td>.695</td>
</tr>
<tr>
<td>EC</td>
<td>20</td>
<td>.683</td>
</tr>
<tr>
<td>PT</td>
<td>8</td>
<td>.666</td>
</tr>
<tr>
<td>EC</td>
<td>9</td>
<td>.649</td>
</tr>
<tr>
<td>FS</td>
<td>5</td>
<td>.635</td>
</tr>
<tr>
<td>EC</td>
<td>22</td>
<td>.595</td>
</tr>
<tr>
<td>PD</td>
<td>10</td>
<td>.543</td>
</tr>
<tr>
<td>FS</td>
<td>16</td>
<td>.528</td>
</tr>
<tr>
<td>FS</td>
<td>23</td>
<td>.519</td>
</tr>
<tr>
<td>PD</td>
<td>17</td>
<td>.377</td>
</tr>
<tr>
<td>EC</td>
<td>* 14</td>
<td>.751</td>
</tr>
<tr>
<td>EC</td>
<td>* 18</td>
<td>.694</td>
</tr>
<tr>
<td>PT</td>
<td>* 15</td>
<td>.634</td>
</tr>
<tr>
<td>FS</td>
<td>* 7</td>
<td>.542</td>
</tr>
<tr>
<td>FS</td>
<td>* 12</td>
<td>.508</td>
</tr>
<tr>
<td>PD</td>
<td>* 13</td>
<td>.461</td>
</tr>
<tr>
<td>FS</td>
<td>1</td>
<td>.431</td>
</tr>
<tr>
<td>EC</td>
<td>* 4</td>
<td>.392</td>
</tr>
<tr>
<td>PT</td>
<td>* 3</td>
<td>.365</td>
</tr>
<tr>
<td>PD</td>
<td>24</td>
<td>.741</td>
</tr>
<tr>
<td>PD</td>
<td>6</td>
<td>.674</td>
</tr>
<tr>
<td>PD</td>
<td>27</td>
<td>.632</td>
</tr>
<tr>
<td>PD</td>
<td>* 19</td>
<td>.489</td>
</tr>
</tbody>
</table>

Note: * = Reversed items; Component loadings < .3 have been suppressed.

As can be seen from Table 2.3, Component 2 contained all but one of the reversed items, together with one positively worded item from the Fantasy Subscale. This positively worded item was, “I daydream and fantasise, with some regularity, about things that might happen to me”. Several authors have observed factor structures
which separate positively and negatively worded items, (e.g. Knight, Chisholm, Marsh, Godfrey, 1988), however, this effect becomes most distinct with subjects who have poor reading levels (Dunbar, Ford, Hunt & Der, 2000). Given the lengthy nature of the positively worded item, along with the remaining negatively worded items, it seems plausible that component 2 was due to inflated specifics associated with reading ease.

Component 3 consisted of all items that contained the word ‘emergency’ or ‘emergencies’. Item 19, which loaded on this component, was a reversed item which also contained the word ‘emergency’. However, after reversal this item was negatively associated with the remaining ‘emergency items’. This may be explained by offenders responding to the word emergency in the same way for each item, regardless of the intended direction of the item. Component 1, which was the largest component, consisted of all the remaining items. No apparent pattern could be identified within this component.

Subscale scores for the Interpersonal Reactivity Index were generated and analysed against other scale scores by means of Pearson’s Correlation. The correlation results are presented in Table 2.4.
Table 2.4: Pearson’s correlation results for each of the four IRI subscales, CSS subscales, Impulsivity and Socialisation for the offender sample.

<table>
<thead>
<tr>
<th></th>
<th>EC</th>
<th>FS</th>
<th>PD</th>
<th>LCP</th>
<th>TLV</th>
<th>ICO</th>
<th>Imp</th>
<th>Soc</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT</td>
<td>.56b</td>
<td>.21</td>
<td>-.11</td>
<td>.53b</td>
<td>-.53b</td>
<td>-.59b</td>
<td>-.41a</td>
<td>.40a</td>
</tr>
<tr>
<td>EC</td>
<td>.22</td>
<td>-.04</td>
<td>.59b</td>
<td>-.49a</td>
<td>-.50b</td>
<td>-.16</td>
<td>.23</td>
<td></td>
</tr>
<tr>
<td>FS</td>
<td>.10</td>
<td>.03</td>
<td>-.03</td>
<td>-.22</td>
<td>.10</td>
<td>-.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PD</td>
<td>-.07</td>
<td>.14</td>
<td>.15</td>
<td>-.03</td>
<td>-.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCP</td>
<td>-.82c</td>
<td>-.72c</td>
<td>-.59b</td>
<td>.53b</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLV</td>
<td>.80c</td>
<td>.42a</td>
<td>-.42a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICO</td>
<td>.44a</td>
<td>-.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: PT = Perspective Taking; EC = Empathic Concern; FS = Fantasy Scale; PD = Personal Distress; LCP = Law, Courts & Police; TLV = Tolerance of Law Violations; ICO = Identification with Criminal Others; Imp = Impulsivity; Soc = Socialisation.  

a = p < .05; b = p < .01; c = p < .001.

Perspective Taking and Empathic Concern both produced correlation results that were consistent with their assessment of positive empathic constructs. Specifically, an individual’s tendency to attempt to perceive another’s plight (PT) was associated with positive attitudes to the criminal justice system (LCP), and with higher levels of Socialisation. Low levels of Perspective Taking were associated with Tolerance of Law Violations and Identification with Criminal Others. As would be expected, a low dispositional tendency to attempt to understand another’s situation was associated with high levels of impulsivity. An individual’s tendency to have feelings of concern for others in need was associated with positive attitudes to the criminal justice system, and high levels of Socialisation, but was negatively associated with Tolerance for Law Violations and Identification with Criminal Others. Therefore, the results indicating that Perspective Taking and Empathic Concern were assessing positive empathic constructs. Personal Distress and the Fantasy scale, however, failed to be associated with any of the other measures.
Discussion

The comparison between the offender sample means and the reported non-offender means for each of the Interpersonal Reactivity Index subscales does indicate that the scale is capable of discriminating between offenders and non-offenders. The direction of the difference was in the predicted direction, with offenders demonstrating lower levels of empathic concern, perspective taking, and fantasy. However, offenders scored lower than non-offenders on the Personal Distress subscale contrary to the expectations that offenders would score higher as it is this subscale which has been suggested to be related to levels of aggression and violence (Davis, 1994). Overall these results appear to support the use of the Interpersonal Reactivity Index with an offender sample for at least three of the four subscales, however, the psychometric qualities of the Interpersonal Reactivity Index appear to indicate that the scale is in fact unreliable with this population.

The psychometric qualities of the Interpersonal Reactivity Index were examined and the results of this analysis indicated that the reliability of three of the subscales was unacceptable, particularly for the Personal Distress subscale. These results confirm earlier findings of a lack of reliability of the Interpersonal Reactivity Index when used to assess offenders (Ireland, 1999). It may be that this lack of reliability of the Interpersonal Reactivity Index is specific to offender populations, particularly since acceptable reliability results have been obtained when the Index has been used to assess other populations.
The measurement of empathy in violent offenders poses unique difficulties. Davis (1994, p 52) has argued that it is the “greater verbal skill and insight of adults” that has made self-report assessment of empathy possible. The psychometric properties of self-report measures of empathy may, therefore, be dependent upon the verbal skill and insight of the population in which they are being used. Verbal skills may be viewed either in terms of general verbal intelligence, or more specifically, in terms of literacy skills. The literature has identified a consistent verbal intelligence deficit in offender populations (Blackburn, 1993). For instance, 70% of recidivists demonstrate a verbal intelligence deficit (Haynes & Bensch, 1981). In regard to more specific literacy deficits, it has been estimated that literacy deficits exist within around 20% of the offender population (Caddick & Webster, 1998). These deficits may pose a serious threat to valid, reliable self-reported assessments. Offender samples may produce unacceptable reliability indices on the subscales of the Interpersonal Reactivity Index due to deficits in verbal intelligence, literacy, and insight, which are considered necessary for self-report measurements of empathy. Without the required levels of insight and verbal skills, respondents may rate items based on aspects such as specific words or phrases. This appears to have been the case in this study. From the component analysis, it appears that items that contain the word emergency, or emergencies, were rated by respondents in a similar fashion regardless of the direction of the item. Another component derived from the analysis consisted of the reversed items (except the reversed ‘emergency’ item), along with one positively worded item. Negatively worded sentences require longer processing
time (Clark, & Chase, 1972) suggesting that they require greater literacy skills. One explanation of these items all loading onto this component is that these items required greater literacy skills than the offenders possessed. It should be reiterated, however, that the sample size used for this analysis was less than desirable. Therefore, it is suggested that these results be interpreted with caution.

The Perspective Taking subscale is purported to provide an indication of an individual’s dispositional tendency to attempt to understand another’s plight. It is a cognitive measure that can be thought of as representing a positive empathic construct. As expected, this measure was associated with higher levels of socialisation and pro-social attitudes. Antisocial attitudes and higher levels of impulsivity were associated with lower levels of Perspective Taking. Empathic Concern assesses an individual’s tendency to experience feelings of concern for another’s plight, and represents an affective positive empathic construct. Again, correlation results support this notion. Empathic Concern was positively associated with higher levels of Socialisation and pro-social attitudes, and negatively associated with higher levels of anti-social attitudes.

The remaining two subscales, Personal Distress and Fantasy, failed to demonstrate any correlations with any other measure. This was particularly surprising for the Personal Distress subscale given its alleged relationship with anti-social behaviour and aggression (Davis, 1994). It was expected that Personal Distress would be
associated with higher levels of anti-social attitudes (TLV & ICO), and possibly lower levels of Socialisation, however those relationships were not observed.

The Interpersonal Reactivity Index is recommended for use as an assessment tool with offenders (Polaschek & Reynolds, 2000), however, the results of this study suggest that the scale be used with caution when assessing offenders. Perspective Taking and Empathic Concern were found to discriminate between offenders and non-offenders in the expected direction; however, the Personal Distress subscale results were counterintuitive. Additionally, Personal Distress produced an internal consistency that was far below acceptable and failed to demonstrate any relationships with any of the other measures.

It is suggested that the Interpersonal Reactivity Index requires some alteration for use with offenders. Specifically, the Perspective Taking and Empathic Concern subscales should be examined in terms of their readability levels. Increasing the readability levels of these subscales may help to improve their internal consistency, making them more suited to an offender sample. Additionally, it is recommenced that the Personal Distress subscale is not used to assess offenders. It is unclear exactly what this subscale is measuring; particularly given it’s low reliability and counterintuitive results.

It is especially disappointing to lose the Personal Distress subscale. The assessment of a negative empathic construct may provide much needed answers to the
relationship between empathy and aggression / violence. Further research should examine more effective ways of assessing Personal Distress in offender samples along with the nature of the relationship between experiences of personal distress and aggression.
Chapter Three

3.1 Overview

Adopting a multidimensional approach to the study of empathy has facilitated our understanding of interpersonal affective responses and their relation to both antisocial and prosocial behaviours. It is argued, though, that we have not gone far enough in our attempts to assess all facets of interpersonal affective responses. Stotland’s (1969) original construct of contrast empathy was adapted in the present chapter to construct a measure of contrast affect. Additionally, a new measure of personal distress, which focuses upon the affective nature of the construct, was created. Analysis supported the reliability and validity of both the new scales, with each of the new scales demonstrating different patterns of associations with the other variables included in the chapter. Specifically, low empathic concern, low perspective taking and high affect intensity predicted high intolerance of another’s distress. High levels of contrast affect were generally only found in males with low levels of empathic concern. The future use and importance of the scales in relation to our understanding of antisocial behaviour and desistence is discussed.
3.2 What’s Missing In Empathy Research?

Some may argue that all the research centring on empathy has achieved little in actually measuring empathy (e.g., Switankowsky, 2000), and that what has been achieved is considerable progress in the assessment of individual differences in indicator variables theoretically related to the dynamics of interpersonal emotional responses. The usefulness of these indicator variables has been demonstrated repeatedly, for instance when predicting prosocial behaviour (e.g., Davis, 1983), predicting satisfaction with romantic relationships (e.g., Davis, 1994), when investigating altruistic behaviours (e.g., Batson, Duncan, Ackerman, Buckley & Birch, 1981), and when facilitating conflict resolution (e.g., Mallinckrodt, 2000) and the reduction of aggressive behaviour in children (e.g., Feshbach & Feshbach, 1982). We have also moved away from assessing only positive interpersonal constructs, such as feelings of concern for others, toward assessing the broad plethora of possible interpersonal reactions. For example the assessment of personal distress, or egocentric affective reactions to another’s distress, has become relatively commonplace since the advent of Davis’s (1994) Interpersonal Reactivity Index (IRI). However, in order to adequately reflect the breadth of emotional reactions possible by one human being to the distress of another, it may be necessary to introduce the assessment of constructs currently either ignored, or poorly assessed, in investigations of interpersonal relations.
3.3 Personal Distress as a Self-Oriented Response Style

Berger (1962) proposed that an empathic response could cause an individual to experience negative affect and lead them to avoid the distressed other. Stotland (1969) further argued that an affective empathic reaction is a form of emotion that involves both physiological and subjective elements. The subjective nature of empathic experience may result in the observer of distress cues interpreting their own physiological and emotional arousal as aversive. Hoffman (1981) states that “empathic distress is unpleasant and helping the victim is usually the best way to get rid of the source” (p. 52). Aversive negative arousal may be a dominant response style of some individuals in response to the distress of others and individuals with this response style are more likely to choose to escape the situation if given the opportunity (Batson, 1990).

Fultz, Schaller and Cialdini (1988) provided evidence for the related, but distinct nature of empathic concern and personal distress. They also suggest that, unlike empathic concern (other-oriented feelings of concern), personal distress is self-oriented and experienced as a more direct personal affective response. Personal distress, therefore, represents one possible self-oriented response to the distress cues of another. It may even be a response that can dominate other, less direct experiences such as empathic concern. Cohen and Strayer’s (1996) finding of significantly higher levels of personal distress in conduct disordered youth led them to conclude that personal distress can become so great that the individual becomes completely egoistic and their personal needs begin to outweigh the needs of the distressed other. Concern
for others is “a fragile flower, easily crushed by self-concern” (Batson, O’Quin, Fultz, Vanderplas & Isen, 1983).

The IRI, (Davis, 1980) contains a subscale which is currently the most frequently used measure of personal distress response style. However, descriptions of personal distress focus on the affective nature of the response (such as shock, alarm, disgust or fear; Batson, Duncan, Ackerman, Buckley & Birch, 1981) in response to distress cues from another. Davis’s scale, on the other hand, includes items that appear to focus on coping styles rather than affective response styles per se. For example, “In emergency situations I feel apprehensive and ill-at-ease”. It appears that Davis’s subscale differs in its construction of personal distress from the definition presented in the literature. Although it is probably in the situations outlined by Davis’s scale that individuals are likely to experience distress cues, but it seems unlikely that the subscale is assessing personal distress directly. It is likely that the two constructs (personal distress and coping styles) are closely related, in that the more an individual perceives himself or herself as capable of dealing with a distressing situation the less likely they are to experience personal distress in the presence of a distressed other.

In order to adequately investigate personal distress however, a measurement instrument is required that taps into the affect specific nature of the response. For instance, experiencing agitation, hostility, or fear would be aversive affective interpersonal reactions to another’s distress. As yet, these aspects of affective responding have not been assessed but may prove theoretically relevant. Additionally, research into the relationship between empathic responding and aggression would logically involve the assessment of those who have committed violent acts, however,
Davis’s scale has reliability problems when used to assess offenders (see Chapter Two). A measure designed to assess personal distress as an affective response style, needs to adequately address the affective nature of the construct in relation to another’s distress cues (such as crying), and needs to produce reliable results when used with offender samples in order to facilitate research in this area.

### 3.4 Contrast Affect as a Self-Oriented Response Style

Stotland (1969) argued that a broad definition of empathy did not disqualify situations where the observer and the target had opposing emotional experiences, for example, “a sadistic person might feel joy at another’s pain” (p. 273). Sadism has been defined as the experience of positive arousal resulting from inflicting pain or humiliation on another, which may or may not include a sexual component (Berner, Berger & Hill, 2003). Murphy and Vess (2003) argued that sadism may also include an enjoyment of the control and domination which it achieves, which appears consistent with accounts of the individual differences associated with bullying behaviour. Factors associated with bullying behaviour have been posited to include an enjoyment of the domination or control achieved over victims, as well as a tendency to view violence as admirable (Naumann, 2001).

Issues of power and control have been extensively researched in various literatures related to criminal and antisocial behaviours, for instance, in domestic violence. Brewster (2003) has recently extended this line of enquiry to include stalking situations. Felson (1996) claimed that actual harm was only used by perpetrators intent on domination and control when they needed to “produce compliance or to save
face” (p 433). This appears congruent with Indermaur’s (1995) analysis of violent property crime, which concluded that a need for dominance and to save face are important contributors to the employment of violence.

From the above discussion then, it appears reasonable to hypothesise that some offenders may experience an arousal via the use of violence, which they find pleasurable, either as a result of the physiological arousal associated with such activity or via the attainment of control. Hassine (2003) supports this position in relation to physiological arousal, claiming that violence results from an addiction to fight or flight response chemicals. Indeed, Berner et al (2003) proposed that physiological arousal was one form of gratification that could result from the use of violence.

### 3.5 Scale Construction Issues

#### 3.5.1 General Scale Construction Issues

The following sections outline general scale construction issues relevant to the current discussion.

#### 3.5.1.1 Self-Report Measures

Paper and pencil questionnaires are the most popular means of investigating a wide range of constructs. Apart from the obvious advantages that this type of measurement technique provides, paper and pencil tests also provide respondents with a level of anonymity not offered by other techniques (Brannon, 1981). This makes paper and
pencil questionnaires particularly useful when investigating sensitive topics, as is the case with the present work. Additionally, self-report measures are economically advantageous as well as being quick to administer. Another advantage, inherent in self-report measures, is the ability to allow respondents to complete the questionnaire in their own time, thus reducing the associated difficulties of providing a suitable testing environment.

Given the technical advantages associated with self-report measures, as well as the added advantage of anonymity, it was determined that this format of questionnaire would be most suitable for the current series of studies.

3.5.1.2 Likert Type Scales and Item Stem Direction

Numerous response formats exist, each with its own particular merits and disadvantages; however, Brannon (1981) recommends consistency in response format, particularly when exploring relatively new constructs and topics. Brannon argues that the error variance associated with the measurement method would become difficult to interpret when response formats differ. Therefore, when comparing different formats within the same area, true relationships may be obscured by unsystematic method variance. Since previous measures of empathy have involved Likert response formats, it appears prudent to continue the use of this response style.

Brannon (1981) asserts that the weight of evidence suggests that Likert scales are the most psychometrically favourable response format. There appears to be relatively little problem with response bias, they are quick to complete and they are reliable. However, the trend of using short Likert scales fails to maximize the method’s
potential. Longer scales, such as seven points, maximize the reliability of the method (Brannon). Komorita and Graham (1965) however, presented evidence that undermined this position. Scale length was unassociated with reliability for homogenous scales, but impacted on reliability for heterogeneous scales. Their conclusion was that increases in reliability associated with increases in scale length were indicative of an increased likelihood of a response set. Indeed, if increasing the length of the scale evokes an increase in response sets, then shorter scales would be preferable. Unfortunately, decreasing the length of the scale will also decrease the sensitivity of the items to discriminate due to a decrease in the amount of variance produced by the scale. However, if Komorita and Graham are correct in their assertion that the increased reliability (and presumably response sets) was only apparent for heterogeneous scales, then homogeneity of items becomes of utmost importance. Paper and pencil tests should contain homogenous items, according to Brannon (1981). He contended that heterogeneous items obscure inter-relationships of specific construct issues. Therefore, the most useful inventories would consist of a series of ‘content-specific’ subscales.

Another aspect of Likert scales that has received attention in the literature is the use of a neutral point. Grichting (1994) discusses the potential problems associated with discerning meaning from a neutral point, in that such a response may indicate either indifference or ignorance. Although it appears that some individuals are simply more likely to choose a neutral point than others (Duncan & Stenbeck, 1988), the intensity of the item is likely to impact on use of neutral point usage, particularly if individuals use neutral responses as a means of avoidance.
3.5.1.3 Item Selection

Item selection based upon an entirely empirical typology has been the method of choice in the past, and has the ability to produce seemingly psychometrically sound scales. Unfortunately though, this method tends to rely on pooled variance and often produces factors that are difficult to interpret and conceptualize (Brannon, 1981). Additionally, empirical typologies appear to produce scales that are particularly prone to validity shrinkage with future use (Gregory, 1996). A purely theoretical typology, on the other hand, has had similar failures. Brannon suggests “the most efficient method of achieving coherent, homogenous subscales is to alternate between subjective judgments by an investigator who has thought about the content area and empirical tests of those judgments” (p. 624).

3.5.1.4 Reliability Analysis

Scale homogeneity is best demonstrated by internal consistency, as measured by Chronbach’s Alpha. Perceptions of adequate internal consistencies have ranged from $\alpha = .70$ (Gregory, 1996) to as high as $\alpha = .90$ (Nunnally & Bernstein, 1994). Internal consistencies for scales that assess affective constructs, however, have had a history of poor reliability indices. This has lead some authors to conclude that expectations for internal consistency should be reduced to as low as $\alpha = .50$ (Poresky, 1990). Lowered internal consistencies, though, have ramifications for the amount of error variance produced by the scale and therefore the size of an individual score’s confidence interval and subsequent interpretability (Charter & Feldt, 2002). Maximizing item homogeneity should reduce, to some extent, the observed difficulties with scales assessing affective constructs.
The degree to which each item correlates with the remaining items provides an indication of each individual item’s degree of homogeneity with the rest of the scale. Item-Total Correlations, however, have a tendency to provide inflated indicators of homogeneity due to the inclusion of the target item in the total score calculation. A Correct Item-Total Correlation, on the other hand, provides the degree of association between the target item and the total of the remaining items. This method of analysis will be used to evaluate the degree of individual item homogeneity, with a cutoff correlation of .30, as suggested by DeVellis (1991).

3.5.1.5 Establishing Validity

Brannon (1981) states that the issue of predictive validity of paper and pencil instruments has been an embarrassment to test designers. Correlations with other scales have been cited as an indication of validity; however, Brannon asserts that although interesting, correlational results with other scales provide only modest indicators of validity. Further to this, the use of ‘known-group’ validation is “so easy to pass that it provides no meaningful information” (p. 624). Brannon proposes the use of comparisons with measures of meaningful social behaviour as an indicator of validity. However, when ‘known-groups’ are based on meaningful social behaviour (such as violence) rather than self-selection (such as voluntary group membership) then ‘known-group’ validation should provide a more meaningful indication of validity.
3.5.2 Psychological Assessment and Offender Populations

Gudjonsson (2001) highlights one of the major problems associated with the psychological assessment of offenders, that is, very few assessment tools are designed for and standardised on offenders. This is even more problematic in relation to the assessment of empathy, since empathy scale have been designed for use in prosocial research areas (such as marital satisfaction) rather than antisocial research areas (such as violence). Offenders also have specific assessment needs that may not be of concern in the general population and these needs are likely to impact on successful assessment. For example, Gudjonsson and Haward (1998) discuss the influence of factors such as reading ability, motivation, and response bias, on test scores.

The paper presented in Chapter 2 demonstrated that some of these factors appear to influence the reliability of the measurement of empathy, when using a scale that was constructed and evaluated on a student population to assess offenders. As well as highlighting the need for assessment instruments that are able to assess interpersonal emotional reactions, and that have been constructed and evaluated for use with offenders, the findings in this chapter also illuminate some considerations that need to be kept in mind during the construction of such instruments.

Offenders appear to have difficulty with the complex wording associated with the currently available empathy measure. The construction of the new measure should specifically attempt to minimise the reading skills required to complete the scale. Item length as well as the number of items should also be kept to a minimum.
Section 3.5.1.2 outlines the difficulty associated with the inclusion of a midpoint in Likert type response scales. These issues may be particularly influential in populations that wish to elude assessment and utilise a ‘neutral’ midpoint to avoid divulging information to assessors. It is recommended, therefore, that assessments which present confronting items to offenders should not include a midpoint in the item response scale.

With the above issues in mind, the construction of the new empathic response scale will adhere to the following principles:

- Item selection based on a theoretical typology,
- Item selection to maximise the homogeneity of the scales,
- Item construction to maximise easy readability,
- Scale construction to maximise variability, without a neutral point, and
- Final empirical evaluation of scale with offender samples.

Using this approach results in three distinct phases of scale construction (Gregory, 1996):

1. The theoretical-substantive stage, which involves theory-guided item writing and relates to a theoretical typology in that items are selected to reflect specific aspects of the theoretical construct being measured.
2. The Internal-structural stage relates to an empirical typology, that is, items are then kept or rejected on the basis of empirical evidence of their suitability using means such as item-scale correlations.
3. The external-criterion stage, which involves the testing of population differences using the newly created scales.

The current chapter outlines the first two phases of the scale construction process for two scales; Negative Affect Intolerance Scale (personal distress scale) and Offender Contrast Affect Scale (contrast empathy scale). Phase 1 involved item selection based on the theoretical nature of the constructs to be measured, while phase 2 involved the empirical evaluation of the internal consistencies of the two scales. The relationship of the newly created scales to currently available measures will also be examined. Once reliability and basic validity have been investigated, the newly created scale may then be used to examine differences between offenders and non-offenders in future research.

Given the similarity between the Negative Affect Intolerance Scale and Davis’s (1994) Personal Distress scale, it was expected that there would be a strong positive relationship between the two measures. Additionally, it was expected that intolerance of another’s distress would be negatively associated with empathic concern, but that it would be positively associated with perspective taking, since perspective taking is thought to be an important variable in the production of personal distress (Cialdini, Brown, Lewis, Luce, & Neuberg, 1987). Given that personal distress appears to be related to high levels of arousal (Fultz, Schaller, & Cialdini, 1988), it also seemed likely that a tendency to experience strong affective intensity would be predictive of personal distress.
Contrast affect, on the other hand, was expected to display a negative relationship with empathic concern, but a positive relationship with perspective taking. Although no previous literature exists, it seems reasonable to expect that perspective taking is required in order for the impact of one’s actions on another to be anticipated.

### 3.6 Method

#### 3.6.1 Participants

One hundred and sixty six Western Australian university students, with a mean age of 25 years, participated in the study. Of those 35 were male (mean age 26 years), and 130 were female (mean age 25 years). No rewards or incentives were offered.

#### 3.6.2 Materials

**3.6.2.1 Affect Intensity Measure**

The Affect Intensity Measure was developed by Larsen (1984) to assess the level of intensity with which individuals experience emotions. Twenty nine of the original 40 items, which assessed the level of negative affect intensity were selected for use in the present study. This selection was based on the structure analysis of the scale conducted by Bryant, Yarnold and Grimm (1996). Participants responded to each item using a six point Likert scale ranging from 1 (never) to 6 (always).

**3.6.2.2 Interpersonal Reactivity Index**

The Interpersonal Reactivity Index (Davis, 1980) consists of 28 items constituting four subscales of seven items each. Empathic Concern assesses an individual’s
tendency to have feelings of concern for others; Perspective Taking assesses an individual’s tendency to engage in perspective taking; Personal Distress assesses an individual’s tendency to experience feelings of distress when confronted with emotional situations; and the Fantasy scale assesses an individual’s tendency to become engaged with fictional characters. Each of the 28 items was rated using a four point Likert scale, ranging from 1 (does not describe me well), to 4 (describes me very well). Reliabilities for the four subscales are reported to range from .70 to .78 (Davis, 1994).

3.6.3 Item Selection

3.6.3.1 Negative Affect Intolerance Scale

The Negative Affect Intolerance Scale was designed for use in this study to assess an individual’s tendency to experience self-oriented negative affect, in the form of personal distress, as a result of exposure to a distressed other. Items were written to reflect available descriptions of personal distress, which include affective states of disgust, fear, disturbed, upset, troubled, worried, etc (descriptions obtained from: Batson & Coke, 1981; Batson, Duncan, Ackerman, Buckley & Birch, 1981; Batson, O’Quin, Feltz, Vanderplas & Isen, 1983; Davis, 1983; Fultz, Schaller & Cialdini, 1988). The tendency for individuals experiencing personal distress to seek escape (Batson, 1990) was also reflected in the scale, along with the tendency to experience hostility (Milner, Haley & Fultz, 1995).

The final scale consisted of 13 items rated using a six point Likert scale, ranging from 1 (never) to 6 (always). Higher scores reflected a greater level of self-oriented
responses and hence greater intolerance and hostility to the negative emotional displays of another.

3.6.3.2 Contrast Affect Scale

The Contrast Affect Scale was purpose designed for this study to assess the level of contrasting affect. The scale items were written to reflect pleasurable affective states resulting from the control and dominance of others, as well as pleasure derived from inflicting pain and distress. The scale consisted of 12 items and was rated on a six point Likert scale, ranging from 1 (never) to 6 (always). Higher scores reflected a greater propensity to experience positive affect in the control and dominance aspects of the use of violence.

3.6.4 Procedure

Students were approached during their regular lectures and tutorials. They were informed that the study involved completion of a questionnaire only, and that this could be done in their own time and returned into a sealed box. Given the nature of the items in the new scales, ensuring participant confidentiality was given high importance in order to encourage responses that were open and honest.

3.7 Results

Analysis has been conducted on the full sample of 166 subjects, except for sex comparisons. In order to eliminate problems associated with unequal cell sizes, a
smaller sample was constructed using all male respondents (n = 35) and an equal number of randomly selected female subjects.

### 3.7.1 Scale Reliabilities

The adapted Affect Intensity Measure produced an internal consistency of .79. The four subscales of the Interpersonal Reactivity Index were examined for internal consistency and produced acceptable Chronbach Alpha levels (Perspective Taking, $\alpha = .78$; Empathic Concern, $\alpha = .76$; Personal Distress, $\alpha = .77$; and Fantasy, $\alpha = .81$).

#### 3.7.1.1 Negative Affect Intolerance Scale

The Negative Affect Intolerance Scale was examined via principle components analysis. The resulting scree plot (Figure 3.1) indicated that the scale was unidimensional and therefore no component extraction or rotation was employed.

![Figure 3.1: Scree plot showing eigenvalues produced by principle components extraction of the Negative Affect Intolerance Scale.](image-url)
The internal consistency of the new scale was examined via Chronbach’s Alpha as well as Corrected Item-Total Correlations. These results are presented in Table 3.1, and indicated that the scale was internally consistent and that each item was appropriate for inclusion in the scale.

Table 3.1: Chronbach Alpha and the Corrected Item-Total Correlations for the 13 items of the Negative Affect Intolerance Scale, for the full sample (n = 166).

<table>
<thead>
<tr>
<th>Item</th>
<th>CITC</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>When people whinge I feel like telling them to shut up</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>I am patient with people when they are emotional (R)</td>
<td>.36</td>
<td></td>
</tr>
<tr>
<td>I get angry when other people are angry</td>
<td>.32</td>
<td></td>
</tr>
<tr>
<td>I feel irritated when someone is frightened</td>
<td>.45</td>
<td></td>
</tr>
<tr>
<td>Listening to someone moan and carry on makes me angry</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>I try to avoid people who are really upset</td>
<td>.51</td>
<td></td>
</tr>
<tr>
<td>Gutless people make me sick</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>I want to get away when people are upset</td>
<td>.58</td>
<td></td>
</tr>
<tr>
<td>I hate the sound of people who are upset</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>I feel comfortable spending time with people who are sad (R)</td>
<td>.37</td>
<td></td>
</tr>
<tr>
<td>Frightened people make me angry</td>
<td>.48</td>
<td></td>
</tr>
<tr>
<td>I get really tense when someone around me is frightened</td>
<td>.36</td>
<td></td>
</tr>
<tr>
<td>Sad people make me angry</td>
<td>.60</td>
<td>.82</td>
</tr>
</tbody>
</table>

Note: (R) denotes reversed items.

3.7.1.2 Contrast Affect Scale

Analysis of the Contrast Affect Scale was also conducted using Corrected Item-Total Correlations and Principle Component Analysis. The scree plot for this scale suggested that there might be two correlated (r = .42) components (see Figure 3.2). Therefore, an Oblimin rotation was employed and the pattern matrix is presented in Table 3.2, along with each component’s internal consistency and the full scale internal consistency. Corrected Item-Total Correlations are presented for the two components as well as the full scale.
Table 3.2: Pattern matrix resulting from Principle Components extraction for the 12 Contrast Affect Scale items for the full sample (n = 166).

<table>
<thead>
<tr>
<th>Item</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Alpha</th>
<th>Full CITC</th>
<th>Full Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy making someone upset</td>
<td>.48</td>
<td></td>
<td></td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>I feel in control when I’m hurting someone</td>
<td>.70</td>
<td></td>
<td></td>
<td>.58</td>
<td></td>
</tr>
<tr>
<td>I feel good when I cause pain</td>
<td>.89</td>
<td></td>
<td></td>
<td>.49</td>
<td></td>
</tr>
<tr>
<td>I enjoy causing pain</td>
<td>.80</td>
<td></td>
<td></td>
<td>.64</td>
<td></td>
</tr>
<tr>
<td>The only time I feel good is when I’m cruel</td>
<td>.73</td>
<td></td>
<td></td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>Causing pain makes me important</td>
<td>.82</td>
<td></td>
<td></td>
<td>.56</td>
<td></td>
</tr>
<tr>
<td>I enjoy seeing someone else in pain</td>
<td>.85</td>
<td></td>
<td>.86</td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>I feel upset if I hurt someone (R)</td>
<td>.85</td>
<td></td>
<td>.61</td>
<td>.53</td>
<td></td>
</tr>
<tr>
<td>I feel upset when I cause someone pain (R)</td>
<td>.75</td>
<td></td>
<td></td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>I feel bad when I hurt someone (R)</td>
<td>.85</td>
<td></td>
<td></td>
<td>.51</td>
<td></td>
</tr>
<tr>
<td>I feel really low when I upset someone (R)</td>
<td>.75</td>
<td></td>
<td></td>
<td>.51</td>
<td></td>
</tr>
<tr>
<td>Hurting someone makes me feel uncomfortable (R)</td>
<td>.76</td>
<td></td>
<td>.81</td>
<td>.57</td>
<td>.85</td>
</tr>
</tbody>
</table>

Note: Component loadings of less than .30 have been suppressed; (R) denotes reversed items.
An examination of how the items loaded on to the two components reveals that the
two components correspond to positively and negatively worded item stems. The
internal consistencies of the individual components were not any higher than that for
the full scale and it was decided that a component split according to item direction
was not a useful construction to pursue. Therefore, the full scale has been used in the
following analysis.

3.7.2 Scale Descriptives and Sex Comparisons

Comparisons on sex were conducted using a multivariate analysis of variance, using
all scales as DVs, which indicated that there was an overall effect for Sex
\( F(7,55)=4.26; p=.001 \). The Holm technique for a modified Bonferroni approach
(Kromrey & Dickinson, 1995) for controlling inflated Type I error with multiple
comparisons was used in examining the subsequent univariate comparisons. Using
this method, the only significant sex differences observed were in relation to
Empathic Concern and Contrast Affect. Males scored lower than females on
Empathic Concern, while females scored lower than males on the Contrast Affect
Scale. No sex differences were observed on any of the other scales. The univariate
results are presented in Table 3.3, along with the means and standard deviations for
males, females, and the full sample.
**Table 3.3: Means, standard deviations (in parentheses) and univariate comparisons for male (n = 35) and female (n = 35) participants in the sex comparison sample and also in the full sample (n = 166) for all scales.**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Full Sample</th>
<th>Sex Comparison Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>Perspective Taking</td>
<td>21.48 (3.62)</td>
<td>20.41 (3.94)</td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>23.01 (3.44)</td>
<td>20.38 (4.30)</td>
</tr>
<tr>
<td>Personal Distress</td>
<td>14.74 (3.77)</td>
<td>14.21 (3.72)</td>
</tr>
<tr>
<td>Fantasy</td>
<td>20.34 (4.57)</td>
<td>17.86 (3.61)</td>
</tr>
<tr>
<td>Affect Intensity Measure</td>
<td>114.99 (12.03)</td>
<td>110.31 (12.35)</td>
</tr>
<tr>
<td>Negative Affect Intolerance</td>
<td>44.74 (8.83)</td>
<td>47.62 (8.01)</td>
</tr>
<tr>
<td>Contrast Affect</td>
<td>19.92 (7.10)</td>
<td>23.45 (8.88)</td>
</tr>
</tbody>
</table>

Note: * p = .002; ** p < .001

### 3.7.3 Prediction of Negative Affect Intolerance

Multiple linear regression was used to examine the combined and unique influences of variables in the prediction of Negative Affect Intolerance (see Table 3.4).

Demographic variables (age, sex) along with the affect subscales of the Interpersonal Reactivity Index (PT, EC, FS, PD) and the Affect Intensity Measure were included in the analysis. None of the demographic variables significantly and uniquely predicted Negative Affect Intolerance. Rather, Negative Affect Intolerance was negatively associated with Empathic Concern and Perspective Taking and positively associated with Affect Intensity and situational Personal Distress (as measured by the IRI). The predictor variables included in the regression analysis accounted for a substantial amount of the variance in Negative Affect Intolerance (Adjusted R2 = 36%).
Table 3.4 also presents the zero-order (Pearson’s) correlations between the predictor variables and Negative Affect Intolerance, as well as semi-partial correlations where all other predictor variables have been partialed out. This analysis indicated that, although a significant predictor of Negative Affect Intolerance, the zero-order correlation between the NAIS and Affect Intensity was not significant. However, little change in the strength of the association was observed once the other predictor variables were controlled for, indicating that Affect Intensity shared little variance with the other predictor variables. This was not the case for Empathic Concern and Perspective Taking, which shared a significant amount of variance ($r (163) = .50; p < .001$). Personal Distress contributed significantly toward the prediction of NAIS scores, and although the correlation had little practical significance ($r^2 = 4.8\%$) the relationship between the two measures appeared to be unique based on the semi-partial correlation.

### Table 3.4: Linear Regression Analysis predicting Negative Affect Intolerance (n=166).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Zero Order r</th>
<th>Semi-Partial r</th>
<th>β</th>
<th>Total Adjusted R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.06</td>
<td>-.06</td>
<td>-.06</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>-.16</td>
<td>-.03</td>
<td>-.03</td>
<td></td>
</tr>
<tr>
<td>Perspective Taking</td>
<td>-.45***</td>
<td>-.23*</td>
<td>-.29**</td>
<td></td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>-.49***</td>
<td>-.30**</td>
<td>-.39***</td>
<td></td>
</tr>
<tr>
<td>Personal Distress</td>
<td>-.22**</td>
<td>-.20*</td>
<td>-.21**</td>
<td></td>
</tr>
<tr>
<td>Fantasy</td>
<td>-.15</td>
<td>-.10</td>
<td>-.11</td>
<td></td>
</tr>
<tr>
<td>Affect Intensity Measure</td>
<td>-.10</td>
<td>-.15</td>
<td>-.17*</td>
<td>.36***</td>
</tr>
</tbody>
</table>

Note: β denotes standardised beta weights. * = p<.05; ** = p<.01; *** = p<.001.
3.7.4 Prediction of Contrast Affect

A parallel analysis (see Section 3.7.3) was conducted to evaluate the prediction of contrast affect using the same set of variables. The set of predictor variables explained less variance in Offender Contrast Affect Scale (OCAS) scores (Adjusted R² = 25%) than they did with Negative Affect Intolerance Scale scores. The only significant associations were negative and with age and Empathic Concern.

There were several significant zero-order (Pearson’s) correlations observed. The significant positive correlation between OCAS and Sex reflected the Sex difference observed in Section 3.7.2, however, the semi-partial correlation indicated a substantial reduction in this association once the other predictor variables were controlled. Presumably, this occurred due to the degree of association between Sex and Empathic Concern (r (161) = -.35; p < .001). Likewise, Perspective Taking was significantly correlated with OCAS prior to, but not after, controlling for the other predictor variables. Although significant, Affect Intensity was only weakly associated with Contrast Affect.

### Table 3.5: Linear Regression Analysis predicting Contrast Affect (n=166).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Zero Order r</th>
<th>Semi-Partial r</th>
<th>β</th>
<th>Total Adjusted R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.17</td>
<td>-.17</td>
<td>-.17*</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>.24**</td>
<td>.10</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>Perspective Taking</td>
<td>-.36***</td>
<td>-.13</td>
<td>-.15</td>
<td></td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>-.42***</td>
<td>-.26**</td>
<td>-.35**</td>
<td></td>
</tr>
<tr>
<td>Personal Distress</td>
<td>.02</td>
<td>-.00</td>
<td>-.00</td>
<td></td>
</tr>
<tr>
<td>Fantasy</td>
<td>-.04</td>
<td>.08</td>
<td>-.09</td>
<td></td>
</tr>
<tr>
<td>Affect Intensity Measure</td>
<td>-.16*</td>
<td>.02</td>
<td>.02</td>
<td>.25***</td>
</tr>
</tbody>
</table>

Note: β denotes standardised beta weights. * = p<.05; ** = p<.01; *** = p<.001.
3.8 Discussion.

The present study sought to investigate the reliability and validity of two newly created instruments designed to measure an individual’s self-oriented empathic responses. The data supported the reliability and validity of both scales, with the relationship of these constructs to currently available measures being congruent with current theory.

Negative Affect Intolerance was negatively associated with Empathic Concern for others, which was consistent with the view that personal distress is a self-oriented, rather than other oriented, affective reaction to the distress of others. This finding supports the proposition put forward by Cohen and Stayer (1996), that affective reactions to distress cues have the potential to become completely self-oriented and override the needs of the other. In the current study, individuals who experience high levels of distress and intolerance of another’s distress cues reported having lower levels of concern for the other’s welfare.

Also consistent with previous research, affect intensity was predictive of NAIS. Individuals who are susceptible to strong affective reactions appear to experience greater intolerance of the negative emotional displays of others. Furthermore, a lack of situational self-reported emotional efficacy (as measured by the Interpersonal Reactivity Index Personal Distress scale) was predictive of feelings of intolerance. It appears, therefore, that a self perceived lack of ability to deal with affectively intense situations is likely to produce higher levels of intolerance to another’s negative emotional displays.
Contrary to previous literature, scores on the NAIS were predicted by a lack of perspective taking. Personal distress is thought to result from victim orientation (Fultz, et al., 1988) and to be produced via perspective taking (Coke, et al., 1978). The explanation for this observed pattern in the data may be in the particulars of the perspective taking scale. Batson, Early, and Salvarani (1997) distinguish between two types of perspective taking, self-oriented and other-oriented. They further argue that self-oriented perspective taking, or understanding the other by imagining how you would feel, is more likely to produce feelings of self-oriented distress in the observer than other-oriented perspective taking, or imagining how the other person feels.

Davis’s (1980) perspective taking scale may be assessing self-oriented perspective taking to a greater extent than other-oriented perspective taking, for example “When I’m upset at someone, I usually try to ‘put myself in his shoes’ for a while” although not all of the items reflect this aspect of perspective taking. “Before criticising somebody, I try to imagine how I would feel if I were in their place” is another item which appears to reflect a self-oriented approach to perspective taking. However, the items contained in Davis’s scale appear to have prosocial connotations. Rather than simply assessing the degree to which individuals are aware of or understand another’s emotional status, the items include sentiments associated with prosocial action, such as “before criticising” and “I try to look at everybody’s side”.

No sex differences were noted for the NAIS or the IRI Personal Distress scale. The failure to find any sex differences on self-oriented affective responding (NAIS) or situational personal distress is interesting in light of previous literature. A consistent sex difference has been observed on measures of empathic concern; however, it has only been self report measures that demonstrate this difference (Skoe, Cumberland,
Eisenberg, Hansen & Perry, 2002). Physiological measures have generally failed to produce consistent sex differences on empathic responding (Skoe et al.). Consistent with this area of research, we found that females report higher levels of concern than males. It was interesting to note that, although expressing greater levels of concern, females did not report lower levels of intolerance for a distressed other. Such a finding may be interpreted as indicating that the higher levels of self-reported concern by females reflect a subjective interpretation bias (perhaps due to cultural gender influences), but females are equally likely to find their emotional arousal aversive.

The Contrast Affect Scale appears to be tapping into an individual’s propensity for cruelty and callousness. Males scored significantly higher on the Contrast Affect Scale than females. This result was consistent with findings of higher levels of aggression and violence in males than females (Blackburn, 1993), and appears congruent with arguments that the use of violence and aggression to dominate others is primarily a masculine trait (Moore & Stuart, 2005). Levels of contrast affect should be further examined in relation to all types of violence, but may prove particularly useful in the area of domestic violence where control issues have been of principal concern (Moore & Stuart).

Low levels of concern for others were associated with higher levels of contrast affect. This appears consistent with the argument that empathic concern and aggression are incompatible responses.

Contrast Affect was not related to Perspective Taking. Indeed, it has been argued that perspective taking may represent a possible criminogenic tool (see Chapter Five). It
appears that, although perspective taking has been positively associated with prosocial behaviour (Oswald, 1996), and is thought to precipitate empathic concern (Batson, 1991), antisocial behaviour is not necessarily negatively associated with perspective taking.

Contrast affect was found to decrease with increasing age. This finding is particularly interesting, given our continued inability to determine specific factors that contribute toward the desistence of antisocial behaviour (Blackburn, 1993). It seems, from this data at least, that a propensity toward callousness and cruelty decreases with age. This finding is also congruent with developmental models of empathy that predict increases in empathic concern during early adulthood (Chase-Lansdale, Wakschlag & Brooks-Gunn, 1995). It may be that for some individuals there is a delayed maturation of empathic responding; however, developmental models predict a reduction in self-oriented distress as ‘true’ empathic concern develops (Davis, 1994) and we found no evidence of a decrease in self-oriented intolerance with age.

The overall amount of variance explained by the predictive models was moderate. Thus, adopting a multidimensional model of interpersonal affective reactions to another’s emotional displays has been shown to be useful in increasing our understanding of this aspect of social behaviour. Further, including Stotland’s (1969) construct of contrasting affective reactions has also been shown to be useful. However, the results also suggest that there are other intervening variables, which have yet to be identified, and which would account for the remaining variance.
The two newly constructed scales, NAIS and CAS, appear to be tapping into unique aspects of interpersonal affective responses. The reliability and validity of the newly created scales require further investigation, although preliminary findings support these assessment tools. Specifically, the ability of the scales to discriminate between known groups that are based on meaningful social behaviour such as violence. Therefore, the next chapter outlines two studies, which investigate the psychometric properties of the scales with offenders as well as investigating known group differences.
Chapter Four

Self-oriented Affective Responses in Violent Offenders
4.1 Overview

Chapter four contains an outline of the results of two studies. The first study used the newly constructed scales from Chapter 3 to assess offenders who had been classified as either violent or non-violent by the Western Australian Department of Justice. The reliabilities of the scales were examined using this sample, along with the scales’ ability to discriminate between the groups. The second study presented used a much larger sample of offenders with varied criminal histories. Once again, the suitability of the new scales for use with offender populations was examined. In addition, offender heterogeneity was investigated via cluster analysis. Given the arguments relating to the importance of remaining cognisant to offender heterogeneity (Howells, Watt, Hall and Baldwin, 1997), it was deemed appropriate to investigate the possibility of several unique empathic response profiles within the offender sample. Once identified, these offender subgroups were compared to a community sample in order to investigate the presence of divergent empathic response patterns (A copy of the scales used are presented in Appendices B and C).
4.2 Pilot Study

Study 1 was conducted to establish the reliability of the self-oriented affective response style questionnaires (Negative Affect Intolerance Scale and Offender Contrast Affect Scale) with offender samples. Two other scales were included, Impulsivity and Neuroticism. It has been argued that impulsivity is one of the most important variables when investigating offender characteristics (Farrington, 2002). Additionally, neuroticism has been described as a form of general negative affectivity (Yik & Russell, 2001), which may help to distinguish between an empathic response deficit and shallow negative affectivity. These additional scales play a larger role in the analysis of the main study (presented in section 4.6) but are included in the pilot study for the sake of consistency.

4.3 Method

4.3.1 Participants

Forty nine incarcerated male offenders participated in the study. Participants ranged in age from 18 to 70 years ($\bar{X} = 30.1$). Offenders had been classified by the Western Australian Department of Justice as either violent ($n = 17$) or non violent ($n = 32$) based on their LOSNI scores (Ward & Dockerill, 1999). Two Western Australian metropolitan prisons were used for data collection, one maximum security ($n = 18$) and one minimum security ($n = 31$). Violence category was independent of prison ($\chi^2(1) = 0.22; p = .64$).
4.3.2 Measures

**Impulsivity**: The Impulsivity subscale of the Karolinska (Schalling, Asberg, Edman & Oreland, 1987) was administered, with higher scores indicating a greater tendency to act impulsively. The scale consisted of 10 items rated on a 4 point Likert scale ranging from ‘Not at all like me’ to ‘Very like me’.

**Negative Affectivity**: The Neuroticism subscale of the Eysenck Personality Questionnaire (EPQ-N; Eysenck & Eysenck, 1964) was used as a measure of general negative affectivity (Tellegen, 1985). The scale consisted of 23 items with a simple yes/no response format.

**Contrast Affect**: The Offender Contrast Affect Scale (OCAS) was used to assess offenders’ experience of enjoyment, arousal and dominance when inflicting harm on others [for example; Causing pain makes me important]. The internal consistency of the scale for non-offenders is $\alpha = .85$ (See Chapter 3). The scale consisted of 12 items and was rated on a six point Likert scale, ranging from 1 (never) to 6 (always), with the possible scores ranging from 12 to 72. Higher scores reflected a greater propensity to experience positive affect in the presence of another in distress.

**Negative Affect Intolerance**: The Negative Affect Intolerance Scale (NAIS) was used to assess the level of intolerance offenders experience in the presence of a distressed other [for example; I hate the sound of people who are upset]. The internal consistency of the scale for non-offenders is $\alpha = .82$ (See Chapter 3). The scale consisted of 12 items rated using a six point Likert scale, ranging from 1 (never) to 6 (always), with possible scores ranging from 12 to 72. Higher scores reflected a greater intolerance of the negative emotional displays of another.
4.3.3 Procedure

Prison superintendents were approached and asked for assistance in questionnaire distribution. Prison staff distributed the questionnaires to offenders who had been classified as either violent or non violent. Sex offenders were excluded from the study. In order to keep offence category private, as the only offenders who did not receive a questionnaire were sex offenders (specifically at the minimum security prison) offenders were told that they were selected on a random basis. Offenders completed the questionnaire in their own time, sealed the questionnaire in the envelope provided and placed it in a sealed box. The boxes were collected from the prison at a later date.

4.4 Results

4.4.1 Scale properties

All scales produced acceptable reliabilities. Impulsivity produced an internal consistency of .69, the Neuroticism internal consistency was .90, Offender Contrast Affect was .86, and the Negative Affect Intolerance Scale’s internal consistency was .70.

4.4.2 Group differences

Differences between offenders who were classified as violent, and those who were classified as non violent were examined on all scales (see Table 1). No significant difference between violent and non violent offenders were found on any of the measures.
Table 4.1 Scale means, standard deviations, and univariate comparisons of offenders classified as either violent or non violent.

<table>
<thead>
<tr>
<th></th>
<th>Impulsivity</th>
<th>Neuroticism</th>
<th>Contrast Affect</th>
<th>Negative Affect Intolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violent</td>
<td>28.38 (3.67)</td>
<td>9.50 (5.53)</td>
<td>22.06 (7.64)</td>
<td>45.88 (10.87)</td>
</tr>
<tr>
<td>Non Violent</td>
<td>26.25 (5.22)</td>
<td>7.52 (6.30)</td>
<td>22.57 (10.75)</td>
<td>48.86 (9.69)</td>
</tr>
<tr>
<td>Univariate</td>
<td>t(39)=1.31;</td>
<td>t(45)=1.06;</td>
<td>t(45)=0.17;</td>
<td>t(43)=0.95;</td>
</tr>
<tr>
<td>Comparison</td>
<td>p=.20</td>
<td>p=.29</td>
<td>p=.86</td>
<td>p=.35</td>
</tr>
</tbody>
</table>

Note: Standard deviations are presented in parentheses.

4.5 Summary

Both of the new self-oriented affective response scales (OCAS and NAIS) produced acceptable reliabilities with the offender samples, as did the Neuroticism scale. No differences were found between offenders classified as violent and those classified as non violent on any of the measures employed. However, these results should be interpreted with two issues in mind.

Firstly, given the consistent argument that violent offenders are a heterogenous population (e.g., Howells, Watt, Hall & Baldwin, 1997) the lack of significant differences are unsurprising and may have resulted from the presence of subgroups within the violent sample. Therefore, the lack of significant differences should not be taken to indicate that empathy is not a variable of importance. Secondly, there is another issue relating to the whether empathy is a variable which is important in relation to violence and aggression, or whether it is related to criminality per se. The pilot study did not make use of a community comparison group, and so it was not possible to establish if both violent and non violent offenders differ from the community in their empathic responses. The following study, however, does introduce a community sample for this purpose. Additionally, rather than relying on
the Department of Justice classification of violent and non violent offenders, which may or may not be accurate, the following study uses measures of criminal versatility
4.6 Interpersonal affective responses and violence: Refining lack of empathy descriptions.³

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Running Head: Interpersonal Affective Responses and Violence

Keywords: Empathy, Violence, Offenders

Abstract

Violent offenders have often been described as lacking empathy. A lack of empathy is thought to indicate a lack of emotional arousal in response to distress cues from victims. This, in turn, is posited to result in a failure to inhibit violent behaviour. However, the alternative hypotheses appear to have been overlooked. The current research investigated patterns of affective responses in offenders. The findings support both lack of affective responding as well as self-oriented emotional responding explanations. Patterns of affective responding also showed an unexpected similarity to category descriptions of psychopathy indicating the need for future research. Treatment implications of the findings are discussed for each of the identified affective response patterns.
Violent offenders are frequently described as lacking empathy, with this apparent lack thought to be a vital link in understanding the aetiology of violent behaviour. Yet, empirical research has failed to establish a consistent association between violent behaviour and empathic reactions. Additionally, texts that address violence often dedicate little more than a paragraph to the topic of empathy. This apparent oversight, however, is most likely due to the confusion that surrounds the topic rather than neglect on the part of authors.

“If I seem confused here in that I only ask questions, it is because I am confused here.” (Andrews, 1995; p51)

Mainstream psychology has attempted to develop definitions and measures of empathy, but most of this research has focused on the theoretical link between empathic responding and prosocial behaviour. Empathy has traditionally been investigated within the boundaries of helping behaviours (e.g., Davis, Mitchell, Hall, Lothert, Snapp, & Meyer, 1999) and altruism (e.g., Batson, O’Quin, Fultz, Vanderplas, & Isen, 1983). The majority of the research regarding the theoretical link between empathy and violence has focused on the aggressive behaviours of children or artificially induced laboratory aggression (Miller & Eisenberg, 1988). There has been little consistent empirical evidence to link a lack of empathy with adult offending.

Despite these difficulties, empathy continues to be a theoretically important construct in relation to violence. For example, Baumeister (1997) proposed that empathy was
the forerunner to guilt. By facilitating feelings of guilt and remorse, Baumeister argued, empathy acts to indirectly inhibit those actions. Most theories accounting for the link between empathy and violence, however, attribute a more direct inhibitory function to empathy (e.g., Feshbach, 1964). In these theories, a callous unemotional response to others in distress has been equated with a lack of empathic arousal. The underlying assumption of this position appears to be that violent offenders do not seem to respond emotionally to the distress cues of another. A lack of empathic concern, however, does not preclude other, distress cue driven, emotional responses. A theoretical structure which includes alternative emotional responses to distress cues, may enable a clearer understanding of the role that affective responses to distress cues play in violent offending.

Howells, Watt, Hall and Baldwin (1997) recommend that interventions for violent and high risk offenders be “grounded in an established and developing theoretical framework” (p. 120). In addition, to be effective, such interventions must address the diverse characteristics and needs of offenders who are a heterogenous population. Current work in relation to empathy and violent offending does not meet either of these requirements. The theoretical framework for establishing links between empathy and violence are unclear, and therefore impedes needs analysis. A useful model of empathic responding and its relation to violent behaviour would facilitate analysis of individual need, and thus effective treatment programs.

**Empathic Responding.**

Historically, empathy has been viewed as either an affective or a cognitive construct, while more recent work has seen most researchers agree that both affective and
cognitive processes underlie a display of empathic responding (for a review see Davis, 1994). This paper, however, presents a relatively restricted focus on the construct of empathy in order to clarify inconsistencies in the literature relating empathy to aggression. The focus of this paper, therefore, is affective empathic responding and its theoretical link to violent behaviour (for a discussion of the cognitive aspect of empathy in relation to violence see Beven, O’Brien-Malone & Hall, In Press). While Brownell, Zerwas and Balaram (2002) argue that “Empathy with other’s distress is but one aspect of this complex socioemotional landscape” (p. 28), it is suggested here that theories relating empathy with violence require a narrow focus on distress cue stimuli only.

Affective empathy is an emotional reaction that results from the emotional displays of another (Stotland, 1969). There has been much debate about whether the emotional reaction must be congruent with the target’s emotional display in order for it to be correctly labelled as empathy (Miller & Eisenberg, 1988). For the purposes of the current research, empathic responses are defined as affective reactions to the distress cues of another, which may include the following responses: empathic concern – the feelings of concern and sympathy felt by an observer in response to the distress cues of another (Davis, 1994), personal distress – an instrumentally self-focused emotional response to the distress of another (Batson, 1990), and contrast affect – affective arousal which is incongruent with the emotional experience of the observed other (Stotland, 1969).
Theories Relating Empathy and Violence

The empathy literature acknowledges more than concern as a possible response to the distress cues of another, therefore, theories which relate a lack of empathic responding to violence assume more than a lack of empathic concern. A lack of empathic responding is an absence of any affective response to the distress cues of another, not just a lack of empathic concern. Several theories have been proposed that view empathic responding as an inhibitor of interpersonal violence and assume a lack of empathic response in individuals who engage in violence.

For example, Blair’s (1995) Violence Inhibition Mechanism model proposes that distress cues activate a basic emotional system that leads to an automatic arousal in the individual and results in the inhibition of violent behaviour. The model predicts that those who engage in violent behaviour will demonstrate either a reduced or absent arousal response to distress cues. Blair (1999) argued that a reduced physiological activation to distress cues was suggestive of a fundamental deficit in the emotion system mediating empathy. Blair, therefore, suggests that a ‘lack of empathy’ in violent offenders equates to a lack of emotional response, not just a lack of empathic concern.

Empathic Dysfunction and Psychopathy

There is evidence to suggest that a lack of affective arousal in response to distress cues is found in both children and adults who have been classified as psychopathic (Blair, 1999). However, Factor I of the PCL-R (Hare, 1996) assesses a lack of empathy, along with callousness and shallow affect. It may be that individuals with high scores on the PCL-R exhibit reduced negative affect rather than an empathic
dysfunction per se. Hale, Goldstein, Abromowitz, Calamari and Kosson (2004) provide support for a lower level of general negative emotionality, which they proposed was indicative of the PCL-R factor I. Therefore, shallow affect, as measured by the PCL-R would be better described as a reduced negative emotionality in light of Hale et al’s results. A reduced capacity for experiencing negative emotions would have implications for empathic responses to distress cues. Offenders who demonstrate constricted negative affectivity may be less likely to experience negative affect in the presence of distress cues, perhaps supporting the Violence Inhibition Mechanism model (Blair, 1995). If this is the case, and descriptions of a lack of empathy in those identified as psychopathic are a manifestation of a more general affective disorder, then it would be expected that low scores of negative affectivity would coincide with low scores on empathic response scales. If however, negative affectivity and empathic dysfunction – whether a lack of response or non-standard levels of distress / contrast empathy – appear independent, then this would indicate a specific role of empathic responding in violent offending.

In terms of measurement, it appears that reduced negative emotionality or restricted negative affect may be inferred by low levels of neuroticism. Yik and Russell (2001) found that those who scored highly on neuroticism were more likely to experience negative affect than those who reported low levels of neuroticism. This finding is consistent with Tellegen (1985) depiction of neuroticism as an indicator of negative emotionality. This affective lability, as indicated by neuroticism, relates to negative affective experiences and appears congruent with Hale et al’s (2004) description of lower general negative affectivity.
It should be highlighted, however, that a lack of empathy has been a descriptor used in relation to both offenders classified as psychopathic and violent offenders in general. Furthermore, theories that specifically attempt to describe the function of empathy in inhibiting violence, have done so in the context of general theories of violence rather than theories of psychopathy (i.e., Feshbach & Feshbach, 1969). Additionally, the item that assesses a lack of empathy in the PCL-R is likely to be confounded with clinical perceptions of the construct of empathy. The item requires clinicians to report based on clinical observation, and because the term empathy is generally though to mean concern for a distressed other, it is possible that clinicians equate a lack of empathic responding with a failure to display empathic concern. This observation, however, does not equate to a lack of empathic responding when that response is expressed in terms of distress or positive arousal.

**Personal Distress**

Personal distress is an affective reaction to the distress cues of another. Unlike empathic concern this affective reaction is not focused on the welfare of the other (Batson, 1990). Instead, the individual focuses on the emotional arousal that they themselves are experiencing. This emotional arousal is experienced as personal distress and is aversive in nature. Like empathic concern, personal distress is theorised to have the capacity to initiate helping behaviours (Hoffman, 1981). However, unlike empathic concern, personal distress is thought to produce a drive to reduce one’s own distress through several possible mechanisms (Batson, 1990). One of these hypothesised mechanisms appears to be relevant to the study of violence and aggression. The aversive-reduction hypothesis posits that empathic distress is unpleasant and that the best way to reduce this unpleasantness is to help the one in
need (Hoffman, 1981). Batson claims that little support for this model has been found in investigations of empathy and altruistic behaviours in general, but does suggest that the model appears valid for individuals whose dominant affective response is personal distress.

When confronted with distress cues, which initiate personal distress in the observer, that observer will be driven to reduce their own aversive affective state. This reduction may be achieved via helping the other, which would eliminate the distress cues and thereby eliminate the experience of personal distress. Alternatively, it has been suggested that, when escape is easily achieved, an individual experiencing personal distress will simply remove themselves from the distress cues (Batson, 1990). When escape is not possible, and helping behaviours are not effective at eliminating distress cues, the individual may experience intolerance for the other’s emotional displays. Alternative reactions may occur in an attempt to alleviate personal distress. One of these reactions may be violence, particularly in individuals who view violence as an acceptable response mechanism.

Partial support for this hypothesis may be found in child abuse literature. Mothers who were at high risk of physically abusing their children reported higher levels of personal distress than mothers who were at low risk (Milner, Halsey & Fultz, 1994). These authors also found that high risk mothers experienced greater distress when viewing a crying infant along with greater increases in hostility than low risk mothers. It may be that an inability to reduce personal distress leads to a general feeling of intolerance of the distress cues of another.
The construct of personal distress is interesting as it has the potential to explain the contribution of negative affective reactions to distress cues to violent behaviours. For example personal distress, as measured by the Interpersonal Reactivity Index, demonstrates a positive relationship with anti-social behaviour and aggression (Davis, 1994). Personal distress is an affective reaction to distress cues, which presents an alternative hypothesis to the ‘lack of empathy’ explanation currently in the literature.

Contrast Affect
An alternative affective response which may result from exposure to distress cues is contrast affect. Early definitions of empathy tended to focus upon an affective matching between observer and target, such as concern when the target is distressed or joy when someone displays joyful emotions. However, Stotland (1969) also put forward another negative aspect of interpersonal reactions, which she termed contrast empathy. Contrast empathy was described by Stotland as an empathic reaction that resulted when the observer experienced an affective reaction that was contrary to that being experienced by the target. For example, feeling positive affect when another is distressed. Slapstick comedy is essentially based on this premise. A more extreme case of contrast affect is sadism, or the experience of positive arousal due to inflicting pain or humiliation on another (Berner, Berger & Hill, 2003). Experts in the field of sadism have failed to agree on the exact nature of the construct. It appears, however, that sadism is distinguishable from the often associated construct of masochism, and that sadism is not wholly confined to sexual gratification. Berner and his colleagues (2003) present evidence suggesting that individuals may display sadistic tendencies that do not involve a sexual component. They further suggest that there may be different forms of sadism with different forms of pleasure derived. More specifically,
Berner et al propose that physiological arousal may represent a form of gratification other than the traditionally recognised sexual arousal. Hassine’s (2003) observed behaviour among predatory inmates appears to support Berner et al’s proposed gratification from physiological arousal. Hassine concluded that some individuals were in effect addicted to the physiological fight or flight response mechanisms.

Contrasting affective interpersonal reactions have received little attention, although they represent a construct that may contribute greatly towards our understanding of interpersonal aggression and violence. Contrast affect is another affective reaction to distress cues, which presents an alternative hypothesis to the ‘lack of empathy’ explanation.

**Refining lack of empathy descriptions.**

A lack of empathic concern in response to another’s distress cues should not be taken to indicate that the observer is not experiencing an affective arousal. Psychological instruments that measure empathic concern are only assessing a subset of the range of emotional responses that an individual may experience in the presence of distress cues, and should not be taken to indicate that the individual does not experience a lack of emotional response in general.

Clinical observations of a lack of empathy may be representative of a variety of aetiologies. Failing to demonstrate concern for another may be the result of a failure to respond to the distress cues of another and may represent a restricted negative affectivity. On the other hand, failure to demonstrate concern is not necessarily indicative of a failure to respond emotionally. It is possible that emotional responses
to distress cues may be interpreted as personal distress by violent offenders. Alternatively, the affective arousal experienced during violent offences may be interpreted as pleasurable and result in contrast affect. Refining descriptions of a lack of empathy requires an examination of both self-oriented affective response styles and negative affectivity in offenders. Three possible hypotheses emerge from such a position:

- Empathic concern inhibits violence: Violent offenders have restricted negative affectivity and fail to experience an emotional arousal to the distress cues of their victims.
- Personal distress facilitates violence: Violent offenders respond to the distress cues of their victims, experience this arousal as an aversive and seek to reduce their own discomfort.
- Contrast affect facilitates violence: Violent offenders respond to the distress cues of their victims, experience this arousal as pleasurable and seek to increase their own gratifying experience.

Three possible affective response styles have been presented and hypothesised to relate to violence and aggression in unique ways. However, given arguments relating to the heterogenous nature of violent offenders as a population (Howells, et al, 1997), rather than favouring any one explanation, it is expected that distinct groups will be identified, which confirm one or more of the above hypotheses.
Method

Participants

One hundred and six, non remand sentenced offenders rated as maximum security, ranging in age from 18 to 53 years ($\bar{X} = 29.75$), participated in the study. The combined 106 participants had a total of 268 offence categories varying in severity. The total number of offence categories for individual participants ranged from 1 to 8, with a mean of 3.17 offences. Of the 106 offenders, 85 produced complete datasets suitable for analysis.

Four hundred and fifty questionnaires were hand delivered to a randomly selected sample of low socio-economic suburbs (based on the 1996 ABS data on SES) within the metropolitan area of Perth, Western Australian, followed up two weeks later by a reminder letter. The covering letter explicitly stated that individuals who had been to prison, or were sentenced to community work orders should not participate. Sixty seven (14.9%) of the questionnaires were completed and returned. However, although it was requested that a male complete the questionnaire, 24 returned questionnaires had been completed by females and were therefore unsuitable for the present study. This resulted in a total of 43 male, low socio-economic status community participants, with a mean age of 41.49 years (SD = 16.33).

Measures

**Impulsivity:** The Impulsivity subscale of the Karolinska (Schalling, Asberg, Edman & Oreland, 1987) was administered, with higher scores indicating a greater tendency to act impulsively. The scale consisted of 10 items rated on a 4 point Likert scale ranging from ‘Not at all like me’ to ‘Very like me’.
Negative Affectivity: The Neuroticism subscale of the Eysenck Personality Questionnaire (EPQ-N; Eysenck & Eysenck, 1964) was used as a measure of general negative affectivity (Tellegen, 1985). The scale consisted of 23 items with a simple yes/no response format.

Contrast Affect: The Offender Contrast Affect Scale (OCAS) was used to assess offenders’ experience of enjoyment, arousal and dominance when inflicting harm on others [for example; Causing pain makes me important]. The internal consistency of the scale for offenders is $\alpha = .86$ (Beven, O’Brien-Malone & Hall, 2003). The scale consisted of 12 items and was rated on a six point Likert scale, ranging from 1 (never) to 6 (always), with the possible scores ranging from 12 to 72. Higher scores reflected a greater propensity to experience positive affect in the presence of another in distress.

Negative Affect Intolerance: The Negative Affect Intolerance Scale (NAIS) was used to assess the level of intolerance offenders experience in the presence of a distressed other [for example; I hate the sound of people who are upset]. The internal consistency of the scale for offenders is $\alpha = .70$ (Beven, O’Brien-Malone & Hall, 2003). The scale consisted of 12 items rated using a six point Likert scale, ranging from 1 (never) to 6 (always), with possible scores ranging from 12 to 72. Higher scores reflected a greater intolerance of the negative emotional displays of another.

Procedure
The complete list of sentenced offenders within a maximum security Western Australian prison was obtained and used to randomly select offenders to be called to the interview area. Offenders were called down in groups of three to eight. This process was continued until 100 participants were obtained (in fact data from 106
participants was collected due to group sizing). A participation rate of 86% was achieved.

Offenders entered the main interview room in groups and were told that the researcher
did not work for the Department of Justice or the Police. Offenders were informed
that the purpose of the study was to examine the suitability of the scales for use in
prisons and that no identifying information would be collected. After agreeing to
participate, offenders were separated into individual interview rooms and completed
the questionnaires on their own. Individual offence histories were collected via prison
records, coded and recorded on the completed questionnaires. In order to protect the
participants’ anonymity, consent forms were kept separately from the questionnaires.

Results

Scale reliabilities and descriptives
The Karolinska Impulsivity subscale produced a less than desirable internal
consistency of $\alpha = .62$, and, the corrected item total correlations indicated several
items that were problematic. Once these items had been removed from the scale the
internal consistency of the remaining items was $\alpha = .72$. The EPQ neuroticism
subscale demonstrated excellent internal consistency ($\alpha = .88$). The OCAS internal
consistency was $\alpha = .83$ and the NAIS produced an internal consistency of $\alpha = .72$.
The mean and standard deviation for each scale, for all offenders and non offenders,
are presented in Table 1.
Table 4.2: Scale means and standard deviations for offenders (n = 106) and for community participants.

<table>
<thead>
<tr>
<th></th>
<th>Impulsivity</th>
<th>Neuroticism</th>
<th>OCAS</th>
<th>NAIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offenders</td>
<td>19.61 (4.53)</td>
<td>10.11 (5.79)</td>
<td>25.03 (9.96)</td>
<td>38.27 (9.69)</td>
</tr>
<tr>
<td>Community</td>
<td>17.12 (4.21)</td>
<td>9.33 (6.09)</td>
<td>21.47 (8.51)</td>
<td>34.02 (7.89)</td>
</tr>
</tbody>
</table>

Note: Standard deviations are presented in parentheses.

The community means were compared to those of the offender participants via single sample t-tests (an adjusted alpha level of .0125, using a Bonferoni correction, was used for multiple comparisons). This procedure eliminated problems associated with unequal cell sizes between the two populations. Offenders did not differ significantly from non offenders on Neuroticism (t(100) = 1.35; p = .179). However, the offender sample was significantly higher in Impulsivity (t(100) = 5.53; p = < .001) and Contrast Affect (t(93) = 3.47; p = .001) than the non offenders. The offenders also scored significantly higher on Negative Affect Intolerance than the non offenders (t(97) = 4.34; p < .001).

Identifying offender subgroups

Ward’s cluster analysis method was used to determine if subgroups existed within the offender sample. Using the four scales, a five cluster solution was indicated by the denogram and was subsequently further explored. Discriminant function analysis was employed to test the reliability of the cluster solution, with the cluster solution correctly classifying 94.3% of offenders. The discriminant function analysis was used to allocate offenders with incomplete data sets to clusters, thereby bringing the cluster

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2 Factor analysis was used to remove any items from the NAIS or OCAS which were problematic.
analysis sample back to the original 106 offenders. Cluster means on Impulsivity, Neuroticism, Contrast Affect and Negative Affect Intolerance were compared to the community means using single sample t-tests as reported above. The Bonferroni adjusted alpha level for these multiple comparisons was .003.

Cluster 1 offenders were significantly higher on impulsivity than the community sample (t(19) = 9.61; p < .001) and demonstrated significantly lower levels of neuroticism (t(19) = 3.81; p = .001). They did not differ from the community in their experience of intolerance for another’s negative affect (t(19) = 0.81; p = .43) nor did they demonstrate a higher level of contrast affect (t(19) = 0.20; p = .84). These
offenders, therefore, could be described as impulsive with a restricted negative affectivity.

Cluster 2 offenders were significantly different from the community on only one of the four variables. This group of offenders demonstrated significantly higher levels of intolerance to another’s negative emotional displays ($t(42) = 5.53; p < .001$). Apart from higher levels of NAIS, there were no other distinguishing features of this cluster. Therefore, Cluster 2 offenders showed little difference from the community apart from being more intolerant of the negative emotional displays of others.

Cluster 3 offenders were significantly younger ($\bar{X} = 23.36$) than the other four clusters ($F(4,83) = 3.71; p = .005$). Tukey’s post-hoc analysis confirmed that the significant difference was between Cluster 3 and the other four clusters. No other clusters differed on age.

This group of offenders were significantly more impulsive than the community sample ($t(14) = 7.45; p < .001$) and demonstrated significantly higher levels of contrast affect ($t(14) = 16.71; p < .001$). They did not differ from the community on NAIS or Neuroticism. These offenders can best be described as being young, impulsive and enjoying the control that violence affords them.

Cluster 4 offenders were significantly lower on contrast affect than the community sample ($t(9) = 10.48; p < .001$) as well as being significantly lower on intolerance for other’s negative emotional displays ($t(9) = 4.94; p = .001$). These offenders did not differ from the community on levels of impulsivity or negative affectivity. This
pattern of results indicated that Cluster 4 offenders responded with very little emotion to the distress cues of others, although they did not report a restricted negative affectivity.

Cluster 5 offenders were significantly higher in negative affectivity than the community sample ($t(9) = 7.59; p < .001$), and were significantly more impulsive ($t(9) = 4.96; p = .001$) than the community. They also experienced significantly higher levels of intolerance to the negative emotional displays of others ($t(9) = 4.81; p = .001$) than the community. There was no difference between this cluster of offenders and the community on contrast affect. Cluster 5 offenders, therefore, may best be described as experiencing a lot of negative affectivity, while being impulsive and intolerant of the negative affectivity of others.

Criminal versatility data was obtained by recording whether or not an offender had been convicted of a particular type of crime during the course of their offending career. A score of 1 was allocated if the offender had committed that particular crime type, and a score of 0 was allocated if they had not. Violent offence categories were summed to derive a violent versatility score, while non-violent offence categories were summed to attain a non-violent versatility score. These scores were then subtracted and the resulting difference score (non-violent minus violent) were used to investigate differences between the clusters on propensity to engage in violent offences and non-violent offences. A Kruskal-Wallis test was then conducted to determine if the offending patterns of the clusters were in fact different. The non-parametric option was prudent given the problems associated with unequal and small cell sizes. The results indicated that there was a significant difference in the offending
patterns of the clusters ($H (4) = 10.11; p = .039$), with the greatest difference score being obtained by cluster 4. Differences in offence type by cluster are presented in Figure 2.

![Figure 4.2: Bar graph showing the mean number of violent and non violent offences types committed by offenders in each cluster.](image)

Discussion

The current investigation sought to clarify descriptions of a lack of empathy among offenders by investigating levels of self oriented affective responses as well as a general lack of negative affectivity. It was proposed that different mechanisms might underlie clinical observations of a ‘lack of empathy’ in violent offenders. Specifically, it was argued that failing to display empathic concern in response to distress cues did
not necessarily preclude other forms of empathic responses. Three possible explanations were offered to account for a relationship between a clinical observation of a ‘lack of empathy’ and violence.

Firstly, it was acknowledged that such an observation could in fact indicate that the offender was not responding emotionally to the distress cues of another. In this case, empathic concern is seen as an inhibitor of violence. Secondly, it was argued that offenders may respond emotionally to the distress cues of another, but that emotion was being experienced as an intolerance to the distress cues as a result of personal distress. In this case a self oriented empathic response to distress cues results in a drive to reduce one’s own aversive state, possibly using violence. Therefore, personal distress has the capacity to facilitate violence. Finally, it was suggested that some offenders may find the arousal they experience in response to distress cues as pleasurable, and that this may relate to the enjoyment of control obtained through violence. As with personal distress, contrast affect is likely to facilitate violence when offenders experience a drive to increase their own enjoyment. No one hypothesis was given preference over the others, rather, an acknowledgement of the heterogeneity of offender populations was used to suggest that all three hypotheses would be confirmed in different subgroups of offenders.

Cluster analysis did confirm the presence of subgroups of offenders and these subgroups displayed unique interpersonal response. Cluster 1 offenders demonstrated a reduced or restricted negative affectivity and were impulsive, but did not demonstrate abnormal levels of self-oriented affective responding. This group of offenders displayed a pattern of responding, which appeared congruent with a reduced
negative affectivity but not the reduced response to distress cue hypothesis. Their levels of personal distress and contrast affect were comparable to the community sample, indicating that they do respond to distress cues. Furthermore, their responses to distress cues were not markedly self-oriented. Hare (1970) suggested three categories of psychopaths. Primary psychopaths were described as impulsive and having flat emotional responses. Much of the research conducted in an attempt to establish a reduced negative affectivity in offenders has focused upon offender categories based upon the PCL-R (e.g., Lilienfeld & Hess, 2001), and appear to relate well to Cluster 1. Cluster 1 displayed high impulsivity (relating to PCL-R Factor II) and low negative emotionality (relating to PCL-R Factor I), which appears consistent with descriptions of primary psychopathy. However, Cluster 1 did not report reactions to distress cues that could be described as callous, nor as a ‘lack of empathy’. Indeed, although they displayed a generally restricted negative affectivity, this restriction was on the basis of their personal responses to life in general rather than in response to another’s distress cues. This finding is consistent with Blackburn’s (1986) Group 1 descriptions of primary psychopathy, characterised by high levels of impulsivity and low levels of negative affective experience.

Cluster 4, on the other hand, could also be identified as supporting the notion of reduced responding to distress cues. Although they did not demonstrate a reduced general negative affectivity, they did demonstrate significantly lower levels of self-oriented emotional responding than the community. This may indicate a reduced susceptibility to negative emotional contagion, although prosocial empathic concern was not assessed. Clearly, they experience less personal distress in the presence of distress cues than the community does. This group of offenders also reported lower
levels of positive emotion in relation to the use of violence than the community. In terms of psychopathy, these offenders reported a response style that appears congruent with the PCL-R’s Factor I, but did not report the high levels of impulsivity that would be consistent with Factor II.

Cluster 4 offenders were convicted of fewer violent offence categories than the other four clusters, along with more non-violent categories. The results of this analysis indicated that there was no presence of a drive for hostile violence in the form of personal distress reduction, nor was there a drive for pleasure. Interestingly, the interpersonal empathic responses for this cluster were the most congruent with the hypothesis of a lack of empathic responses, and yet they clearly committed the least number of violent offence categories. Additionally, upon further examination, none of the violent offences committed by offenders in cluster 4 could be described as major violent offences (i.e., murder, assault occasioning grievous bodily harm) rather they tended to be simple assaults.

Clusters 3 and 5 demonstrated self-oriented affective response patterns in response to distress cues, which suggested that they do respond emotionally to the distress cues of others. It would be possible for offenders in both of these clusters to be described as lacking empathy, in that they display either enjoyment of, or intolerance to, distress cues from others. However, it would be incorrect to suggest that they fail to respond emotionally.

Cluster 3 demonstrated high levels of contrast affect, becoming aroused by the control and dominance aspects of the use of violence. Cluster 3 was significantly younger
than the other clusters, and was the only cluster to display significantly higher levels of contrast affect. These offenders may represent a group of offenders that are similar in description to dissocial psychopaths (Hare, 1970). That is, young offenders who engage in antisocial/aggressive behaviour in the context of subcultures such as gangs.

Cluster 5, on the other hand, would be likely to respond to distress cues with agitation, intolerance and hostility. Descriptions of secondary psychopaths (Hare, 1970) tend to focus on personality attributes of high negative affectivity, as measured by neuroticism. Cluster 5 displayed extremely high levels of neuroticism as well as being impulsive and responding to distress cues with self-oriented affect. Given the similarity between these two descriptions, Cluster 5 may be described in terms similar to those used to describe secondary psychopathy. Cluster 5 is also consistent with Blackburn’s (1986) description of secondary psychopathy, characterised by high levels of impulsivity along with high levels of negative affectivity. Blackburn also identified this group as being socially anxious, which may go some way to explaining the high levels of intolerance found in this study.

Although Cluster 2 differed from the community in their level of intolerance for another’s distress, this was their only distinguishing feature. It should be recognized that affective response styles are likely to be of significance for some but not all offenders. The failure of Cluster 2 to display any apparent similarity to descriptions of psychopathy or personality disordered offenders may confirm the argument that these offenders may best be understood in terms of antisocial attitudes and criminal sentiments rather than in terms of abnormal affective responses. Future research should investigate affective response pattern in relation to other constructs, which
have demonstrated usefulness in distinguishing offenders from non offenders, such as
criminal sentiments. It may be that this group of offenders would benefit more from
treatment programs that concentrate on criminal sentiments and antisocial attitudes
than from programs aimed at affective response patterns.

**Some thoughts on psychopathy descriptions and affective response styles.**
The similarity between many of the above cluster descriptions and descriptions
relating to categories of psychopathy cannot be ignored. Although far from being an
aim of the current research, particularly given the moral connotations often associated
with the construct’s description and measurement (Gunn, 1998), an investigation of
these similarities appeared appropriate. In retrospect, it is hardly surprising that this is
the case given the persistence of ‘lack of empathy’ descriptions in relation to
psychopathy. Cleckley (1976) argued that traits associated with a callous unemotional
response to others were the foundation of psychopathy.

Brinkley, Newman and Widiger (2004) have argued that the construct of psychopathy
represents an aetiologically heterogenous category of offenders and requires
clarification of the underlying mechanisms in order to enhance clinical descriptions
and develop more effective treatment strategies. These authors argue that
subcategories of psychopathy may be clarified through investigations which include
both physiological and personality variables. The current investigation has contributed
toward arguments of varied aetiological mechanisms underlying psychopathy.
Principally, the presence of two clusters (Cluster 1 and Cluster 4) which appear to
represent different aspects of the PCL-R Factor I is an intriguing finding. Future
research would do well to expand the current investigation to include PCL-R, along
with specific criminality measures such as age of first offence, which have demonstrated a consistent ability to discriminate psychopaths from non psychopaths (as defined by PCL-R assessment).

**Reflecting on inconsistent research findings.**

Investigations into the theoretical link between a lack of empathy and violent behaviour have produced inconsistent and often confusing results. For example, Book and Quinsey (2003) found no difference between psychopaths and non psychopaths on empathy or altruism, confirming findings from a meta-analysis that indicated that there was no relationship between altruism and antisocial behaviour (Krueger, Hicks, & McGue, 2001). Despite these types of findings, Kandel and Freed (1989) argue that there is enough evidence to suggest that such a relationship does exist and should be pursued. It has been argued elsewhere (Beven et al, 2004) that at least some of this inconstancy is a result of methodological concerns associated with measurement issues, in addition to the use of heterogenous samples. The use of offender samples compared to non offender samples tests the hypothesis that a lack of empathy and criminality are associated, whereas a comparison of violent, non violent and non offenders more accurately addresses whether a lack of empathy is related to violence. However, in study 1 of the current investigation, violent and non violent offenders did not differ on any of the measures employed. A lack of empathy may well be associated with general criminality rather than a propensity for violence; however, it may well be an artefact of the heterogeneity inherent in offender populations. The current investigation indicates that sample heterogeneity may play a substantial role in investigations of affective interpersonal traits and violence, particularly given the varied mechanisms which explain clinical observations of a lack of empathy.
Implications for the treatment of offenders.

Cluster 2 indicates that not all offenders who engage in violent behaviour are likely to benefit from treatment programs that include empathy training. For these offenders, other factors are likely to be of greater concern (e.g., criminal sentiments). Cluster 1’s demonstration of shallow affect was partially congruent with current theories of the relationship between a lack of empathy and violence. However, the results from this cluster did not provide an indication for traditional empathy training programs. Both these groups of offenders demonstrated affective responses to distress cues that were consistent with those obtained from the community, calling into question the usefulness of empathy training. The results obtained from the other three clusters, however, present a more troubling picture in relation to empathy training.

Self-oriented affective responses pose a different dilemma for treatment providers. For offenders in clusters 3, 4, and 5, empathy training programs, which seek to increase responses of offenders to distress cues, are likely to be counterproductive, if not risky. Cohen and Strayer (1996) hypothesised that personal distress could become so great that it results in a completely egocentric response to another’s distress. This egocentric response would result in personal needs (to reduce an aversive affective state) that outweigh the other’s needs. Violent responses to distress cues would represent one egocentric response, and may be used as a means of eliminating distress cues. Furthermore, Newhill and Mulvey (2002) suggest that violence may also serve to regulate intense emotions. Offenders who display excessive levels of self-oriented responding (Cluster 5), in the form of intolerance to distress cues, may benefit from treatment options that focus on emotion regulation and serve to undermine the
reinforcement of violence by reducing negative affect. In some ways, the production of uncontrolled personal distress may be similar to uncontrolled anger. Future research should be conducted to establish if violent offenders who display high levels of intolerance to distress cues benefit from treatment programs similar to those currently in use for anger control.

Affective arousal in response to distress cues, particularly in relation to perceived control and dominance, may prove difficult to treat. However, previous research into contrast affect indicates that this variable decreases with age (Beven et al, 2004), perhaps explaining why Cluster 3 offenders, who had elevated OCAS scores relative to the community, were significantly younger. It may also indicate that offenders in Cluster 3 may be more likely to be desisters than offenders in the other four clusters. On the other hand, it may also be that this group of offenders maintain their high levels of impulsivity and over time move into one of the other clusters.

Concluding comments.

Inciardi (1990) comments on offender treatment programs by stating that, “Everything is working and everything is failing” (p. 613). That is, while there are effective treatment programs available, we seem to have difficulty in establishing which offenders to assign to which programs. In relation to empathy, this difficulty in assigning offenders to appropriate programs may be associated with a lack of theoretical clarity on the role that empathic responding plays in the production and inhibition of violence. Three distinct patterns of affective responses were proposed in the current research, each with a unique aetiological process in relation to violence. Traditionally, empathic responding has been associated with concern for another in
distress and believed to inhibit violence. Personal distress on the other hand, is a self oriented affective response to distress cues that is aversive and leads to a drive to reduce one’s own aversive state. Therefore, it was proposed that personal distress facilitates the use of violence. Contrast affect is also a self oriented affective response to distress cues, however, the individual experiences the arousal as pleasurable. Contrast affect, therefore, facilitates the use of violence.

The presence of subgroups within the offender population, who exhibit unique patterns of interpersonal affective responses, makes treatment program allocation even more complex. The consequences of incorrect treatment program allocation, however, cannot be understated. For offenders who experience high levels of personal distress, or intolerance of distress cues, empathy training programs that attempt to increase the offender’s susceptibility to distress cues will only increase their aversive affective reactions. If violence is used as a mechanism for eliminating distress cues, and hence personal distress, then empathy training programs may simply increase violent responses to distress cues. On the other hand, if offenders find distress cues in others pleasurable, either in terms of physiological arousal or via control/dominance, then programs which heighten their awareness of those cues, may simply increase their ability to gain pleasure through violence. The major limitation of the present study was the failure to collect data pertaining to both the category of offence as well as the frequency of offences within those categories. Serious investigation of the impact different empathic response patterns have on both the inhibition and facilitation of violence should be conducted to determine which response patterns are likely to benefit from traditional empathy training programs and which patterns of responding require alternative programs.
Finally, while making some progress toward understanding subgroups within an offender population, the current results need to be taken with caution as a result of the low response rate from the community.
Chapter Five

Theoretical importance and measurement of perspective taking in violent offenders.
5.1 Overview

The focus of this thesis has been on the affective component of empathy and it’s relationship to violent behaviour. An investigation into egoistic affective responses in Chapter 4 indicated that the quality of perspective taking might contribute toward egoistic distress. Perspective taking appears to have been generally dealt with as a fairly simplistic unidimensional construct, even though previous literature (see Batson, Early & Salvarani, 1997) indicates that this is not the case. This chapter, therefore, attempts to expand our understanding of perspective taking, and it’s relationship with aggression. A two dimensional model of perspective taking is presented and its implications for offender treatment explored.
5.2 The frequency and accuracy of offenders’ perspective taking: Are we measuring the right thing?\(^4\)

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Abstract

The link between violent behaviour and empathy has traditionally centred on affective constructs. More recently, however, researchers have begun to address deficits in cognitive aspects of empathy, specifically perspective taking. Current studies tend to focus upon the frequency of perspective taking behaviour, giving little or no attention to issues of accuracy, even though the literature regarding offender attributional biases indicates that accuracy is of equal, if not greater, importance than frequency. This paper presents a brief review of the perspective taking literature as it relates to violent offenders and proposes the adoption of a two dimensional model of perspective taking that accommodates both frequency and accuracy.
Empathy and aggression have traditionally been viewed as incompatible (Baron, 1983), with empathy often being investigated as a possible inhibitor of aggressive behaviour. This theoretical inverse relationship between empathy and aggression is, however, more complicated than may be obvious from the above statement. A recap of the original theory, as proposed by Feshbach (1964), may help to clarify the situation.

Feshbach (1964) theorised that empathy represented one possible inhibitor of aggressive behaviour, and that the relationship would be dependent upon the type of empathic deficit and the type of aggression being displayed. In a series of studies, Feshbach and colleagues investigated the impact that empathy and fantasy training had on children’s aggressive behaviour (e.g., Feshbach, 1964; Feshbach & Feshbach, 1982). Feshbach and Feshbach proposed that empathy was a shared affective experience between two individuals and that it was dependent upon three components. Firstly, the observer needed to be able to identify that the other person was experiencing an emotion and the observer also needed to identify the type of emotion being experienced by the other. Additionally, the observer needed to perceive the situation from the perspective of the other, and finally this perspective taking needed to lead to affective arousal in the observer. This model attempted to explain, not so much the resulting empathic experience, but how empathic experiences arose. By focusing upon the factors necessary for the production of empathy, Feshbach’s team provided a means of designing and implementing treatment programs. Furthermore, Feshbach and Feshbach provided an analysis of three types of aggression and theorised what effects this three component system of empathy would have upon each
type. The three types of aggression posited by Feshbach and Feshbach were: emotional aggression, instrumental aggression, and hostile aggression.

Emotional aggression, according to Feshbach and Feshbach (1982), is associated with feelings such as frustration and anger. They argued that, although anger can occur without physical attack, it frequently leads to aggressive behaviour. Empathy should impact upon displays of emotional aggression, not by impacting on the aggressive behaviour itself, but by influencing the antecedents of anger. Individuals who are able to accurately take the perspective of the other would be less likely to misinterpret, and more likely to understand, the actions of others. Therefore, perspective taking (the cognitive component of empathy) would facilitate more effective communication and result in less frequent manifestations of anger.

When aggression is instrumental, Feshbach and Feshbach (1982) argued, the aggression is directed toward the attainment of goals such as money or power. In instrumental aggression, empathy would lead the aggressor to experience negative affective responses in reaction to observing their victim in distress and pain. This would lead to the aggressor desisting due to the unpleasant experience associated with the affective component of empathy.

The mechanism that underlies the relationship between empathy and hostile aggression, where the goal is to inflict pain on another, was thought to be the similar to that for instrumental aggression (Feshbach & Feshbach, 1982), although the authors warned that hostile aggression is complicated to treat and must involve more than just alternatives to aggression. They further suggested that hostile aggression
can be sadistic in nature and may be due to perspective taking occurring in the absence of an appropriate affective response.

More recently, however, Leith and Baumeister (1998) have argued that a review of the literature indicates that affective and cognitive components of empathy are not equally beneficial in terms of inhibiting aggression. Leith and Baumeister argued that perspective taking appeared to be the more influential in promoting prosocial interpersonal interactions. Indeed, there is some evidence that perspective taking has a major role to play in enhancing interpersonal interaction, increasing prosocial behaviour, and decreasing aggression (Batson, 1991). For example, Oswald (1996) found that individuals who engaged in perspective taking produced significantly more helping behaviours. Additionally, a greater tendency to engage in perspective taking has been found to be consistently associated with higher levels of social functioning (Davis, 1983).

Unfortunately though, much of the research seems to have simplified the relationship between aggression and empathy. Feshbach and Feshbach’s (1982) analysis of the impact of empathy on aggressive behaviour was dependent upon the type of aggression being displayed. The argument that empathy produces behaviours that are incompatible with aggression and that it is difficult to inflict harm on someone while experiencing feelings of concern for their welfare at the same time appears to be primarily relevant to instrumental aggression.

Inconsistencies within the area have already begun to emerge, as is apparent with much of the research investigating individual empathic differences. To some extent,
these inconsistencies may be attributed to the complexity of empathy constructs, the use of a variety of measures, and researchers’ misunderstandings of what those instruments actually assess. A discussion regarding the operationalisation of perspective taking may help to clarify some of these issues.

**Defining and measuring perspective taking**

Davis (1994) asserts, in his review of empathy assessment methods, that the measurement of perspective taking has been developed and refined to a greater level in children’s assessment than has been achieved in the assessment of adults. The assessment of cognitive empathy in adults has developed quite differently from the way it is assessed in children. Davis argues that this has occurred primarily due to the greater verbal skill and insight of adults which have made self-report questionnaires a suitable measurement option for them, even though they are not suitable for children.

Perspective taking in the literature relating to children has been conceptualised as perceptual, cognitive or affective perspective taking (Krebs & Russell, 1981). Davis (1994) asserts that the three domains are differentiated by the content of the perspective taking, with perceptual perspective taking being concerned with the child’s ability to understand how objects appear from another’s physical viewpoint, affective perspective taking being concerned with the acknowledgment of another’s emotional experience, and cognitive perspective taking being concerned with the understanding of another’s thoughts and intentions. This distinction has not been addressed in the assessment of perspective taking in adults; rather, Davis points out that affective and cognitive perspective taking have been combined into one construct often referred to as social perspective taking. Perceptual perspective taking
demonstrates little variation in adults (Oswald, 1996), presumably because perceptual egocentrism is extinguished through natural cognitive development, and therefore tends not to be assessed in adult populations.

Although it would be desirable to distinguish between cognitive and affective perspective taking in adults, there does not appear to be any available test. The following comments, therefore, are directed toward social perspective taking.

Apart from the failure of adult measures of perspective taking to differentiate between cognitive and affective aspects, Davis (1994) also warned that the measures in use do not differentiate between the process of perspective taking and the non-affective outcomes of that perspective taking activity. That is, perspective taking instruments have tended to confound the frequency of perspective taking by an individual with whether that perspective taking is accurate. This was of primary importance to Davis (1980) when he constructed his own scale for assessing empathic constructs, including perspective taking.

The Interpersonal Reactivity Index (IRI; Davis, 1994) is the most frequently used test for the assessment of empathy in offenders, and has been recommended as an assessment tool for offenders by Polaschek and Reynolds (2001). Many researchers appear to be interpreting the scores derived from this instrument as an indication of the offender’s ability to perspective take, however, as Davis points out, the instrument is an indication of an individual’s tendency to engage in perspective taking. The Perspective Taking subscale of the IRI provides a measure of an individual’s frequency of perspective taking, but it does not provide an indication of an
individual’s accuracy in perspective taking. The interpretation of the IRI perspective taking scores is sometimes erroneous. For example, Corcoran and Mallinckrodt (2000) investigated the mediating influence of perspective taking (as measured by the IRI) on the relationship between an individual’s attachment style and their conflict resolution style. Perspective taking did have a mediating effect, particularly between the belief that relationships are secondary and engaging in a dominating conflict style. The authors interpreted this to indicate that it was the perspective taking ability of the participant that held the key, however, the scale measures the frequency of perspective taking not accuracy (although both are likely to be aspects of general perspective taking ability). Therefore, when an individual views relationships as secondary they may simply be less likely to make any attempt to understand the perspective of the other but that does not necessarily indicate that they are unable to accurately perspective take, they may simply choose not to. Consequently, there appear to be two issues relating to perspective taking that need to be addressed in efforts to understand the relationship between empathy and aggression, and to utilise that understanding to inhibit aggressive behaviour. Firstly, do individuals who are prone to violence engage in perspective taking less frequently than individuals who do not engage in violence? And secondly, are individuals who are prone to violence as equally capable of accurate perspective taking as individuals who do not engage in violence?

**Perspective taking frequency and aggression**

There is evidence that supports the notion of a relationship between perspective taking frequency and aggression. Richardson, Green and Largo (1998) demonstrated a clear relationship between the frequency of perspective taking and aggressiveness in
response to provocation, although this relationship was moderated by gender and interpersonal context. Engaging in perspective taking appeared to have a greater inhibitory effect on aggressiveness for females. Additionally, high frequency perspective taking participants responded less aggressively when the offensiveness of the provocation was increasing rather than when the offensiveness was decreasing. In another study, higher levels of perspective taking frequency were associated with lower levels of indirect aggression, verbal aggression, irritability and assault (Richardson, Hammock, Smith, Gardner & Signo, 1994). Both these studies, however, used undergraduate student samples rather than offender groups.

Unfortunately, establishing a relationship between aggression and perspective taking frequency within the general adult population does not necessarily imply that violent offenders engage in perspective taking less frequently than non-violent offenders, or even non-offenders. In order to establish if there is a deficit in perspective taking frequency associated with aggressive behaviour in criminal, relative to general populations, it is necessary to assess both general and offender populations. Furthermore, in order to differentiate between violent and non-violent offenders and establish if perspective taking is associated with aggression specifically, or whether it is endemic to criminal populations in general, violent and non-violent criminal populations must be investigated.

Studies in which offenders have been assessed using the IRI Perspective Taking subscale have yielded mixed results, possibly due to the use of heterogenous offender groups. For example, Bush, Mullis and Mullis (2000) found that offender youths failed to show a significant difference from non-offender youths (aged 12 – 18) on
perspective taking frequency, however, these researchers do not report the offence types of the offender group. It should be reiterated that a failure to find an effect in some studies where specific offence type has not been reported, and presumably not considered as a variable, is likely to be a result of mixed subject characteristics. To illustrate the point, offenders who have been identified as bullying other inmates, and therefore demonstrate aggressiveness within the prison system, demonstrate significantly lower levels of perspective taking frequency than inmates who are victims of bullying (Ireland, 1999). All participants in this study were incarcerated offenders, but by comparing those who were engaging in aggressive behaviour with those who were not, it demonstrated a relationship between perspective taking frequency and aggression in offender samples. Unfortunately though, no use was made of a non-offender group. A finding of no significant difference between non aggressive offenders and non offenders would have excluded the possibility of a relationship between perspective taking frequency and criminality per se. This distinction is essential if perspective taking is to be used in violent offender treatment programs as an effective means of reducing violent recidivism.

Levels of perspective taking frequency have most commonly been evaluated in offenders who have committed sexual offences. These studies have yielded conflicting and sometimes surprising results. Smallbone, Wheaton and Hourigan (2003) found no difference between rapists, and intrafamilial and extrafamilial paedophiles in their levels of perspective taking frequency as measured by the IRI. However, in other studies perspective taking frequency (IRI) did significantly discriminate between paedophiles and rapists, with paedophiles demonstrating higher perspective taking frequency than rapists (Pithers, 1994; Pithers, 1999).
Unfortunately, none of these studies used non offender samples for comparison. When a non offender comparison group was used, paedophiles did not demonstrate any significant difference on the IRI Perspective Taking subscale from the non-offenders (Fisher, Beech & Browne, 1999). At first glance, it seems counterintuitive that paedophiles demonstrate the same frequency of perspective taking as non offenders, however, there may be differences in the accuracy of that perspective taking activity.

**Perspective taking accuracy and aggression**

The accuracy of offender perspective taking has been largely ignored in the literature, which has tended to focus upon offenders’ levels of perspective taking frequency. Unlike the general adult population, however, offenders appear to have a reduced capacity to accurately perceive a situation from another’s point of view (Short & Simeonsson, 1986). Furthermore, offender perspective taking may be particularly vulnerable to cognitive distortions and biases, adding support to the assertion that it is possible for an individual’s cognitions about an event to evoke anger and aggression, even though the event itself may be quite innocuous (Feshbach, 1997). These deficits in perspective taking accuracy may be unsystematic or alternatively there may be a systematic bias, such as attribution of hostile intent.

Dill, Anderson, Anderson and Deuser (1997) tested the assumption that aggressive individuals expect and perceive greater levels of hostility in ambiguous social events. The results from their study indicated that higher levels of aggression were associated with an increasingly hostile attribution bias, and that this bias was present even when individuals were not personally involved in the social exchanges. These authors
argued that a hostile perceptual bias was a general schema used by aggressive individuals to understand social interchanges. Once again, though, the sample comprised non-offenders. Copllo and Tata (1990) used offenders and identified a tendency for violent offenders to interpret ambiguous information as threatening.

It may be possible, therefore, for offenders to engage in frequent perspective taking, but for that perspective taking activity to be inaccurate, and in fact to contribute to an aggressive reaction by the offender due to a hostile perceptual bias. Furthermore, Novaco and Welsh (1989) argue that the more an individual is exposed to violence the more likely they are to perceive violence, suggesting that offenders who have had substantial exposure to violence will display more attributional biases than offenders with a limited history with aggression and violence.

In offender populations, therefore, it appears inadequate to merely assess the frequency of perspective taking when deficits in the accuracy of that perspective taking activity may contribute toward violence.

Polaschek and Reynolds (2001) warn that several information-processing biases are related to aggression and recommend that violent offenders be assessed for these. However, they also highlight that there are few measures available. Primarily the assessment has been dependent upon the use of vignettes.

Prior to the development of the IRI the Hogan Empathy Scale (Hogan, 1969) was the most commonly used measure of cognitive empathy. Davis (1994) has suggested that rather than being a measure of the frequency of perspective taking, the Hogan
empathy scale provides an indication of the outcome of perspective taking, and may therefore indicate the level of accuracy. Rice, Chaplin, Harris and Coutts (1994) used the Hogan Empathy Scale to assess differences between rapists and non-rapists and found that rapists produced significantly lower scores than the non-offender group, suggesting lower levels of perspective taking accuracy. Although taken as a measure of empathy by the authors, the findings may actually indicate reduced accuracy in the rapist sample and would leave open the possibility that they may engage in perspective taking as often.

Lisak and Ivan (1995) investigated perspective taking accuracy using the Affect Facial Recognition task. Their findings indicated that men who were sexually aggressive were less accurate in identifying facial expressions than were non-aggressive men. Although this was expected to occur in relation to female faces the results demonstrated that the deficit was specific to male faces only. It is perplexing that the deficit was not present when identifying the facial expressions of females given the nature of the offenders’ aggression, but it does provide tentative support for the notion of perspective taking deficits in aggressive individuals. It may be that female facial expressions are more animated and less ambiguous than male expressions. Whatever the explanation, their results certainly indicate the complexity of interpersonal emotion recognition.

Critically, the assessment of violent offenders’ perspective taking needs to include both frequency and accuracy. This would provide a precise picture of the deficits present in violent offenders in general, as well as allowing for the examination of specific patterns of perspective taking deficits in particular violent offender
such subgroups. Such patterns of perspective taking deficits would have relevance for clinical interventions targeting offenders.

A two dimensional approach to perspective taking

It appears that research that assesses the frequency of offenders’ perspective taking and fails to assess accuracy is incapable of discerning specific perspective taking deficiencies and so providing a comprehensive assessment of treatment needs and effects. Figure 1 presents the proposed model of perspective taking, which takes into account both accuracy and frequency.

Offenders who are positioned in bottom left quadrant will demonstrate low levels of perspective taking frequency as well as low levels of accuracy in perspective taking. Treatment providers who only assess perspective taking frequency (regardless of whether they address accuracy in their program) will be unable to establish if, post
treatment, the offender has moved to high frequency, high accuracy; or whether they are now positioned in the quadrant described as high frequency, low accuracy. Offenders who have high perspective taking frequency but low levels of accuracy may be at higher risk of violence due to an increased occurrence of perceptual biases.

Treatment providers who assess offenders’ accuracy, without consideration of frequency, will be unable to establish if, post treatment, the same offender has moved to high frequency, high accuracy; or whether they display high levels of perspective taking accuracy but engage in perspective taking activity infrequently. Infrequent use of perspective taking will essentially render treatment ineffective. For example, Sessa (1996) attempted to utilise perspective taking as a mediating variable in the conflict experienced by nursing teams. Teams were trained in perspective taking but the perspective taking training did not produce a decrease in conflict. However, the teams’ perspective taking scores on the IRI did demonstrate a significant relationship, with higher perspective taking being related to lower levels of person-oriented conflict. The author concluded that perspective taking was an important variable in mediating conflict, but suggested that the teams’ inability to implement the perspective taking training may have been responsible for the lack of effect found. It may be that the training was effective, but only those who had a tendency to engage in perspective taking in the first place were likely to utilise their new found perspective taking accuracy gained through training. The only way to establish if offender treatment programs result in accurate and frequent perspective taking is to assess both these aspects pre and post treatment.
The top right quadrant represents individuals who both frequently engage in perspective taking and show a high level of accuracy in perspective taking. It appears intuitively reasonable that this represents a pattern of perspective taking that is most conducive to prosocial interpersonal interactions; however, it should be noted that even this pattern of perspective taking might contribute to aggressive and violent behaviour in certain circumstances. Feshbach and Feshbach (1982) warn that perspective taking without an appropriate affective component may underlie sadistic or hostile aggression. Thus, accurate, frequent perspective taking may represent a criminogenic tool when the object of aggression is another’s harm. Offenders who have a tendency to engage in hostile aggression, where the sole intent is to inflict harm on another, may in fact ‘benefit’ from perspective taking training when it enables them to more accurately perceive that their aggression is producing the desired effects. This is consistent with Feshbach and Feshbach’s assertion that the influence of empathy on aggression depends to some extent upon the type and purpose of that aggression. Thus, the selection of the appropriate intervention must take into account the specific patterns of perspective taking deficits and their relationship with the offender’s history of violence.

**Concluding thoughts**

Consistent results demonstrating a deficit in perspective taking in violent offenders and those prone to aggression have proved elusive; however, this may be due in part to difficulties regarding the exact nature of perspective taking and the nature of perspective taking measures. Additionally, the use of heterogeneous samples, such as those which consist of offenders with mixed offence histories, further cloud research in this field. This is because the relationship between aspects of empathy (such as
perspective taking) and violence may be being diluted by the presence of non-violent offender participants.

Understanding the relationship between perspective taking and aggression would be better pursued if research differentiated between perspective taking frequency and the accuracy of that perspective taking. Specific patterns of perspective taking deficits could then be identified, allowing researchers to investigate their contribution toward, or interaction with, perceptual biases such as an attribution of hostile intent.

Identifying specific patterns of perspective taking may also go some way toward understanding the inconsistencies apparent in the literature. Future research should use a combined approach (frequency and accuracy) to establish if specific subgroups of offenders have particular perspective taking deficits. A failure to find a deficit in perspective taking frequency in some offender groups does not rule out the possibility of a deficit in perspective taking accuracy, and visa versa. For example, accuracy may be an area of need for certain subgroups of sex offenders who fail to show frequency deficits.

An approach that assesses both perspective taking accuracy and frequency may also help to explain why increases in perspective taking frequency do not necessarily lead to an inhibition of aggressive tendencies. As Blackburn (1993) highlights, “while failure to develop role-taking skills may impede socialisation, their acquisition does not guarantee socialised behaviour” (p. 204). This line of reasoning is also supported by Davis’ (1994) review on the relationship between perspective taking and aggression, in which he concludes that “the association between dispositional
perspective taking and aggressive responding is a complex one, subject to the influence of other factors” (p. 167). Those factors may include the presence of attributional biases and the accuracy of perspective taking. Additionally, perspective taking should be assessed in conjunction with measures of affective components of empathy (such as empathic concern), as these may be essential for a complete picture of the criminogenic needs of a particular offender. It would appear that the inhibition of aggression would best be facilitated through the adoption of a model of empathic responding that encompasses frequent and accurate perception of others, and results in an appropriate affective response in the observer. Deficits in any of these areas may be associated with increased risk of aggression in at least some individuals and the most beneficial treatment options are likely to be those that assess and specifically address all three.
Chapter Six

Empathy and Aggression
6.1 Overview

The purpose of this thesis was to re-evaluate and extend both the research and the theory regarding the relationship between empathy and human aggression and violence. This re-evaluation was conducted on several levels. Firstly, definitional concerns in the area were addressed and a broad definition of empathy was adopted. Secondly, current psychometric instruments for the assessment of empathy were evaluated for use with offender populations. The result of this analysis, along with a broadening of the definition of empathy, was the development of a set of new measurement instruments specifically designed for use with offenders. These instruments were analysed using a convenience sample to establish item homogeneity and scale validity, before conducting a pilot study to evaluate the scales’ reliabilities with an offender sample. The concluding empirical study investigated different empathic response profiles. Finally, a theoretical discussion was presented which probed the issues related to perspective taking. This chapter will provide a brief summary of the major findings of this thesis, along with an integrated discussion and suggestions for future research and treatment options.
6.2 Empathy and Aggression – A Really Brief Recap

Throughout this thesis it has been argued that the relationship between empathy and aggression is a complex one, which depends upon three issues, which are central to understanding the inconsistencies found in the literature;

- Multiple definitions of empathy exist within the literature, along with a restrictive view of the affective component of empathy,
- The original theory proposed by Feshbach (1964) focused upon the goal or form of aggression, while subsequent investigation have failed to account for this aspect, and
- Violent offenders have been treated as a homogenous group despite arguments relating to their heterogeneity (Howells, Watt, Hall, & Baldwin, 1997).

Each of these issues, therefore, will be briefly explored as they relate to the current work before a more in-depth examination of the implications of this thesis.

6.2.1 Empathy: What it is and what it is not!

There is little doubt that definitional concerns regarding empathy have occupied researchers and theorists alike for decades. It is also likely that this debate will continue, and that there will be a proportion of the scientific community who will disagree with the definition adopted in the current work. However, what is important is that research
clearly and accurately state the definition of empathy which has been adopted to allow literature to be adequately compared and contrasted.

Throughout the current work, empathy has been defined as “an observer’s reacting emotionally because he perceives that another is experiencing or is about to experience an emotion” (Stotland, 1969; p. 272). This definition acknowledges both the affective (reacting emotionally) and the cognitive (perceives) aspects of empathy. Furthermore, there was no caveat that the observer’s emotional reaction had to be congruent with the targets, and there was no caveat that the observer had to interpret their own emotional state as concern for the target. As a result, this definition of empathy included:

- **Empathic Concern** – where the observer experiences feelings of concern and sympathy in response to another’s distress cues,
- **Personal Distress** – where the observer experiences self oriented feelings of distress, intolerance, and/or hostility in response to another’s distress cues, and
- **Contrast Affect** – where the observer experiences self oriented feelings of positive arousal in response to another’s distress cues.

Therefore, while some researchers have argued what empathy is not (i.e., Eisenberg 2002) the current work adopts an inclusive definition of empathy, outlining instead what empathy includes.
6.2.2 Empathy and Aggression? Well, it depends …

The original premise that empathy would play a role in understanding aggression can be attributed to Feshbach (1964) who theorised that an empathic response was one possible inhibitor of aggressive behaviour. Although this aspect of Feshbach’s theory has been widely investigated in a variety of populations (i.e., children – Feshbach & Feshbach, 1969; toddlers – Gill & Calkins, 2003; juveniles – Kaukianinen, et al, 1999; juvenile offenders – Bush, et al, 2000; adults – Ohbuchi, et al, 1992; and adult offenders – Ireland, 1999), much of the research has failed to take into account the subtleties of Feshbach’s theory.

Feshbach (1964) stated quite clearly that the role of empathy in human aggression would depend upon the type of empathic deficit as well as the type of aggression. In terms of empathic deficits, Feshbach argued that empathic responses required accurate perspective taking, along with an appropriate affective response. In relation to aggression, Feshbach & Feshbach (1982) argued that different forms of aggression had different goals and that these goals would dictate whether empathy would function as an effective inhibitor. That is, for emotional or reactive aggression, perspective taking inhibits the precursor the anger by facilitating more effective communication and understanding of the actions of others. In terms of instrumental aggression, empathy would lead to the experience of negative affective arousal associated with the aggression and would lead to the aggressor desisting to avoid the aversive affective experience. Finally, hostile aggression represents one form of aggression that may not be inhibited by empathic responses.
Since the object of hostile aggression is to inflict harm and empathic responses may serve to inform the aggressor of the success of their actions.

The current work sought to clarify the first premise of Feshbach’s (1964) theory. That is the type of empathic deficit or dysfunction. Specifically, Feshbach argued that there had to be an appropriate empathic response to inhibit aggression. This work attempted to identify responses that would be inappropriate and in addition further work investigating a lack of empathic response. The second premise of Feshbach’s theory would require a re-evaluation of the forms of aggression, particularly in light of the difficulty in identifying aggression, which is uniquely instrumental or hostile (Bushman & Anderson, 2001). The theoretical relationship between empathy and aggression may be further advanced by work that investigates alternative forms of aggression, however, this was beyond the scope of the current thesis.

6.2.3 Clear as Mud: The impact of offender heterogeneity.

An additional issue that appears to have impacted upon the clarity of research findings is that of offender heterogeneity. There is evidence that offender populations are inherently heterogenous rather than homogenous, and that this presents difficulties in applying treatment programs (Howells, et al, 1997). It has been further argued in this work that the heterogenous nature of offender populations, even those based on offence category, present substantial difficulties for researchers. Therefore, while literature relating to a specific hypothesised relationship (such as that between empathy and aggression) may be
inconsistent, that inconsistency may be due to sampling issues rather than evidence that
the hypothesised relationship does not exist. That is, the relationship between variables
may exist in one or more subgroups within a heterogenous sample but is inconsistently
identified over the whole of the sample.

6.2.4 Section Summary.

These then are the three bases upon which the current work was built. That is, in order to
examine the relationship between empathy and aggression, one must clarify definitional
issues, consider a multidimensional relationship between the constructs and consider the
possibility that different dimensions of that relationship exists within different subgroups
of the target population.

The results of the current work support this position. Specifically, a broad definition of
empathy was adopted that incorporated more than one response style (concern, distress &
enjoyment) to the distress cues of another. Cluster analysis was performed to evaluate
the presence of one or more of these response styles in a sample of violent offenders,
which indicated that all three response styles were present. The remainder of this
chapter, therefore, recaps those response styles and explores both the theoretical and
applied implications.
6.3 A Multidimensional Perspective on the Relationship between 

Empathy and Aggression.

6.3.1 Empathy as an Inhibitor

Meta-analytic analysis has provided only modest support for the view that empathic responses act as an inhibitor of aggressive behaviour (Miller & Eisenberg, 1988), which is hardly surprising given the inconsistencies in the literature. These inconsistencies, however, appear to be less likely to indicate a lack of evidence for the theory than they are a result of sampling issues. This proposition is supported by the finding of the present work. That is, for a subgroup of violent offenders, there was evidence to suggest that they do lack interpersonal affective responses. They appeared to be unmoved by the distress cues of others, and reported affective responses which were lower than those of the community. What remains unresolved is why these offenders do not experience an affective response to another’s distress cues. Several possibilities exist, each of which will be explored in the following subsections.

6.3.1.1 Failure to Perceive Emotional Cues

One possible explanation for a lack of empathic responses is that this subgroup of individuals fails to perceive distress cues altogether. This proposition would certainly be consistent with Feshbach and Feshbach’s (1982) first step in the process of empathic responding. According to Feshbach and Feshbach, the first step in empathic responding
is a cognitive task, to identify and discriminate the feelings being experienced by the
other person. Therefore, in order to produce an empathic response to the distress cues of
other, individuals need to first of all realise that the other person is in fact distressed.

There is evidence that some offenders lack the capacity to distinguish facial expressions
(Lisak & Ivan, 1995), suggesting that it is the identification of distress cues which may be
deficit. However, a failure to discriminate between emotional states on facial expressions
does not necessarily mean that offenders are unaware that the target is experiencing an
emotion, rather it is the nature of the emotion which poses the problem. Even evidence
which suggests that offenders fail to produce normal physiological arousal to distress
cues (Blair, 1999) does not provide evidence that they are unaware that the target is
experiencing an emotion.

Alternatively, rather than being unable to determine that the other person is experiencing
an emotional state, it may be that violent offenders actively engage in perspective taking
less frequently. Therefore, it may not be a deficit in their ability to perceive an emotional
state; it may be that they do not choose to perceive that emotional state. As Bandura
constraints…” (p. 25).

6.3.1.2 Cognitive Distortions in Perceiving Emotional Cues.

Findings which show a deficit in discriminating emotional states from facial cues (Lisak
& Ivan, 1995) do, however, indicate that there may be a problem in the accuracy of
offenders’ perspective taking. That is, these offenders do not report an emotional response to distress cues because they do not perceive the other as experiencing distress. There is sufficient evidence to suggest a cognitive-processing bias in violent and/or aggressive individuals (i.e., Novaco & Welsh, 1989), however, it appears unlikely that this would entirely explain the current findings.

If offenders were to inaccurately perceive another’s emotional state, it does not necessarily imply that they will not respond with some form of affect. Only a limited range of affective responses were assessed in the current work, so it may be possible that a cognitive distortion in the perceptions of emotional states leads to some other affective response. Depending upon the level of distortion, the ensuing affective response may be quite unexpected or counter-intuitive. Therefore, rather than concluding that these offenders do not experience an affective response to distress cues, it may be more accurate to say they don’t experience the affective responses assessed here.

One of the strengths of the current work was the inclusion of a broader range of affective responses than in previous research. For example, euphoric responses were included to distress cues. It remains, therefore, entirely possible that this subgroup of offenders actually do not experience an affective response. It is also possible that this lack of response is not due to either a failure to perceive another’s emotional state, or a distortion in that perception.
6.3.1.3 Failure to Experience an Affective Response.

It may be that the cognitive aspects of empathy function correctly in these violent offenders, and that, although they perceive another’s emotional state accurately they simply do not experience an affective response.

Blairy, Herrera and Hess (1999) argue that an important basis of affective responses to other emotional states is non-verbal mimicry. That is, it is not sufficient to simply perceive the emotional state of another in order to experience affective arousal. The observer needs to engage in non-verbal mimicry of the other’s emotional cues such as facial expressions. This mimicry then produced a corresponding affective state in the observer. It is possible, therefore, that these offenders engage in accurate perspective taking but fail to engage in non-verbal mimicry. It would be beneficial to explore this possibility in future research as a means of determining the aetiology of a lack of affective response. Determining the specific cause of an empathic deficit would greatly benefit the design and implementation of treatment programs.

6.3.1.4 Treatment Issues.

Treatment of violent offenders in regards to non attitudinal factors has proven difficult. As Quinsey, Harris, Rice and Cormier (1998; p. 220) note, “…it is unclear at present how to make some of the nonattitudinal ones change. For example, how is it possible to increase an offender’s empathy or decrease an offender’s superficiality?” Interestingly, it may be that factors such as empathy have an underlying attitudinal structure and that this
should be the focus of treatment. In relation to the current discussion, a lack of empathic responding could be attributed to attitudes related to the value of others. It may be that violent offenders engage in perspective taking only when they perceive the other as being of value to themselves. This would be consistent with Batson et al’s (1995) assertion that empathy not only plays an information function (people learn they value the other as a result of the empathic response), but is also governed by an individual’s belief that they value the other. This then would be one mechanism which may prove fruitful for intervention, specifically if the empathic deficit is due to a failure to perceive emotional cues as a result of a failure to engage in perspective taking.

On the other hand, if a lack of empathic response is due to a cognitive distortion in that perception, then treatment should focus on the accuracy of perspective taking. Programs such as the Social Perspective Taking program (Chalmers, & Townsend, 1990) show post-test gains in both perspective taking accuracy and ensuing empathic responding. However, it should be remembered that one of the problems with treating perspective taking accuracy, without due consideration to perspective taking frequency, is that individuals may not use the skills they have gained (Sessa, 1996).

A failure to experience an affective empathic response, despite actively engaging in accurate perspective taking poses a very different treatment dilemma. The focus of treatment here should be on the transition from cognitive aspects of empathy to appropriate affective arousal. For example, if Blairy et al (1999) are correct regarding the importance of non-verbal mimicry in producing appropriate affective arousal, and it is
demonstrated that violent offenders fail to engage in non-verbal mimicry to distress cues, then this would provide for a clear intervention goal. Future research needs to assess this possibility, but should also investigate whether non-verbal mimicry can be effectively taught. This area of research should proceed with caution, and should pay careful attention to offenders’ ability to regulate that affective arousal. A failure to do this may mean that, rather than exhibiting optimal empathic arousal, offenders move from this subgroup into the subgroup which displayed high levels of personal distress. It should also be remembered that this group of offenders were more likely to engage in non-violent offences than violent offences. Therefore, the empathic response pattern of this group of offenders does not appear to be the most problematic in regards to aggressive and violent behaviour.

6.3.2 Empathy as a Facilitator: Distress Reactions.

Some offenders demonstrated an emotional response to distress cues which was consistent with the literature describing personal distress. That is, they found the distress of others distressing to themselves and responded with hostility and intolerance. Therefore, rather than being an inhibitor of aggression, empathic arousal may function as a facilitator of aggression in these individuals. The arousal they experience in response to distress cues is aversive and produces a drive to reduce that arousal. If they are unable to reduce empathic arousal via self-regulation then it is possible that they may respond with violence. This would be more likely in individuals who have a propensity to use violence and/or see violence as an acceptable strategy. This argument is consistent with
findings which indicate offenders experience emotion during the course of an offence which “may be more strongly bi-polar than the usual range of emotions” (Canter, & Ioannou, 2004; p. 80). Canter and Ioannou’s results indicate that the most common emotional experience during a violent offence is distress.

6.3.2.1 Failure to Regulate Affective Responses.

For this subgroup of offenders, a lack of empathic responding is not the issue. Rather it appears to be an inability to regulate their empathic responses. Cohen and Stayer (1996) have argued that empathic arousal can reach an intensity level that leads to the individual refocusing their attention on their own welfare rather than the distress other. In addition preliminary investigation into distress reactions produced results indicating that the dispositional tendency to experience higher levels of affect intensity added significantly to the prediction of intolerance to another’s distress (see Chapter 3). The contention that high levels of personal distress in offenders is due to a failure to regulate affect is also consistent with Bandura’s (2002) assertion of the importance of emotion regulation to empathic arousal. Bandura states that those who fail to regulate their empathic arousal “fall victim to emotional burnout” (p. 25).

There is considerable evidence to attest to the functionality of affect regulation. For example, susceptibility to emotional contagion accounted for a large proportion of variance in the prediction of emotional exhaustion in nursing staff (Omdahl & O’Donnell, 1999). Linehan (1993) identified three vulnerability factors in individuals who experienced emotional dysregulation; high sensitivity to emotional stimuli, high
reactivity to emotional stimuli, and a difficulty in returning to an emotional baseline state. Furthermore, Linehan identified environmental factors associated with the development of emotional dysregulation which bare a striking similarity to the variables associated with the development of criminality, such as inappropriate punishment techniques, a lack of attention and unresponsive parenting.

6.3.2.2 Treatment Issues.

For individuals who experience high levels of personal distress, and their arousal has the capacity to facilitate aggression, empathy training programs pose a serious risk. Empathy training programs which seek to enhance an individual’s sensitivity to distress cues will simply increase aversive affective responses in susceptible individuals. As Hanson (1997) points out, there is a common assumption that intense levels of distress will inhibit reoffending. The results of the current work clearly undermine that assumption. Additionally, there is evidence illustrating a link between the intensity of the distress reactions and victim blaming (Thornton, 1984), as well as levels of hostility (Milner et al, 1994).

Therefore, empathy training programs should be provided to violent offenders with caution and only after ascertaining the exact nature of their dispositional empathic responses. Rather than engaging in treatment programs which seek to increase the individuals’ sensitivity to distress cues and facilitate sympathetic responses, offenders with high levels of personal distress would benefit from emotion regulation training. Hanson (1997) argued that sympathetic responses were likely to occur only when the
individual was aware of the other’s distress cues and was able to cope with their own affective response.

Fruzzetti, Shenk, Mosco, & Lowry (2003) claim that the Dialectical Behavior Therapy (DBT) designed by Linehan (1993) is the most direct and comprehensive program available. Additionally, they supply empirical evidence to illustrate its effectiveness with a variety of clinical populations, including those with aggressive and violent behaviours. Programs such as DBT should prove useful for offenders with excessive levels of empathic arousal, while such programs may already be part of current offender treatment strategies, the program should be specifically adapted to include interpersonal affective responses. Maintaining current empathy training programs for these individuals may simply increase their vulnerability to use violence in distressing situations.

6.3.3 Empathy as a Facilitator: Euphoric Reactions.

A third subgroup of offenders produced a pattern of empathic responding which was significantly different from the general community. Specifically, these individuals reported feeling in control and enjoying the dominance which resulted from the use of violence. The distress cues from the victim appear to provide positive feedback to the offenders in this regard. Alternatively, it may be that Hassine (2003) is correct and it is the biochemical reactions associated with violence that produces a euphoric state. In that case, the distress cues of the victim serve to produce an affective arousal and presumably contribute toward biochemical production. This group of offenders would then come to
associate the use of violence with a euphoric state and this would produce a drive to engage in violence. The question, of course, is how distress cues could produce a positive affective state when intuitively it should produce an aversive one.

6.3.3.1 Cognitive Distortions

Cognition plays an important role in affective responses, since it is the cognitive appraisal of cues which provide for the elicitation of specific emotions (Lazarus, 1991). Alternatively, cognition is also thought to be essential in providing a label for arousal, both of which are needed in order for an emotion to occur (Schachter & Singer, 1962). Either theory of the involvement of cognition in emotion provides for an explanation of contrasting affective responses to distress cues.

Lazarus’s (1991) model relies upon the motivations and expectations that an individual brings to any given situation to determine the emotional experience. The offenders in the current work who exhibited contrasting affect were younger than the other offenders in addition to being impulsive. As mentioned in Chapter 4, this group of offenders bare a striking resemblance to descriptions of dissocial psychopaths. Hare, (1970) describes these individuals as young offenders engaging in antisocial and aggressive behaviours with their peers. Gang behaviour is likely to bring with it a set of motivations and expectations in relation to the use of violence, which are substantially different from the norm. These differing motivations and expectations may account for the production of substantially different emotional responses to the distress cues of others.
Alternatively, if cognition is playing a role in labelling the affective arousal produced by distress cues (Schachter & Singer, 1962), then the label being attached to that arousal may be the issue. Cornelius (1996) describes a classic case of misattribution, where high arousal levels are attributed to passion during intense situations. Rather than attributing high arousal levels to passion, it may be that these offenders are attributing their empathic arousal to excitement or a similarly euphoric emotional state.

 Either way, the evidence does not suggest a lack of affective arousal in response to the distress cues of others. Rather, it suggests that these offenders do response emotionally to distress cues, but that response is counterintuitive and would be observable as a lack of concern or callousness.

6.3.3.2 Desistance and Callousness

Farrall and Bowling (1999; p. 254) describe the development of a theory of desistance as “not a criminological luxury” and clearly outline such a theory’s role in the reduction of recidivism. Despite the importance of developing an understanding of the factors that influence desistance, that understanding remains tentative. However, as Farrall and Bowling point out, research has implicated several variables such as the formation of significant relationships. These authors also suggest that the relationship between life event variables and desistance is unlikely to be due to simple cause and effect. The result of West’s (1982, cited in Farrall & Bowling) analysis of marriage indicates that it is the quality of relationships formed which is important for desistance.
This discussion may help shed some light on the current work’s finding of a decrease in contrast affect with age. It is possible that the formation of good quality significant relationships influences a decline in egocentric empathic responses. This may explain why the particular subgroup of offenders, who exhibited contrasting affect, were significantly younger than the other subgroups of offenders. Alternatively, it may simply be that these offenders are delayed in their empathic development and that over time they develop a less callous empathic response style. This would seem to be inconsistent with Hare’s (1996) assertion that the callous/unemotional response style associated with psychopathy remains stable over the lifespan. It should be remembered, however, that the offenders in the current work were more indicative of dyssocial psychopathy rather than Hare’s description of primary psychopathy.

Given the importance of peer associations with dyssocial psychopathy, it is also possible that these offenders experience a change in peer associations over time. Although new peer associations may remain criminogenic, it may be that the initial support for the use of violence declines and thereby no longer maintain the euphoric state associated with victim distress cues.

### 6.3.3.3 Treatment Issues

The most pressing concern in regards to treatment is the possible impact of current empathy training programs, and specifically the use of perspective taking training for these young offenders. Feshbach and Feshbach (1982) explicitly warn that individuals who engage in hostile aggression would be complicated to treat. These authors express
concerns over violent individuals who engage in perspective taking in the absence of an appropriate affective response which results in aggression of a sadistic nature. Treatment programs which seek to increase the perspective taking frequency and/or accuracy of violent offenders may, under these circumstances, be increasing the positive feedback the offender obtains from the victims distress cues and therefore increasing their euphoric state. A failure to take account of the nature of affective responses violent offenders experience in response to distress cues, in light of the current work, appears to be a counterproductive and dangerous practice.

While the discussion of what not to do with this group of offenders is fairly straightforward, determining what to do with them is not. Much more work needs to be done to determine an appropriate treatment option for these offenders. One avenue may be to explore the role of motivation and expectation in relation to their affective responses. Another avenue may be to determine the causes of decline of contrast affect with age and manipulate those causes to accelerate that decline. The issue remains, however, as to what empathic response pattern these offenders have once there is a decline in contrast affect. Do they continue to experience self-focused empathic responses to distress cues, and therefore become similar to those offenders who experience high levels of personal distress? This seems reasonable given that they also reported a slightly higher level of intolerance. As their enjoyment decreases they may become more likely to feel irritated and hostile in response to distress cues. Therefore, emotion regulation may prove to be a benefit to these offenders.
6.3.4 Empathy: It’s Not Always Relevant!

The above discussion deals with the empathic response patterns of 33% of the offenders included in the current work. That leaves 67% of offender, for who empathic response is unlikely to be a factor in their violent behaviour. It is clear, from the current work, that empathy is not a factor in all cases of violence. Therefore, empathy cannot be said to play a role in general theories of aggression and violence, rather it appears to be a factor in specific subgroups of offenders. The major weakness of the current study was the lack of data pertaining to the specific circumstances of the violent offences. This data would have permitted an investigation of Feshbach and Feshbach’s (1982) claim that empathy would display a different relationship with violence depending on the category of that violence. This was not the specific aim of the current work, rather it was aimed at investigating Feshbach and Feshbach’s descriptions of the appropriateness of the affective arousal. It remains to be determined if the different empathic response patterns exhibited in the current work are related to different categories of offences. On the surface, this appears plausible but will require further investigation.

What can be concluded from the current work is that empathy is not always relevant. It is a variable that should not be a standard inclusion in violent offender treatment programs – it is a variable that should be included only after specific needs analysis. Other criminogenic predictors which have demonstrated a consistent ability to predict recidivism, such as criminal sentiments (Andrews, & Wormith, 1984), are more likely to be of benefit for the remaining offenders.
6.4 Future Directions

6.4.1 Theory and Research in Empathy and Violence.

Several questions have been raised as a result of the current body of work, and rather than resolving the issues surrounding a theoretical link between empathy and aggression it points to the need for more research to be conducted. Past research, however, has been focused upon finding a general lack of empathic response in individuals who engage in aggressive and/or violent behaviour. Future research needs to be cognisant of the multidimensional nature of this relationship and investigate specific patterns of empathic responses which were present in offender subgroups in the current work. Therefore, like the current work, future research needs to maintain a broad definition of empathy, needs to be open to the possibility of both intuitive and counterintuitive theoretical links between empathy and aggression, as well as including analysis designed to deal with offender heterogeneity.

In addition to research which would further our understanding of the relationship between empathic response patterns and empathy, research programs designed to identify the aetiology of these patterns is also required. Several possible explanations for the observed empathic responses of offenders have been posed through the course of this discussion. Future research should investigate;
• The perspective taking frequency and accuracy of offenders who fail to exhibit an empathic response.

• Whether a lack of empathic response is a result of a lack of non-verbal mimicry rather than a lack of perspective taking, and if absent, whether non-verbal mimicry can be effectively trained.

• The form and direction of the relationship between empathy and values.

• Whether emotion regulation training effectively decreases offenders’ levels of personal distress, and whether this leads to an increase in other oriented concern.

• The motivation and expectation differences between different empathic response patterns to the use of violence, and specifically in relation to contrast affect.

• The underlying causes of a decline in contrast affect with age, and whether this provides a suitable treatment option for these offenders.

This level of refined analysis will not only enhance our understanding of this area from a theoretical perspective, but will also provide for the design of effective, needs focused intervention programs. It should also be highlighted that the current work is in relation to the dispositional empathic response patterns of offenders in general. It has not included a discussion of victim specific empathy. Victim specific empathy may well pose entirely different treatment dilemmas; therefore, the nature of the difference between dispositional empathy and victim specific empathy would be well worth investigating.
6.4.2 Empathy Training and Offender Treatment Programs.

It has been stated previously, but will be reiterated again here. Standard offender treatment programs which include empathy training should not be employed without adequate needs analysis. The findings of the current body of work illustrates quite clearly that this practice may be counterproductive for some offenders. In cases where there is evidence to suggest that empathy plays a role in facilitating aggressive and violent behaviour, empathy training may simply serve to increase the likelihood of violent recidivism. Furthermore, it appears that for the majority of offenders, empathy is unlikely to be associated with their criminality.

Traditional empathy training techniques may be adequate for those offenders who fail to experience an affective response to distress cues. The purpose of these training programs is to increase the likelihood that an empathic response will be experienced (i.e., Hanson, 1997), but should also include affect regulation training to enable offenders to deal effectively with empathic responses. Otherwise, empathy training may simply move offenders from the no response category to the personal distress and intolerance category of empathic responding.

Unregulated empathic arousal is experienced by individuals as aversive, and individuals seek to reduce this aversive arousal. In individuals who are not likely to resort to the use of violence this aversive arousal may lead to helping behaviour or an attempt to remove themselves from the distressed other (Batson, 1990). Individuals who normalise the use
of violence, and who find themselves in a position which is not conducive to escape are more likely to resort to the use of violence to alleviate their own distress. Traditional empathy training programs should not be implemented with these individuals; rather affect regulation training should be used instead.

Offenders who experience contrast affect in response to distress cues may prove difficult for treatment providers to adequately deal with. They should not, however, be subjected to empathy training programs which may increase their arousal levels or provide them with additional tools to better perceive the effects of their aggression and violence.

6.4.3 What about Psychopathy?

It was certainly not the aim of the current work to pursue an investigation of psychopathy; rather it was an investigation of the relationship between empathy and aggression in general. Although it was acknowledged that the current work may be relevant to psychopathy, it was only in relation to the callous/unemotional trait. A trait which had not consistently been shown to be related to violent recidivism (Walters, 2003), nor did it impact upon the effectiveness of treatment outcomes (Skeem, Monahan, & Mulvey, 2002). It was therefore decided to pursue the more general theory posed by Feshbach (1962), while remaining mindful of the possible implication that this work may have for psychopathy.
An unexpected outcome of the current work was a set of empathic response profiles which bore several similarities to descriptions of psychopathy. Specifically, one subgroup of offenders were younger than the other subgroups and demonstrated a response profile which suggested that they were similar to descriptions of dyssocial psychopaths (Hare, 1970). In addition, another subgroup of offenders appeared to match several descriptions of secondary psychopaths (i.e., Blackburn, 1986). Although finding subgroups of offenders who are similar in description to these categories of psychopathy was interesting, the more interesting finding related to what Hare calls primary psychopaths.

One subgroup of offenders displayed high levels of impulsivity (consistent with the PCL-R Factor II) and low levels of negative affectivity (consistent with the PCL-R Factor I), but did not demonstrate a lack of empathic responding to distress cues. Therefore, they appeared to display characteristics described as primary psychopathy on one level but refute the description on another. Alternatively, another subgroup demonstrated the low levels of empathic responding associated with primary psychopathy but did not show high levels of impulsivity or low levels of negative affectivity. This indicated that general negative affectivity was independent of interpersonal affective responses. That is, negative affectivity describes a dispositional tendency to experience negative affect in one’s life but this was unrelated to experiencing negative affect in relation to interpersonal exchanges. It may simply be that Brinkely et al (2004) are correct, and the arguments relating to the heterogeneity of violent offenders are equally relevant to discussions of psychopathy.
In the very least, the presence of different empathic response patterns in violent offenders should encourage those working within the field of psychopathy to rethink the exact meaning of “a lack of empathy”. All three patterns of empathic responses found in the current work could be interpreted as being a lack of empathy, when empathy is narrowly defined in terms of concern. Only one of which actually indicated a failure to respond affectively. This finding supports Kroner, Forth, and Mills’s (2004) argument that psychopathy is not associated with a lack of negative affect, “it is how negative affect is processed” (p. 421).

### 6.5 Conclusions

The current body of work sought to identify different empathic response patterns in offenders, which were significantly different from those expressed by the general community, and which may contribute toward their violent behaviour. Three response patterns were proposed to represent possibly important empathic responses in elation to the production of aggression and violence. These response patterns were identified in subgroups of offenders, and their theoretical and practical importance was explored.

No direct test of aggression or violence facilitation as a result of these empathic response patterns was tested, and therefore, future research should be conducted to advance this new perspective on the importance of empathy. The findings did, however, go some way to explain the apparent inconsistencies in the body of literature relating to this issue.
Should future research be conducted it must focus on adult offender populations, as there appears to be a substantial lack of research using these populations. Furthermore, it is suggested that research using offender populations take into account their heterogeneity and the impact that this has upon results.

Finally, it appears dubious to continue to administer treatment programs to offenders on the basis of research that is conducted on non-offenders, primarily children and university students and which may act to increase violence in some offenders.
References


Short, R.J., & Simeonsson, R.J., (1986). Social cognition and aggression in delinquent adolescent males. *Adolescence, 21*(81), 159 - 176


Appendix A  Emotional Response Inventory

(Containing OCAS and NAIS items).
**Emotional Response Inventory**

Instructions: Below are some statements. Please indicate on the scale how much like YOU these statements are. There are no right or wrong answers; it’s about how YOU feel. Record your answer by circling the appropriate number.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I enjoy making people upset.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>When people whinge I feel like telling them to shut up.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>I feel upset if I hurt someone.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>I feel on edge when I hear someone crying.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>I feel in control when I’m hurting someone.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>I am patient with people when they are emotional.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>I feel good when I cause pain.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>I get angry when other people are angry.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>I enjoy causing pain.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>I feel irritated when someone is frightened.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11</td>
<td>I feel upset when I cause someone pain.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>12</td>
<td>Listening to someone moan and carry on makes me angry.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>13</td>
<td>I feel bad when I hurt someone.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>14</td>
<td>I feel calm around people who are frightened.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15</td>
<td>The only time I feel good is when I am cruel.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>16</td>
<td>I try to avoid people who are really upset.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>17</td>
<td>Causing pain makes me important.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>18</td>
<td>Gutless people make me sick.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>19</td>
<td>I feel really low when I upset someone.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>20</td>
<td>I want to get away when people are upset.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>21</td>
<td>I enjoy seeing someone else in pain.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>22</td>
<td>I hate the sound of people who are upset.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>23</td>
<td>Hurting someone makes me feel uncomfortable.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>24</td>
<td>I feel comfortable spending time with people who are sad.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>25</td>
<td>Frightened people make me angry.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>26</td>
<td>I tend to stay calm when people are upset.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>27</td>
<td>I get really tense when someone around me is frightened.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>28</td>
<td>Sad people make me angry.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
Appendix B  Negative Affect Intolerance Scale
Negative Affect Intolerance Scale

When people whinge I feel like telling them to shut up
I am patient with people when they are emotional (R)
I get angry when other people are angry
I feel irritated when someone is frightened
Listening to someone moan and carry on makes me angry
I try to avoid people who are really upset
Gutless people make me sick
I want to get away when people are upset
I hate the sound of people who are upset
I feel comfortable spending time with people who are sad (R)
Frightened people make me angry
I get really tense when someone around me is frightened
Sad people make me angry

Note: (R) denotes reversed items.
Appendix C Offender Contrast Affect Scale
Offender Contrast Affect Scale

I enjoy making someone upset
I feel in control when I’m hurting someone
I feel good when I cause pain
I enjoy causing pain
The only time I feel good is when I’m cruel
Causing pain makes me important
I enjoy seeing someone else in pain
I feel upset if I hurt someone (R)
I feel upset when I cause someone pain (R)
I feel bad when I hurt someone (R)
I feel really low when I upset someone (R)
Hurting someone makes me feel uncomfortable (R)

Note: (R) denotes reversed items.
Appendix D  Demographic Questionnaire
Demographic Questionnaire

Could you please indicate;

Your Age: _____________________ Yrs

Are you male? Yes ☐ No ☐

Are you Aboriginal or Torres Strait Islander? Yes ☐ No ☐

What is the highest level of education you have completed?

Primary School ☐
Year 8 ☐
Year 9 ☐
Year 10 ☐
Year 11 ☐
Year 12 ☐
TAFE ☐
University ☐

Other ____________________________

What is your postcode? _______________________________
Appendix E  Community Questionnaire Cover Pages
Individual Differences in Emotional Responses

Confidential Research Survey

This research project looks at the types of emotional responses that different groups of people have. Many of the questions that appear in this questionnaire are used overseas, but we don’t know how West Australians respond to them.

This survey will contribute to our understanding of human emotions.
My name is Jaimie Beven and I am doing a Ph.D. at Murdoch University. The purpose of the study is to investigate the ways in which different people respond to the emotions of other people.

You can help in this study by consenting to complete this questionnaire. It would be greatly appreciated if a male, over 18 years old, could complete the questionnaire. The time this will take can vary; however, it should not take more than around 15 to 20 minutes. Your participation is voluntary. You have not been asked to sign a consent form. This is to ensure that your responses remain anonymous. By completing and returning this questionnaire, you have indicated your consent to participate.

Several different groups of people will be completing this questionnaire. One of those groups is offenders who are currently in prison. It is very important that the groups of respondents are different from each other, so

Please do not participate in this study if you have been in prison or have been/are sentenced to a community order (e.g. ISO, CSO, suspended).

If you are willing to participate in this study, could you please answer all the questions and return this questionnaire in the pre-paid envelope. If you have any concerns or questions regarding this study, please feel free to contact me on 9360 6734, or my supervisors; Angela O’Brien-Malone (9360 2290) and Guy Hall (9360 6033). Or you may wish to contact the Murdoch University Research Ethics Office on 9360 6677.

Thankyou for your time

_____________________________________________________________________

Jaimie Beven

Please note: This questionnaire uses both sides of the page.
Appendix F  Chapter Four Participant’s Offence

Characteristic
Number of offences in each category of offence committed by participating offenders (n = 106).

<table>
<thead>
<tr>
<th>Murder</th>
<th>Unlawful Killing</th>
<th>Grievous Bodily Harm</th>
<th>Assault Bodily Harm</th>
<th>Serious Assault</th>
<th>Assault</th>
<th>Sexual Assault</th>
<th>Attempted Murder</th>
<th>Kidnapping Deprivation of liberty</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1</td>
<td>6</td>
<td>14</td>
<td>3</td>
<td>19</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Unlawful Wounding</td>
<td>Possession of Weapon</td>
<td>Armed Robbery</td>
<td>Robbery</td>
<td>Aggravated Burglary</td>
<td>Burglary</td>
<td>Stealing with violence</td>
<td>Stealing</td>
<td>Break and Enter</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td>15</td>
<td>4</td>
<td>24</td>
<td>26</td>
<td>4</td>
<td>38</td>
<td>7</td>
</tr>
<tr>
<td>Threatening words</td>
<td>Cultivation of drugs</td>
<td>Possession with intent to sell</td>
<td>Possession of drugs</td>
<td>Motor vehicle theft</td>
<td>Driving causing death</td>
<td>Driving causing bodily harm</td>
<td>Dangerous driving</td>
<td>Attempt to pervert justice</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>17</td>
<td>13</td>
<td>31</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
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</tbody>
</table>