Men's regulation of anger and individual differences in empathy to children.

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UMI
MEN’S REGULATION OF ANGER AND INDIVIDUAL DIFFERENCES
IN EMPATHY TO CHILDREN

by Brian H. Keith

A Thesis
Submitted to the Faculty of Graduate Studies and Research
Through the Department of Psychology in Partial
Fulfillment of the Requirements for the
Degree of Master of Arts at the
University of Windsor

Windsor, Ontario, Canada
2001

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Abstract

The present study explored the styles and strategies men use to regulate their negative emotion and anger, as well as the relation between men's use of emotion regulation (ER) and their dispositional empathy. A sample of 120 male undergraduates imagined themselves as the father of a six-year-old child, specified as either a son or daughter. They rated the extent to which they would regulate anger toward their child, both by rating 14 general ER strategies (e.g., avoidance, positive reevaluating, giving up, hiding feelings, expressing feelings elsewhere), and by responding to two specific parenting vignettes. In addition, participants completed questionnaires assessing their ER style for negative emotion and anger (Emotion Control Questionnaire, Roger & Najarian, 1989; Anger Expression Scale, Spielberger, Reheiser, & Solomon, 1988) and their dispositional empathy (Interpersonal Reactivity Index; Davis, 1983). The results were for the most part consistent with predictions. Participants with higher dispositional empathy typically used a controlling ER style for both negative emotion and anger more frequently than did lower empathy men. Men higher in perspective taking — the cognitive component of empathy — found it easier to use antecedent-focused ER strategies when angry. In contrast, individual differences in men's empathy were not related to their use of response-focused ER strategies or a suppressive ER style. For child gender, men reported regulating their anger more and with greater ease, and expressing their anger less, in response to a hypothetical daughter than to a hypothetical son. There was no evidence to support the hypothesis that this anger regulation disparity between child genders was lessened by men's differences in dispositional empathy (i.e., no interaction).
Overall, although participants in the present study were not actual fathers, the findings represent an important step in better understanding fathers’ regulation of their negative emotions toward their children. Specifically, the present findings suggest that dispositional empathy is associated with ER styles and strategies which contribute to the effective regulation of negative emotion and anger in parent-child conflicts, all of which are important ingredients in competent parenting.
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“There is growing evidence that fundamental ethical stances in life stem from underlying emotional capacities. For one, impulse is the medium of emotion; the seed of all impulse is a feeling bursting to express itself in action. Those who are at the mercy of impulse - who lack self-control - suffer a moral deficiency: The ability to control impulse is the base of will and character. By the same token, the root of altruism lies in empathy, the ability to read emotions in others; lacking a sense of another’s need or despair, there is no caring. And if there are any two moral stances that our times call for; they are precisely these, self-restraint and compassion.”

- Daniel Goleman, Emotional Intelligence (1995; p. xii)

“Anyone can become angry – that is easy, but to be angry with the right person at the right time, and for the right purpose and in the right way – that is not within everyone’s power and that is not easy.”

- Aristotle

“It is a wise father who knows his own child.”

- William Shakespeare, Merchant of Venice
INTRODUCTION

Raising a child is an inherently emotional experience. Most interactions between parents and their children are affect-laden to some degree. Past studies have found that young children and stay-at-home parents engage in conflicting interactions from 3.5 to 15 times per hour, and that parents report having 2.5 times more positive emotions than negative emotions with their children (Dunn & Munn, 1985; Lee & Bates, 1985). The overall quality of parent-child emotional interactions has been widely shown to be a vital ingredient in healthy developmental outcomes such as early parent-child bonding, social and emotional competence, and cognitive development (Denham, 1998; Dix, 1991; Eisenberg & Fabes, 1995). Children whose parents are emotionally responsive have been found to develop more secure attachments with these parents, are more cooperative with adults in general (Maccoby & Martin, 1983), are more attentive and engaging in social situations (Baumrind, 1989), and develop better cognitively (Ainsworth, 1979). In addition, there is strong evidence that early close and secure family relationships are associated with high levels of emotional responsiveness to perceived emotion in others, both for older children and for adults (Davis, 1994; Dix 1991; Gottman, 1997). This emotional responsiveness is commonly referred to as dispositional empathy.

Relatively little is known about the specific role that parents’ emotions play in parent-child interactions. More research is needed on the types of emotions that parents experience, when and how they occur, as well as their short- and long-term consequences for the parent-child relationship and child outcomes (Denham, 1998; Dix, 1991, 1992). In particular, more research is needed on the factors that influence emotion regulation
with children (Dix, 1991; Underwood, 1997).

The present study explored how parents’ emotional responses to children are influenced by dispositional empathy. This research was specifically intended to address the lack of information about emotional regulation in fathers. The three central objectives of the present study were: (a) to explore the strategies fathers use to regulate or modify their anger when responding to a son or daughter; (b) to assess whether individual differences in dispositional empathy are associated with differences in the regulation of negative emotion more generally, and anger more specifically; and (c) to investigate whether a father’s empathy interacts with the gender of the child to influence the extent to which a father regulates his anger. To investigate these questions, male undergraduate participants were asked to imagine themselves as fathers of a 6-year-old child. While the use of such a sample may limit the generalizability of the findings, this study does represent an important first step toward understanding fathers’ regulation of their anger when interacting with their children.

Father-Child Interactions

The role of fathers in child-rearing is chronically under-researched in psychology (e.g., Bernadett-Shapiro, Ehrensaft, & Shapiro, 1996; Lamb, 1995). A review of any introductory developmental psychology textbook will confirm that the role of fathers is usually either neglected at the expense of focusing on mother-child relationships, or subsumed under the role of “parents” in general, in which mothers tend to prevail (e.g., Bee, 1995; Lefrancois, 1992). In addition, much of the research centers on absent, abusive, autocratic, or non-engaged fathers, although new generative models of fathering
have recently surfaced (e.g., Hawkins & Dollahite, 1997). In North America there has been a recent important social trend toward greater involvement of fathers in child-rearing in intact families (but a decreased involvement of nonresidential fathers) (Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000). Almeida and Wethington (2000) have found that when fathers spend more time with their children they are more likely to engage in supportive interactions with them.

While the primary caregiver’s role still remains largely the domain of mothers (or mother figures), there is a growing awareness of the potential value and perhaps unique contribution that participating fathers (or father figures) can make to a child’s development (Mackey, 1996; Marsiglio, 1995; Phares, 1996). For example, it has been found that fathers spend a greater percentage of their parenting time engaging in physical play and shared activities than mothers. The presence of this behaviour — if non-directive and non-coercive — is positively associated with children developing good peer relations, as well as perceiving their fathers as emotionally close (Buerkel-Rothfuss, Fink, & Buerkel, 1993; MacDonald & Parke, 1986). Also, retrospective research has found that children of fathers who are present and involved in their care at an early age grow up to be more empathetic and compassionate adults with better social skills (Franz, McClelland, & Weinberger, 1991; Mott, 1993, Parke, 1996). Conversely, not surprisingly, research has also found that at-home fathers who are substance abusers, physical and/or sexual abusers, or who suffer from serious mental or physical ailments have children with higher levels of psychopathology (Phares, 1996).

A recent review of research concerning parental socialization of emotion noted
that very few studies assessing fathers' reactions to children's negative emotions have been conducted to date (Eisenberg, Cumberland, & Sprinrad, 1998). Studies that have involved fathers suggest that one of the largest differences between paternal and maternal involvement remains in the area of responsibility for the children's emotional well-being: Fathers are less involved in emotional interactions with their children when the mother is also present (Pruett, 1993). A recent study (Hakim-Larson, Dunham, Vellut, Murdaca, & Levenbach, 1999) found that fathers experience higher levels of fear than mothers when coping with stressful incidents involving their child, possibly due to a lack of experience and confidence in the child-rearing role. This finding is consistent with research showing that fathers sometimes behave like detached observers rather than active participants when in their children's presence. Thus, fathers tend to have fewer strategies to choose from when responding to expressions of negative affect from their children (Eisenberg, Fabes, & Murphy, 1996; Goodnow & Collins, 1990).

Furthermore, researchers such as Stifter and Grant (1994) have found that fathers express more negative emotion with their infants than mothers, and that this in turn is positively associated with their children inhibiting the expression of negative emotion (e.g., anger and distress). Such findings are likely due in part to the fact that, although fathers appear to be as sensitive to children's cues as mothers, they do not spend as much time interacting with them (Dienhart, 1998). Therefore, they may not have learned to suppress their negative emotions as well as mothers (Parke & Tinsley, 1987). Taken together, the results of these studies suggest that the nature of fathers' emotional interactions with their children, particularly how and when they regulate negative
emotions, is an issue that warrants further investigation (Denham, Copeland, Stradberg, Averbach, & Blair, 1997; Hakim-Larson et al., 1999).

**Emotion Regulation**

Research on the regulation of emotions has grown substantially in popularity in the last decade, focusing on both adults (e.g., Fabes & Eisenberg, 1997; Gross, 1998a) and children (e.g., Denham, 1998; Eisenberg, et al., 1998). In addition, investigations are beginning to point to the underlying neural circuitry involved in emotion regulation (ER) (e.g., Davidson, Jackson, & Kalin, 2000; Thayer & Lane, 2000). Gross (1999) traces the origins of the study of ER to both psychoanalytic tradition (e.g., ego defenses are processes that regulate anxiety) and the stress and coping tradition (e.g., Selye, 1974). Much of the current research on ER is based on a functionalist view, which defines emotion as a person’s attempt to “establish, maintain, change, or terminate the relation between the person and the environment on matters of significance to the person” (Saarni, Mumme, & Campos, 1998, p. 238). From this perspective, it is adaptive in many situations to limit (i.e., regulate) emotional responses to behaviour congruent with scripted social behaviour (Fridlund, 1994; Keltner & Buswell, 1997).

Interpersonal interactions often require modifications of a reflexive emotional reaction due to undesired consequences of an uninhibited response. In fact, it is likely that almost all adult emotion is regulated in some way or another, so that the question is rather one of the degree to which regulation takes place, and the types of regulatory processes that are utilized (Gross, 1999). While regulatory effort is typically thought of as fully conscious and deliberate, it is more accurately conceptualized as occurring
somewhere on a continuum between conscious/effortful and unconscious/automatic (Gross, 1998a; Shiffrin & Sneider, 1977). In addition, although the regulation of emotion is prototypically seen as involving a decrease in an individual’s negative affective response, it also applies to increasing or maintaining one’s emotions, and to positive as well as negative emotions (Gross, 1998a, 1999).

**The Process Model of Emotion Regulation**

An increasing number of researchers use a process model of emotion. In the process model, affect is broken down into a sequence of components, beginning with affect-eliciting stimuli and finishing with experiential and behavioural outcomes (e.g., Gross, 1998a; Lazarus, 1991; Smith & Kirby, 2000). The regulation of emotion may be usefully conceptualized in similar terms. Two recent process models have been proposed by Gross (1998a, 1999) and Campos, Mumme, Kermoian, and Campos (1994). Although these theories are similar, the present study used Gross’s model, which is supported by empirical research (e.g., Gross, 1998b; Gross & Levenson, 1993, 1997) and is conceptually parsimonious. Gross distinguishes between antecedent and response-focused ER (see Figure 1). Note that Campos et al. (1994) separated antecedent-focused ER into two components: input regulation (the level of sensory input) and central regulation (the level where information is processed and manipulated.

*Antecedent-focused* ER may involve one or more of four processes that affect the antecedents of an emotional episode: situational selection, situational modification, attentional modification, and cognitive change (Gross, 1998a, 1999). Temperament theorists such as Rothbart (1989) and Bates (Rothbart & Bates, 1997) tend to focus on
Figure 1. A process model of emotion that shows two major types of emotional regulation (adapted from Gross 1998a, 1999).
attentional processes, which they see as the key to ER. While this type of ER typically serves to decrease stimulus input and thus experience of emotion, particular ways of directing attention may also increase the likelihood of the elicitation of an emotion, as in the case of hyper-vigilance (Campos et al., 1994).

Response-focused ER refers to a process that directly influences physiological, experiential, or behavioural responses which have already been initiated (Gross, 1998a, 1999). This is the type of regulation that is typically considered when referring to the regulation of an emotional experience. The most common form of response-focused regulation involves modifying the expression of emotion by restricting its display, masking it, or expressing it in less overt and more socially acceptable way (e.g., a sigh, roll of the eyes) (Gross, 1998a: 1999). Others include engaging in relaxation techniques or taking drugs to lessen the aversive physiological and experiential aspects of negative emotions such as anger or anxiety.

The intention of the present study was to assess both antecedent- and response-focused types of ER. Participants were asked to rate the ER strategies they would use as parents when responding to their hypothetical child’s anger-eliciting behaviour. As well, two established questionnaires were administered that assess an individual’s ER style: One assessed negative emotion generally, the second was specific to the experience of anger.

**Emotion Regulation Style**

The style of emotion regulation is conceptually related, but somewhat distinct from the process model of ER. ER style refers to the way individuals typically modulate
their negative emotions, particularly anger (Roger & Najarian, 1998; Spielberger, Reheiser, & Sydeman, 1995). Two non-mutually exclusive ER styles are control and suppression.

A controlling ER style is one in which the individual attempts to control their experience and expression of the negative feelings, usually prior to, or in the early stages of, an emotion being activated (e.g., attentional shifting) (Roger & Najarian, 1998; Spielberger et al., 1995). Thus, in terms of face validity, this type of ER style for the most part corresponds to a preference for using antecedent-focused ER strategies. However, in the present study the methods of assessing control ER also included items which assessed behavioural emotional control (e.g., aggression control), as well as cognitive emotional control (e.g., attentional control), and therefore did not fully correspond to the process model of ER.

A controlling ER style is generally associated with the development of strategies to prevent and resolve the experience of anger and other negative emotions, and so is generally conceptualized as an adaptive style of regulating emotion (Spielberger et al., 1995). “Control” in this context is best conceptualized as a form of emotional competence or personal efficacy that allows for a range of choices when one encounters an anger-eliciting stimulus (e.g., appraise the situation in alternative ways, express appropriate levels of irritation or anger) (Horowitz & Znoj, 1999; Kassinove & Eckhardt, 1995; Spielberger et al., 1995). Previous studies have found that individuals who tend to engage in a controlling ER style are generally less often angry and less likely to engage in aggressive behaviour (Roger & Najarian, 1989; Spielberger et al., 1988). They also show
fewer physiological reactions when provoked (Boddeker & Stemmler, 2000). However, at very high levels control ER is less flexible and is associated with a number of non-adaptive behaviours, such as an overuse of defenses (especially repression) and engaging in Type A behaviour, and thus can have negative health consequences, such as heart disease (Spielberger et al., 1988).

A suppressive ER style is one in which individuals hide or do not express negative feelings after they are fully activated. In terms of face validity, this ER style corresponds to a preference for using response-focused ER strategies. This is consistent with research by Gross (1998b; Gross & Levenson, 1997, 1993) that has examined “suppression” as a type of ER, though he conceptualizes it as one (major) form of response-focused ER.

Individuals who typically use a suppressive style of ER have been found to report lower levels of interpersonal control, higher rates of depression, difficulty recovering from stress, and higher incidents of heart disease (Roger & Najarian, 1989; 1998; Spielberger et al., 1988; Steptoe, 1993). In addition, research indicates that even though utilizing suppression to regulate one’s negative affect (e.g., disgust and sadness) is effective in diminishing expressive behaviour (at least in the short-term), it does not generally have any impact on an individual’s experience of negative emotion (Gross, 1998b, Gross & Levenson, 1997). In fact, suppressing one’s negative feelings has been associated with an increase in sympathetic nervous system activation, which Gross (1998b) suggests is due to a parallel activation of both subcortical emotion centers and cortical inhibitory structures.
Anger Regulation

Anger is an emotion that is typically high in intensity and therefore often has strong demands for regulation during parenting (Dix, 1991; Saarni et al., 1998). It can be either instructive or destructive, depending on how and when it is regulated. Anger responses in which an individual “loses control” are generally maladaptive. For example, when experiencing an explosive episode of anger a person is more likely to become self-centered in terms of one’s goals, physiologically over-aroused, and exhibit unregulated behaviour (Cummings & Cummings, 1988; Eisenberg & Fabes, 1992). However, as Gross (1998a) suggests, research is lacking as to what processes are involved in affect regulation for specific emotions, such as anger.

Using a functional approach to emotions, anger generally stems from the perception that personally significant goals are blocked. In social circumstances this may result from another person’s opposition that threatens some aspect of our identity or self-esteem (Berkowitz, 1999; Campos et al., 1994). The anger response orients attention outward – although in a constricted fashion – focusing on blame attribution that make the actions of others (as opposed to non-personal situational factors) more salient (Izard & Youngstrom, 1996). This in turn activates and motivates the angry person toward removing elements they perceive as blocking their goal (Campos et al., 1994).

Dix (1991) has indicated that there is a lack of empirical data about the factors that elicit parental emotions. Recent research by Carpenter and Halberstadt (1996) has identified specific circumstances in which children elicit maternal anger. The current study seeks to extend this research by investigating the extent to which these
circumstances elicit anger from men imagining themselves as parents, and the reason(s) why these feelings are evoked. This descriptive information should help us to better understand the nature of men’s anger responses toward children when in the parenting role.

Given that the experience and the expression of unbridled anger toward another are seldom socially adaptive in human interactions, it is important to examine when and how anger is typically limited or regulated. Strong emotions, particularly negative ones, often disrupt interpersonal interactions. They often interfere with an accurate cognitive appraisal of a situation, and may result in a loss of control over potentially destructive feelings and behaviours (Oatley & Jenkins, 1996). In parenting, this may be especially pertinent given the power differential and potential for harm to the child. In addition, a parent’s role is particularly important in terms of teaching (e.g., modeling) the regulation of anger during interpersonal interactions with their children (Lemerise & Dodge, 1993; Miller & Eisenberg, 1988; Renk, Phares, & Epps, 1999).

The regulation of parents’ anger is also important in terms of controlling what they communicate to their children and, therefore, what reactions their child will likely have. Ineffective or distressed parents often display insufficient or excessive emotion, or emotion that is poorly matched to the parenting task (Dix, 1991; Eisenberg, et al., 1998). This in turn has been linked to poor long-term outcomes for the children, such as a low quality of social functioning (Eisenberg, et al., 1999).

Dispositional empathy may be related to a parents’ ability to adapt to the child and situation, thus allowing the parent to monitor how events influence the child, and
consider which behaviours they believe need to be changed (Dix 1991, 1992). While anger functions to communicate to the child that their behaviour is unacceptable, if this emotion is left continually unregulated, it tends to lead to punitive parenting and inhibits more empathetic responses, such as providing reassurance and encouragement (Dix, 1991; Feshbach, 1989). The emotions expressed by the parent in interactions with the child require a continual balancing of empathic concern toward the child against the parent’s own self-interest.

In terms of the present study, research has suggested that in parent-child interactions parents’ empathetic responses may be an important inhibitor of angry affect and aggressive behaviour toward their children (Miller & Eisenberg, 1988) and are related to positive long-term outcomes for children (e.g., social competence, academic achievement) (Gottman et al., 1996). When a parent experiences anger toward their child, it is often based on the parent’s inference that the child is intentionally blocking a goal relevant to the parent in the moment. While this anger response is almost always non-empathetic at that moment (Dix, 1991) there is often a subsequent reappraisal from a more empathetic perspective when the physiological activation has subsided (Berkowitz, 1999).

The current investigation sought to further examine the extent to which antecedent- and response-focused anger regulation are used, and whether these differ according to individual differences in empathy. In addition, the relation between the regulation of negative emotions generally (e.g., distress, sadness) and empathy was explored.
Dispositional Empathy

In general, parents develop strong affectional ties to their children, and outcomes relevant to their child's well-being are very important to them (Dix, 1992). In addition, the need for connectedness with their children often motivates parents to think about their children's internal states (Dix, 1991, 1992). Furthermore, through frequent intimate interactions with their children, parents develop an elaborate cognitive schema over time, so that information about their child's temperament should be more available to parents than non-significant-others (Andersen, Glassman, & Gold, 1998; Dix, 1991). However, parents differ in terms of how responsive they are to their children, and this responsiveness may predict better developmental outcomes for children (e.g., Dix 1992; Gottman, 1997). As Dix (1992) states, it is useful to conceptualize such responsiveness and sensitivity toward their child as reflective of a parent's dispositional empathy. Research indicates that during parent-child disagreements parents with greater empathy are more likely to focus on their children's needs (e.g., socializing appropriate behaviours, promoting mutually acceptable outcomes) rather than their own needs (e.g., obedience, short-term compliance) (Hastings & Grusec, 1998). This reduces parent-child conflict, promotes cooperative decision-making, and limits destructive emotions and overly-rigid discipline practices (Dix, 1991, 1992). Further, higher empathy parents are more tolerant and less restrictive of children's expressiveness of emotion (Eisenberg et al., 1988).

The term "empathy" has been given a variety of operational definitions in psychology over the years, and although some consistency has emerged, a degree of
variation still remains (for a review see Davis, 1994). Some theorists have tended to define empathy fairly narrowly, focusing on affect (e.g., Stotland & Smith, 1994). However, researchers such as Davis (1983, 1994) and Hoffman (1987) view the construct of empathy multi-dimensionally, and thus include the cognitive or role-taking component as well as the affective component. First, they differentiate between an empathizer’s experiencing an other-focused emotion (e.g., feeling sadness parallel to another’s sadness) versus a self-focused emotion of distress at witnessing another’s suffering. Second, such theorists have emphasized that empathy is a process in which the perceiver, affected by antecedent conditions, experiences both intra-personal outcomes (e.g., a parallel or reactive emotion) and interpersonal outcomes (e.g., helping, aggression) (Davis, 1983, 1994). Third, an emphasis is placed on empathy as a fairly stable individual difference or tendency, that develops in stages as a child obtains more complex role-taking abilities and affective and behavioural responses (Hoffman, 1987). Support for the construct of dispositional empathy has been substantial, ranging from research in genetics (e.g., Emde et al., 1992) to early learning (e.g., Kestenbaum, Farber, & Sroufe, 1989). In fact, from a psychobiological perspective, it has been argued that empathetic abilities may have evolved in humans to promote interpersonal ties and altruistic behaviours that serve to increase the survival of the species, particularly in terms of parenting (Dix, 1992; Panksepp, 1986).

Although some researchers have pointed out that situational factors may impact on empathetic responses (e.g., Batson, 1991; Carlo, Eisenberg, Troyer, & Speer, 1991), the construct of dispositional empathy has continued to be widely utilized in empirical
and conceptual ways (for a summary see Davis, 1994, or Eisenberg, Wentzel, & Harris, 1998). Davis’ (1983, 1994) development of a multidimensional measure of empathy [Interpersonal Reactivity Index (IRI); Davis, 1983] has substantially advanced research on the construct of dispositional empathy. As mentioned, Davis (1983, 1994) argues that empathy consists of a set of separate but related constructs, each representing a separate facet of this characteristic. This is reflected in his IRI measure of dispositional empathy which consists of four main components: Perspective Taking (PT), Empathetic Concern (EC), Personal Distress, and the Fantasy scale. The present study will only utilize the PT and EC subscales, as various studies have found them pivotal to the construct of dispositional empathy (e.g., Eisenberg, Fabes, Nyman, Bernzeig, & Pinuelas, 1994).

Empathic concern is the tendency to experience feelings (either parallel or reactive) in response to perceiving that another person is experiencing an emotion. Perspective taking is the cognitive ability to take another person’s psychological point of view. This is an effortful process that involves both the suppression of one’s own egocentric perspective and the active inference of someone else’s (Davis, 1994). In Davis’ (1994) theoretical model, perspective taking is the central process through which persons empathize. Other ways of empathizing include non-cognitive processes such as motor mimicry and classical conditioning (Davis, 1994). Empathic concern is an intra-personal outcome of empathizing with an inferred emotional state of another individual.

It is worth noting that an individual may not always engage in perspective taking for benevolent purposes (e.g., manipulation). In such cases this would imply some type of disengagement from, or suppression of, empathic concern that usually stems from
perspective taking. However, research supports the idea that perspective taking is
generally positively associated with benevolent outcomes: It has been found to be
positively associated with helping behaviour and negatively related to aggression (e.g.,
Eisenberg & Miller, 1987; Richardson, Hammock, Smith, Gardner, & Signo, 1994).

Gender differences in empathic concern have been consistently found, with
women scoring higher than men (Davis, 1994). However, these findings may reflect
gender-role self-presentation differences rather than actual reactive differences, with
women more willing to endorse emotionally responsive items on questionnaires (Davis,
1994; Eisenberg & Lennon, 1983). This sex discrepancy has been found on most
measures of empathy including Davis’ IRI. Interestingly, studies of the cognitive aspect
of empathy (i.e., perspective-taking on the IRI), which is much less emotion-laden, reveal
few or no significant gender differences (Davis, 1994). Furthermore, persons with higher
dispositional empathy have been found to show less rigid gender-role distinctions
(Brody, 1999; Davis, 1994).

The Relation between Dispositional Empathy and Emotion Regulation

Eisenberg and her colleagues have conducted a series of studies exploring the
relation between dispositional empathy and self-regulation, with participants who are
university students (Eisenberg et al., 1994), elders (Eisenberg & Okun, 1996), and school
age children (as rated by adults; e.g., Eisenberg, Fabes et al., 1998). However, before
looking at the findings it is important to note that this research utilizes the more general
construct of regulation. This typically assesses the broader constructs of attentional and
behavioural regulation (i.e., impulsivity, inhibition control, self/ego-control, and
sometimes, coping), rather than the more specific realm of emotional regulation. Therefore, although Eisenberg and her colleagues have demonstrated a positive relationship between “regulation” and dispositional empathy, this finding may only have limited generalizability to the present study (which focuses on the regulation of emotion). However, their findings are still a useful starting point for formulating hypotheses as to the relation between empathy and ER. That limitation stated, a summary of their findings follows.

Dispositional empathic concern has generally been found to be positively correlated with regulation (Eisenberg & Okun, 1996). In fact, Eisenberg (Eisenberg, Cumberland, & Spinrad, 1997) states that a high level of empathic concern likely reflects an optimal level of emotion regulation (i.e., a relatively high level of ER, but not so high that the individual is overly inhibited or rigid). However, in some studies a positive correlation between empathic concern and regulation was found only after controlling for individual differences in affect intensity [i.e., how intensely an individual typically experiences emotions (Larsen & Diener, 1987)] (Eisenberg, Fabes, Nyman, et al., 1994). Good perspective taking skills — which have been established to be positively correlated with high empathic concern— are moderately associated with high regulation (Eisenberg, Fabes, Murphy, et al., 1994; Eisenberg & Okun, 1996). This is consistent with the view that the ability to another’s perspective is a cognitive skill that involves a type of self regulation (e.g., attentional focusing) (Eisenberg, Wentzel, & Harris, 1998). Further, because perspective taking is other-focused it limits the degree that the individual experiences the vicarious negative emotion of another as aversive (i.e., personal distress),
hence maximizing feelings of empathetic concern (Davis, 1994; Eisenberg & Okun, 1996).

Beyond the general relation between trait empathy and regulation, some of Eisenberg’s investigations also suggest that individual differences in empathic responding may be associated with different types of ER (Eisenberg, Fabes, Nyman, et al., 1994; Eisenberg & Okun, 1996). For example, individuals higher in empathy (EC and PT) were found to use relatively more attentional control – a type of antecedent-focused affect regulation – than less empathetic individuals (Eisenberg & Okun, 1996).

In terms of the present study, it was expected men higher in dispositional empathy would better anticipate anger-evoking situations, and hence engage in more antecedent-focused ER than lower empathy men. It was also hypothesized that men higher in empathy would engage in greater emotion control generally, and more anger control specifically, given that a controlling ER style generally corresponds with antecedent-focused ER. Lastly, given their consideration for the possible negative effect of expressing their anger toward a significant other, higher empathy men were expected to report expressing their anger less toward their hypothetical child, both in terms of ER style and situation-specific anger (i.e., responses to the vignettes).

Gender Differences in Anger Regulation

The Gender of the Parent

Researchers have found differences between how men and women experience and express anger that are relevant to the present study. For example, men have been found to express more anger in social situations than women, and are more inclined to report that
they would not show fear, sadness, or disappointment (Timmers, Fischer, & Manstead, 1998). However, these men and women show no difference in terms of how frequently or intensely they get angry (Brody & Hall, 2000). Research in the parenting domain is consistent with these more general findings. For example, a recent investigation concluded that even though mothers and fathers generally have similar emotional (i.e., experiential) reactions to their 4 and 5-year-old children’s display of negative emotion, they found that fathers behave differently than mothers (e.g., more punitive responses and less supportive reactions than mothers) (Eisenberg et al., 1996). It is not surprising therefore, that a recent investigation has found gender differences in what motivates individuals to regulate emotions when relating to others. Men are more driven to establish and maintain their power and status, while women are more motivated to establish and maintain positive relationships with others (Timmers, et al., 1998). An alternative explanation for this gender difference is that anger is more socially acceptable than other negative emotions in males (Berkowitz, 1999). Additional support for these explanations from “impression management” research in the workplace indicates that men perceive individuals who display a moderate amount of anger as more competent and higher in status (Tiedens, 2001).

The Gender of the Child

In addition to the gender of the parent, the gender of the child at whom an emotion is targeted may also influence parents’ emotional responses (Eisenberg, et al., 1998). Research conducted on child gender supports the idea that girls and boys differ significantly in a number behavioural areas, including aggression (Fagot & Hagan, 1985;
Maccoby, 1990) and verbal expression (Maccoby & Jacklin, 1984). Other research suggests that parental perceptions of children's behaviour are often influenced by the gender of the child, leading to differences in tolerance levels and expectations placed on the child’s competency (Eccles, Jacobs, & Harold, 1990). For example, specific to emotional interactions, evidence suggests that both mothers and fathers encourage sons more than daughters to control their expression of emotional distress (Fuchs & Thelen, 1988; Roberts, 1994). In addition, fathers are more likely to use problem-solving rather than emotion oriented responses with their sons than their daughters (Eisenberg et al., 1996).

Specific to anger, recent findings indicate that, during stressful interactions with their children, parents experience (Hakim-Larson et al., 1999) and express (Garner, Robertson, & Smith, 1997) more anger toward their sons than their daughters. As well, both mothers and fathers react less negatively in response to expressions of anger or aggression from their sons than their daughters. This difference is especially pronounced among fathers (Perry, Perry, & Weiss, 1989; Sanson & Rothbart, 1995). On the other hand, fathers more readily impose restrictions when their sons express anger than when their daughters express anger (Block, 1979).

In terms of the present study, these findings suggest that men would use response-focused ER less frequently and express more anger when responding to a male child than a female child, in the same anger-eliciting circumstance. However, it possible that dispositional empathy may modulate the relationship between child gender and parents’ ER, given that higher empathy men have less stereotypic views of the sexes (Davis,
1994). Therefore, in the present study it was anticipated that there would be an interaction between men's dispositional empathy and the gender of the child when predicting the type and quantity of anger regulation. Specifically, it was expected that higher empathy men would regulate their anger more similarly for boys and girls than would lower empathy men.

Summary and Hypotheses

The strategies that fathers employ to regulate their anger toward their children has not been thoroughly assessed to date. There is also a lack of information about how fathers' dispositional empathy and child gender relates to fathers' emotion regulation. The central purpose of the present study was to begin to address these gaps in the research. While the study focused on male undergraduates imagining how they would behave as fathers, this simulation was an important first step in gaining an understanding of how and when men regulate their anger with children.

The present study addressed the following questions:

1. What types of children's behaviours elicit men's anger? Do these anger responses differ as a function of child gender?

_Hypothesis 1:_

These questions were exploratory, thus no hypotheses were put forward.

2. Which ER strategies do men employ most often when experiencing anger toward a child? Which strategies do they find easiest to use?

_Hypothesis 2:_
a) Based on Garner, Robertson, and Smith (1997) and Hakim-Larson et al. (1999), it was hypothesized that men would use **response-focused ER** more frequently with girls as compared to boys.

b) Because the frequency and ease of use of ER strategies are related, it was expected that men would use response-focused ER with greater ease toward girls than with boys.

c) Because antecedent-focused ER appears to be linked to a controlling ER style, it was hypothesized that men would use **antecedent-focused ER** both more frequently and with greater ease with girls than boys.

3. Are individual differences in men’s empathy related to their style of regulating negative feelings more generally, and anger more specifically? Both parts (a) and (b) of hypothesis 3 were based on theory (e.g., Spielberger et al., 1995) and partially-related research (e.g., Eisenberg & Okun, 1996), as there has been no previous research specifically linking empathy and ER style.

**Hypothesis 3:**

a) With regard to negative affect in general, it was predicted that men with higher dispositional empathy would be more likely to use a **controlling ER style** than men with lower dispositional empathy.

b) With respect to anger, it was expected that men with higher dispositional empathy would be more likely to use an **anger control style** and less **anger expression** than men with lower dispositional empathy.
c) As suggested by portions of Eisenberg’s research (e.g., Eisenberg & Okun, 1996), it was anticipated that men with higher dispositional empathy would report using antecedent-focused ER strategies more often and with greater ease when angry toward a child.

4. Do child gender and empathy interact to influence (a) the extent to which men regulate their state anger (i.e., anger in specific situations, assessed in this study by the way of vignettes concerning a father responding to an anger-provoking child) and (b) type of ER strategy (i.e., antecedent-focused, response-focused) they find easiest to use? The following parts of hypothesis 4 were based on empathy theory (Davis, 1994) and partially-related research (e.g., Eisenberg & Okun, 1996), as there is no prior research assessing an interaction between gender and empathy predicting ER.

*Hypothesis 4:*

a) It was anticipated that men who considered themselves the father of a hypothetical daughter would report greater control of state anger than those who considered themselves as the father of a hypothetical son, but this gender difference was anticipated to be smaller for high-empathy men than low-empathy men. Men responding to a daughter were expected to (i) express less anger and (ii) find it easier to suppress their state anger (the effort needed to not express one’s anger) than those responding to a son, but this disparity was expected to be less for high-empathy men than low-empathy men.

b) It was hypothesized that participants would report finding it easier to utilize
antecedent and response-focused ER strategies when responding to an anger-elicitng daughter than a son, but with less difference across child gender for men with greater empathy.
METHOD

Participants

The participants in the present study were 126 undergraduate men attending the University of Windsor. The age range of this sample was 19 to 65 years with a mean age of 25.29 years (SD = 7.86; median = 22) with 78% of the participants falling into the 19-26 age range. Their subject major was as follows: arts other than psychology (26.9%), sciences (25.2%), business (19.3%), engineering (13.4%), psychology (10.9%), and other (mainly fine arts) (4.2%). Their cultural identity was distributed as such: Canadian (60.3%), South Asian (8.7%), East Asian (7.9%), Eastern European (5.6%), Carribean (4%), African-Canadian (3.2%), Southern European (3.2%), Middle-Eastern (2.4%), Northern European (2.4%), Aboriginal (1.6%), Central/South American (0.8%).

Of the 126 male undergraduates who voluntarily participated in the study, 74 were awarded bonus points toward their undergraduate psychology course while the remaining 52 men were entered in a lottery. As for their motivation for participating, 33% cited it as for course credit, 19% to help out the researcher, 12% out of interest, 10% for the lottery, and the remainder some combination of these.

Twelve participants (9.5%) identified themselves as fathers/stepfathers, eleven of which were either married or in a common law relationship. The fathers had a mean age of 35.36 years (SD = 7.13). They identified having either one (n = 4), two (n = 6), or three children (n = 2), and these children had a mean age of 7.76 years (SD = 5.32).
Of those men who were not fathers (n=114), 39% indicated they “want to be a parent some day”, and 86% expressed they “enjoy spending time with children” (i.e., indicate 5 to 7 on 7-point Likert scales, in response to these questions). Further, 75% of these non-fathers rated themselves as being experienced in interacting with children, and 56% indicated having experience caring for young children (5-7 on 7-point Likert scales).

The study was conducted during the spring and summer terms of the year 2000. The recruitment was done through the psychology department’s participant pool of undergraduate students, as well as through direct recruiting of volunteers. This latter recruiting was done by the researcher attending a wide-range of undergraduate courses to give a brief outline of the research and then asking for volunteer research participants. Students from the participant pool were contacted by phone to ask if they would like to participate in a survey of men’s attitudes toward fathering. Two credits were given to each participant recruited from the participant pool. At the end of the term each credit counted for one percentage point toward the student’s final psychology grade. Those students not part of the participant pool were entered into a lottery, filling out entry slips with their first name and phone number on it, prior to (and independent of) their completing the survey. A winning prize of $100 was awarded after the recruitment was completed; the winner was contacted by phone. Upon completing the research, participants were given a debriefing form and asked whether they wished to be informed of the results of the study by e-mail.

A power analysis indicated that a minimum of 30 participants per child gender was needed to achieve 80% power with an effect size of 0.1. However, given the number
of control variables to be included in the analyses – i.e., in the multiple hierarchical regression analyses – this number was doubled to a minimum of 60 participants per cell.

Procedure and Measures

Prior to conducting this study the method and materials used were reviewed and approved by the Psychology Department’s Ethics Committee. All data were collected in a university classroom in small sessions (maximum of ten participants) in a controlled fashion (i.e., with the researcher present throughout). At the beginning of the session participants were given a standard consent form addressing issues of confidentiality and their right to discontinue the study at any time. The participants were then randomly assigned to the female or male child condition for those measures in which they were to imagine themselves as a parent, the wording referring to either a female or male child respectively. All participants filled out a series of questionnaires in a single session lasting approximately 45 minutes. The whole package was completed and returned, with participants only identified by their subject numbers in order to maintain confidentiality.

The measures were grouped in the following fashion (see Table 1):

1. Background information
2. General parenting scenarios (gender specific)
   a) Intensity of anger in anger-eliciting situations
   b) Strategies for anger regulation
3. Specific parenting vignettes (gender specific)
   a) Situational emotions
   b) Emotion regulation
4. Style of emotion regulation
   a) Regulation of negative emotions
   b) Anger regulation
5. Dispositional empathy
6. Control measures

To counterbalance possible order effects, participants were randomly assigned to one of two conditions: one in which group 4 preceded group 2, the other in which group 4 followed group 3. Within these conditions, the order of the two vignettes in group 3 was reversed for half the participants. The rationale for administering the general parenting scenarios in group 2 prior to the vignettes in group 3 was that it was expected that the former would be helpful in getting participants to imagine themselves in a fathering role, in preparation for considering the specific vignettes.

**Background Information**

Part One of the demographic form included questions relevant to sample characteristics (e.g., personal and family backgrounds) (see Appendix A.). Parts Two, Three, and Four consisted of a series of questions designed to tap into participants’ own experiences with regard to parent-child interactions. Responses were given on seven-point Likert scales. These questions were designed to (a) prime men to start thinking about parenting, and (b) to get an indication of how their past experiences might relate to their response to the anger-eliciting vignettes (in which they imagine themselves as a father of a 6-year-old girl or boy).
Specifically, in Part Two four questions tapped men's interest in becoming a parent someday and their experience interacting with, and caring for, children (e.g., "How much experience to you have caring for young children?"). The first two questions ("Do you want to be a parent someday?" and "How much do you enjoy spending time with children?") were adapted from the "Scale of Possible Selves" (i.e., the "possible self-asparent" subscale) developed by Bloom, Delmore-Ko, Masataka, and Carli (1999).

Part Three consisted of statements concerning their parents' emotion-related behaviour toward them as a child, including the extent to which their parents' expressed comfort, affection, and anger, as well how relaxed, warm, and playful their parent's were toward them (e.g., "My mother/father felt that a child should be given comfort and understanding when he is scared or upset."). These six items were adapted from the "Open Expression of Affect" subscale of the Child-Rearing Practices Report (Block, 1965). Participants rated their mother and father [or primary care-giver(s)] on each of the six behaviours as to whether it "describes my parent well" (value on scale = 7) or "does not describe my parent well" (value on scale = 1).

Part Four required participants to rate both of their parents on four parenting dimensions that have been established to be important in research (e.g., Maccoby & Martin, 1983): restrictive–permissive, warm–hostile, responsive–unresponsive, and demanding–undemanding. Participants provided these ratings on a 7-point Likert scale.
General Parenting Scenarios

Anger-Eliciting Situations

Participants were given a list of fourteen child actions that have been found to elicit anger in mothers, and were asked to rate each one in terms of how angry it would make them if their six-year-old child (girl or boy, depending on the child gender condition to which they were initially assigned) displayed that behaviour (see Appendix B). This list was a subset of the 45 items Carpenter and Halberstadt (1996) have found to elicit mothers’ anger toward their children. The fourteen items selected were chosen to represent each of their four clusters (Carpenter & Halberstadt, 1996): “disobedience/not responding” (five items, e.g., not listening, being uncooperative); “naughty behaviours” (five items, e.g., showing a lack of respect for parents such as talking back or being rude, whines/shows babyish behaviour); “personality deficiencies” (two items, i.e., is slow and dawdles, forgetting to do what is asked or needed); and “damaging behaviours” (two items, i.e., breaking, losing, or not taking care of possessions, fighting with siblings or with friends). Responses were given on a 7-point Likert scale ranging from “not at all angry” (1) to “extremely angry” (7). Participants were also asked to describe why their two highest-rated responses evoked anger.

Strategies for Anger Regulation

This measure (see Appendix C) contains a list of fifteen strategies for regulating anger toward a child and is based on the research of Campos et al. (1994) and Gross (1998a, 1999). These were compiled by Dr. Tanya Martini as part of her ongoing research programme at the Department of Psychology of the University of Windsor.
Some minor modifications were made by the author in order to (a) better link emotional regulation to empathy and affect intensity, and (b) reduce the duration of the survey. The strategies were categorized into antecedent-focused and response-focused ER strategies for conceptual clarity, recognizing that some strategies may overlap categories. (For example, shifting one’s attention – strategy four, “distracting oneself” – can take place prior to or after perceiving an emotion-evoking stimulus.) Note that one ER strategy, “express your feelings of anger toward your child fully”, was included as an alternative, but for the purposes of this study was not considered a type of affect “regulation” or dampening consistent with ER as defined in this study.

Participants imagined themselves as the father of a hypothetical 6-year-old child (girl or boy). They rated (1) how often they would use this strategy if they were angry at their child, and (2) how easy it would be for them to use the strategy. Ratings were on a 7-point Likert scale ranging from “almost never” and “not at all” (1) to “almost always” and “very” (7), respectively.

Specific Parenting Vignettes

Participants were asked to read two short vignettes which described the anger-eliciting behaviour of a hypothetical six-year-old-child. As stated previously, the order of the vignettes was counterbalanced. Half of the participants received instructions to imagine that they were the father of a girl, and the other half the father of a boy (consistent with the above two measures). The two vignettes were designed to elicit a feeling of frustration or anger in participants. They were adapted from research by Hastings and Grusec (1998; study 3) which examined parent-child disagreements and
parental goals. The present study included only scenarios that depicted parent-centered goals (e.g., gaining compliance from your child), as Hastings and Grusec (1998) have found these elicit the greatest anger and least sympathy responses. The following are the two vignettes:

(1) “Imagine you are in the living room where your (daughter/son) is watching TV. You are expecting guests to arrive soon. You have already asked your child to pick up (her/his) toys in the living room but (she/he) continues to watch TV. Your main concern is to get your (daughter/son) to pick up (her/his) toys quickly.”

(2) “Imagine you are talking on the phone with a business associate, and your (daughter/son) keeps interrupting you, even though you have repeatedly told (her/him) not to do so as you are busy. Your main concern at that moment is to get your (daughter/son) to stop interrupting your phone conversation.”

Immediately after each vignette participants were first be asked what they would say and do in that situation. They were asked questions after each vignette that assessed their experience of four emotions: anger, fear, disappointment, and guilt. The same five questions were asked for each emotion. The gender of the child was specified as well. In the case of “anger”, and for the condition with a female child, the questions read:

1. How angry would you feel?

   (1 = “not at all” to 7 = “strongly”).

2. How much control would you have over your feelings of anger toward your daughter?

   (1 = “no control” to 7 = “complete control”)

3. How long would these feelings of anger last?

(1 = “a short time” to 7 = “a long time”)

4. How much would you show or express your feelings of anger toward your daughter?

(1 = “not at all” to 7 = “completely”)

5. If you did not express all your feelings of anger, how much effort would it take you to not show them?

(1 = “no effort” to 7 = “strong effort”)

At the end of the vignettes section, there was an open-ended question and a manipulation check of the independent variable, gender. Specifically, participants were asked:

a) In two or three sentences, describe why you stated you would express OR not express your feelings toward your (daughter/son) in the above two situations.

b) How clearly/vividly did you picture yourself in the above two short stories, including how you would act/feel as a father toward a 6-year-old (daughter/son) in those situations?

(1 = “not well” to 7 = “very well”)

**Style of Emotion Regulation**

**Regulation of Negative Emotion: Emotion Control Questionnaire (ECQ)**

A subset of 24 items (from a total of 46 items) was taken from the Emotion Control Questionnaire. (ECQ; Roger & Najarian, 1989). This specific subset of items representing each of the four subscales (Rehearsal, Emotional Inhibition, Benign Control, and Aggression Control) has been used by Eisenberg and her colleagues in their research
Empathy and Emotion Regulation  35

(e.g., Eisenberg & Okun, 1996). Their selection was based on the highest loading items from each of the four subscales; eight items from each of the Rehearsal and Emotional Inhibition subscales, and four items from each of the Benign Control and Aggression Control subscales (for abbreviated scale, alpha = .80; Eisenberg & Okun, 1996).

Examples of items include, “I often find myself thinking over and over about things that made me angry” (Rehearsal), “I seldom show how I feel about things” (Emotional Inhibition), “Almost everything I do is carefully thought out” (Benign Control), and “If a friend borrows something and returns it dirty or damaged, I usually just keep quiet about it” (Aggression Control). Consistent with Eisenberg and Okun (1996) items were rated on a 5-point scale (the original ECQ uses a true-or-false answer format), ranging from “does not describe me well” (1) to “describes me very well” (5). Responses were averaged to give a final score from 1-5 for each subscale.

**Anger Regulation: Anger Expression Scale (AX)**

The AX (Spielberger, Krasner, & Solomon, 1988) consists of 24 items designed to assess how an individual expresses their anger. Its three, 8-item, subscales tap Anger Out (the expression of anger when motivated by angry feelings), Anger In (no showing feelings of anger), and Anger Control (repressing feelings of anger). Respondents are given a list of typical reactions people have when feeling anger. They then are asked to report “how often you would be likely to act in the following ways if you were feeling angry”. Examples of items are as follows: “Say nasty things” (Anger Out); “Harbour grudges” (Anger In); and “Keep my cool.” (Anger Control). Past research has found
these subscales are factorially orthogonal and internally consistent, with alpha coefficients of .84, .75, and .73, respectively (Spielberger et al., 1988).

The AX utilizes a 4-point Likert scale, ranging from “almost never” (1) to “almost always” (4). Responses were averaged to give a final score on the three subscales of the AX ranging from 1 to 4.

Dispositional Empathy: Interpersonal Reactivity Index (IRI)

The IRI (Davis, 1983) is a multidimensional measure of dispositional empathy. Two of its four subscales were utilized in the present study, each tapping a separate aspect of empathy. Perspective Taking (PT) items assess the tendency to automatically adopt another person’s perspective in everyday life (e.g., “I try to look at everybody’s side of a disagreement before I make a decision”). Empathetic Concern (EC) items tap the tendency to experience feelings of empathy and concern for unfortunate others (e.g., “I often have tender, concerned feelings for people less fortunate than me”).

Each subscale consists of seven questions for a total of 14 items, each of which is marked on a five-point Likert scale from “does not describe me well” (0) to “describes me very well” (4). A high score indicates a high level of empathy. Several items are reverse-keyed. Responses were averaged to give a final score on each subscale ranging from 0 to 4. The other two of the scales of the IRI - the Personal Distress and Fantasy scales - were not included in the present study, as the former does not directly assess dispositional empathy and past research has established that the latter is limited in terms of external validity and theoretical usefulness (Davis, 1994; Eisenberg et al., 1994).
The internal consistency of the IRI subscales (alpha coefficients of .76 and .77 for EC and PT, respectively) and overall IRI test-retest reliability (ranging from .61 to .81 over two month periods for EC and PT, respectively) are acceptable (Davis, 1994; Eisenberg et al., 1994). Recent research by Eisenberg and her colleagues has supported the criterion validity of the IRI with situational observers' ratings and physiological indicators of empathy (e.g., Eisenberg et al., 1994).

**Control Measures**

**Affect Intensity Measure (AIM)**

The AIM (Larsen & Diener, 1985) consists of 40 items which assess how intensely an individual typically experiences emotions, regardless of the valence. The measure assesses instances of participants' both positive (e.g., "When I feel happy it is a strong type of exuberance") and negative (e.g., "The sight of someone who is hurt badly affects me strongly") emotions, as well as their beliefs about how others typically view them (e.g., "My friends might say that I am emotional"). Responses are given on a 6-point Likert scale ranging from "never" (1) to "always" (6). Several items on the scale are reverse-keyed. A total AI score was computed by averaging the responses across items.

Research has demonstrated test-retest reliability of this instrument (correlations from .70 to .90) (Larsen & Diener, 1985, 1987). In addition, the criterion validity of the AIM has been established through reports of emotion in real-life events, and behavioural and physiological measures of emotional intensity (Flett, Blankstein, & Bator, 1988; Larsen & Diener, 1985, 1987; Schimmack & Diener, 1997). The AIM has been shown to
be internally consistent over four samples, with alphas ranging from .90 to .94 (Larsen & Diener, 1987).

**Adult Temperament Questionnaire - Version IV (ATQ-4)**

Version I of the ATQ (Evans & Rothbart, 1999) has recently been cited as part of a published article (Rothbart, Ahadi, & Evans, 2000). The results of recent research using Version 4 of the ATQ are still being written (information can be obtained from the authors). The ATQ was recently developed by Mary Rothbart, David Evans, and their colleagues at the University of Oregon. It represents a refinement and integration of earlier versions of the ATQ, the Physiological Reactivity Questionnaire (Derryberry & Rothbart, 1988) and a measure of children’s temperament (Children’s Behavior Questionnaire; Rothbart, Ahadi, Hershey, & Fisher, 1997). The ATQ-4 is a complex measure consisting of 5 super-scales — negative affect, effortful control, extroversion, affiliativeness, and orientating sensitivity — that may be broken down into 18 main scales.

Three super-scales — Extroversion, Orientating Sensitivity, and Effortful Control — were expected to be the most relevant as control variables for the present study. In consultation with the ATQ’s principal author at the University of Oregon – David Evans – the following “main scales” were selected: Sociability for Extroversion (6 items; e.g., “I would enjoy a job that involves a lot of social interaction”); Affective Perceptual Sensitivity for Orienting Sensitivity (10 items; e.g., “When listening to music, I am usually aware of subtle emotional tones”); and Attentional Control for Effortful Control
(8 items; e.g., "When I try to focus my attention, I am easily distracted"). The total number of items used was 24.

These particular main scales were chosen as they are representative of their respective super-scales and because they are highly correlated with the Big Five scales as external correlates: that is, Sociability with Extroversion; Affective Perceptual Sensitivity with Intellect/Openness; and, Attentional Control with Conscientiousness (Evans & Rothbart, 1999; Rothbart et al., 2000). In addition, these three main scales have also been shown to be internally consistent, with alpha coefficients of .81, .71, and .83 for Sociability, Affective Perceptual Sensitivity, and Attentional Control, respectively (Evans and Rothbart, 1999).

Each item is rated on a 7-point Likert scale, ranging from “extremely untrue” (1) to “extremely true” (7). Scoring was done by averaging the item responses for each main scale.

**Gender Role Conflict Scale (GRCS)**

The GRCS (O’Neil, Helms, Gable, David, & Wrightsman, 1986) is a 37-item measure designed to assess men’s thoughts and feelings that are related to inconsistent and unrealistic masculine gender-role expectations. The term “gender-role conflict” refers to a psychological state in which overly rigid gender-role beliefs, learned during socialization, restrict a person’s ability to actualize their human potential (O’Neil et al., 1986). This conflict is theorized to result from a fear of femininity, which leads men to over-conform to stereotypical male roles as a way of avoiding femininity. Research has
found that high levels of GRC are associated with a variety of mental health difficulties, particularly among college-aged men: for example, low self-esteem, higher anxiety, and problems with interpersonal relationships (O’Neil, Good, & Holmes, 1995).

This self-report instrument assesses four factors: (a) Success, Power, and Competition (SPC), (b) Restrictive Emotionality (RE), (c) Restrictive Affectionate Behaviour Between Men (RABBM), and (d) Conflict Between Work and Family Relations (CBWFR). The latter subscale was not included in the present study, as it is the weakest psychometrically (e.g., it has been found to lack construct validity with other gender measures) and other researchers have recommended that it be omitted from analyses (Good et al., 1995). Therefore the questionnaire utilized in the present study consisted of 31 items.

The SPC subscale consists of 13 items that assess the degree to which a respondent reports rigid beliefs or worries about personal achievement, authority and control over others, and competing with others for personal gain (e.g., “Moving up the career ladder is important to me.”). The RE is a 10-item subscale that is an index of a person’s having difficulty with emotional self-disclosure, as well as a lack of comfort with the emotional expression of others (e.g., “Telling my partner my feelings about him/her during sex is difficult for me.”). The RABBM subscale consists of 8 items that tap the degree to which a respondent reports discomfort with, and avoidance of, expressions of caring between men (e.g., “Hugging other men is difficult for me.”). Participants rated agreement with each item on a six-point Likert scale, ranging from
"strongly agree" (1) to "strongly disagree" (6). Higher scores indicate a greater rigidity in ascribing to traditional masculine roles (i.e., greater masculine gender role conflict).

Exploratory and confirmatory factor analysis have supported the existence of the above-mentioned related, but distinct, subscales, with alpha coefficients ranging from .85 (SPC) to .75 (CBWFR) (O'Neil et al., 1986; Good et al., 1995). Test-retest reliability of the GRCS is adequate, with r's ranging from .72 to .86 over a 4-week interval (O'Neil et al., 1986). Studies have generally supported the construct validity of the GRCS (e.g., O'Neil et al., 1986) as well as it being free from socially desirable response bias (Good et al., 1995). Interestingly, more recent research found a positive relation between Gender Role Conflict scores and hostility, dominance, and interpersonal rigidity (Mahalik, 1996), as well as more immature psychological defenses (e.g., turning against object and projection) (Mahalik, Cournoyer, DeFranc, Cherry, & Napolitano, 1998).

Summary of Emotion Regulation Measures

To review, emotion regulation was assessed by three measures in the present study: ER strategies (questions 2, 3, and 4), ER style questionnaires (question 3), and vignettes (question 4). The rationale for using specific measures to address research questions is addressed below.

**Question 2.** A list of 14 ER strategies was compiled for this study to assess men’s frequency and ease of use of these strategies when regulating anger. These strategies were categorized to provide measures of antecedent-focused and response-focused ER. The measures were gender-specific – participants either imagined themselves as the father of a
hypothetical 6-year-old son or daughter – in order to evaluate if men engage in particular
types of ER strategies more with girls than boys.

Question 3. First, the two ER style questionnaires assessed if men’s typical way
of regulating negative feelings more generally (ECQ), and anger more specifically (AX),
were related to individual differences in dispositional empathy. Each questionnaire
tapped a controlling ER style (Aggression/Benign Control, Anger Control from the ECQ
and AX respectively) and a suppressing ER style (Emotional Inhibition, Anger In from
the ECQ and AX respectively) of ER. These measures had the advantage of being
established questionnaires, as well as assessing broad dimensions (i.e., styles) of ER.
Although these subscales were only used to address research question 3 (i.e., neither
situation nor child-gender specific), based on face validity these constructs generally
correspond to the process model of ER. That is, “control” consisted of mainly
antecedent-focused ER items while “suppression” consisted mainly of response-focused
ER items. Second, the two categories of ER strategies (i.e., antecedent and response-
focused) were used to assess if men with higher dispositional empathy would report using
a type of ER strategy more often and with greater ease when angry toward a child.

Question 4. There were two types of ER measures used in analyses for Question
4: Vignettes and ER strategies. Both measures were gender-specific (participants
responded as the father of a hypothetical 6-year-old son or daughter). The purpose of the
question was to assess whether child gender and empathy interact so as to influence the
extent to which men regulate their anger. The two vignettes provided a measure of state
ER. Participants rated the extent to which they would regulate their anger in terms of (a)
degree of control, (b) degree of expression, and (c) ease of suppression. The general parenting scenarios provided a measure of ER strategies. Participants rated the frequency and ease with which they used antecedent- and response-focused ER strategies.
Table 1

A Summary of the Variables to be Assessed

<table>
<thead>
<tr>
<th>Variable</th>
<th>How Measured</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Central Measures</strong></td>
<td></td>
</tr>
<tr>
<td>• Intensity of anger in response to</td>
<td>➤ 14 anger-eliciting situations</td>
</tr>
<tr>
<td>anger eliciting circumstances</td>
<td>(Carpenter &amp; Halberstadt, 1996)</td>
</tr>
<tr>
<td>• Strategies for anger regulation</td>
<td>➤ 14 emotion regulation strategies</td>
</tr>
<tr>
<td>(ER strategies)</td>
<td>(Campos et al., 1994; Gross, 1998a)</td>
</tr>
<tr>
<td>• Situational emotions &amp; emotion regulation</td>
<td>➤ 2 vignettes</td>
</tr>
<tr>
<td>(state ER)</td>
<td>(Hastings &amp; Grusec, 1998)</td>
</tr>
<tr>
<td>• Style of regulation of negative emotion</td>
<td>➤ Emotion Control Questionnaire (ECQ) (Roger &amp;</td>
</tr>
<tr>
<td>(trait ER)</td>
<td>Najarian, 1989)</td>
</tr>
<tr>
<td>• Style of regulation of anger</td>
<td>➤ Anger Expression Scale (AX)</td>
</tr>
<tr>
<td>(trait ER)</td>
<td>(Spielberger et al, 1988)</td>
</tr>
<tr>
<td>• Dispositional empathy</td>
<td>➤ Interpersonal Reactivity Index (IRI) (Davis,</td>
</tr>
<tr>
<td></td>
<td>1983)</td>
</tr>
<tr>
<td><strong>Control Measures</strong></td>
<td></td>
</tr>
<tr>
<td>• Dispositional affect intensity</td>
<td>➤ Affect Intensity Measure (AIM)</td>
</tr>
<tr>
<td></td>
<td>(Larsen &amp; Diener, 1987)</td>
</tr>
<tr>
<td>• Temperament</td>
<td>➤ Adult Temperament Questionnaire (ATQ)</td>
</tr>
<tr>
<td></td>
<td>(Evans &amp; Rothbart, 1999)</td>
</tr>
<tr>
<td>• Gender Role Conflict</td>
<td>➤ Gender Role Conflict Scale (GRCS) (O’Neil,</td>
</tr>
<tr>
<td></td>
<td>Helms, Gable, David, &amp; Wrightman, 1986)</td>
</tr>
</tbody>
</table>
RESULTS

Preliminary Analyses

Means, standard deviations, and internal consistencies ($\alpha$) for each scale and subscale are displayed in Table 2. Moderate to high internal consistencies were found for each scale and subscale (all $\alpha$'s > .60 after Aggression and Benign Control subscales of the ECQ were combined).

Participants’ Ratings of their Parents

Participants’ ratings of their parents’ warmth and responsiveness were combined, as were their ratings of restrictiveness with demandingness (both $r$'s > .30, $p < .001$). Then, mens’ ratings of their mothers and fathers were combined for those two parenting dimensions, as well as for the Open Expression of Affect scale (all $r$’s > .30, $p < .001$). Exploratory analyses were conducted to examine the relation between the three parenting measures (i.e., participants’ ratings of their parents’: openness of emotional expression, restrictiveness/demandingness, and warmth/responsiveness) and participants’ ER style, for negative emotions more generally and anger more specifically.

Very few relations were observed. Ratings of parents’ open expression of affect was negatively correlated with participants’ tendency to suppress their anger (as assessed by the Anger In subscale of the AX; $r = -.22$, $p < .05$). Also, participants who judged their parents as higher in warmth and responsiveness rated themselves as lower in Aggression/Benign Control ($r = -.28$, $p < .01$).
Table 2

Ranges, Means, Standard Deviations, and Reliabilities for Scales and Subscales

<table>
<thead>
<tr>
<th>Scale / Subscale (number of items)</th>
<th>Possible Range of Scores</th>
<th>Actual Range of Scores</th>
<th>M</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Central Measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interpersonal Reactivity Index</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathetic Concern (7)</td>
<td>0.00 - 4.00</td>
<td>0.43 - 4.00</td>
<td>2.81</td>
<td>.64</td>
<td>.76</td>
</tr>
<tr>
<td>Perspective Taking (7)</td>
<td>0.00 - 4.00</td>
<td>1.00 - 3.71</td>
<td>2.55</td>
<td>.59</td>
<td>.71</td>
</tr>
<tr>
<td><strong>Emotion Control Questionnaire</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehearsal (8)</td>
<td>1.00 - 5.00</td>
<td>1.00 - 4.88</td>
<td>2.66</td>
<td>.73</td>
<td>.79</td>
</tr>
<tr>
<td>Emotional Inhibition (7)</td>
<td>1.00 - 5.00</td>
<td>1.00 - 4.29</td>
<td>2.84</td>
<td>.67</td>
<td>.60</td>
</tr>
<tr>
<td>Benign Control (5)</td>
<td>1.00 - 5.00</td>
<td>1.60 - 4.80</td>
<td>3.54</td>
<td>.65</td>
<td>.56</td>
</tr>
<tr>
<td>Aggression Control (4)</td>
<td>1.00 - 5.00</td>
<td>1.00 - 5.00</td>
<td>3.01</td>
<td>.76</td>
<td>.53</td>
</tr>
<tr>
<td><strong>Anger Expression Scale</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger - Control (8)</td>
<td>1.00 - 4.00</td>
<td>1.63 - 4.00</td>
<td>3.07</td>
<td>.51</td>
<td>.82</td>
</tr>
<tr>
<td>Anger - In (8)</td>
<td>1.00 - 4.00</td>
<td>1.00 - 3.50</td>
<td>2.16</td>
<td>.53</td>
<td>.80</td>
</tr>
<tr>
<td>Anger - Out (8)</td>
<td>1.00 - 4.00</td>
<td>1.00 - 2.75</td>
<td>1.91</td>
<td>.38</td>
<td>.65</td>
</tr>
</tbody>
</table>

*Note. a These scales were abbreviated: (a) ECQ, the subscales were shorted; (b) ATQ, only 3 of the 18 main scales were used; (c) GRCS, a fourth subscale was not included.*

*b Due to the small number of items selected for the AgrC and BC subscales of the ECQ, and their being significantly correlated (r = .35, p < .01), they were combined (Cronbach’s alpha of .65 for 9 items).
(Table 2 continued)

<table>
<thead>
<tr>
<th>Scale / Subscale (number of items)</th>
<th>Possible Range of Scores</th>
<th>Actual Range of Scores</th>
<th>M</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
</table>

**Control Measures**

**Affect Intensity Measure (40)** 1.00 - 6.00 2.74 - 5.05 3.75 .49 .87

**Adult Temperament Questionnaire**

Sociability (6) 1.00 - 7.00 1.50 - 6.67 5.01 .96 .77

Affective Perceptual 1.00 - 7.00 2.50 - 6.30 4.66 .76 .69

Sensitivity (10)

Attentional Control (8) 1.00 - 7.00 1.75 - 6.88 4.11 1.02 .83

**Gender Role Conflict Scale**

Success, Power, Comp.(13) 1.00 - 6.00 1.54 - 5.85 3.87 .99 .91

Restrictive Emotionality (10) 1.00 - 6.00 1.10 - 5.60 3.15 .95 .87

Restricted Affectionate 1.00 - 6.00 1.25 - 6.00 3.43 1.12 .89

Behaviour Between Men (8)
Cultural Identity Comparisons

A comparison of participants who identified themselves as Canadian (n = 75) and those who identified themselves with other cultures (n = 50) was conducted for the dispositional empathy (empathic concern and perspective taking) and emotion regulation (emotion regulation strategies, emotion regulation styles, and state anger regulation for the vignettes) variables. A series of independent samples t-tests found no significant differences between individuals who identified themselves as Canadian in comparison to those who identified with other cultures: t’s (124) ranging from -1.71 to 1.14, all ns.

Relations Between Measures of ER: Strategies, Style, and Responses to Vignettes

An exploration of the construct validity of the ER strategy scales (frequency and ease of use of antecedent and response-focused ER) revealed the following: The relation between the ER strategy scales and the ER style scales (ECQ, AX) was, for the most part, as expected. That is, antecedent ER was expected to be positively correlated with control ER style measures. In terms of convergent validity, both the frequency and ease of using he use of antecedent-focused ER strategies was positively correlated with Anger Control (AX) for (r = .21 and r = .22, respectively, p < .05). Only ease of use was positively related to Aggression/Benign Control (ECQ) (r = .18, p < .05). In terms of discriminant validity, antecedent ER was unrelated to Anger In, Rehearsal, and Emotional Inhibition. One exception to this pattern of null relations was that the ease of using antecedent ER was negatively correlated with Rehearsal (r = -.21, p < .05).

It was expected response-focused ER strategies that would be positively correlated with suppression ER style measures (Rehearsal, Emotional Inhibition, and Anger In), as
well as Anger Out, which has been found to positively related to Anger In (Spielberger et al., 1988). Convergent validity was supported by the findings that frequency of use of response-focused ER was marginally related to Anger In (r = .15, p = .08), while ease of use was correlated with Anger Out (r = .19, p < .05) and negatively correlated with Aggression/Benign control (r = -.21, p < .05). Contrary to expectations, response-focused ER was not related to either of the negative emotion suppression subscales (Rehearsal and Emotional Inhibition). Discriminant validity was supported by the finding that response ER was unrelated to Anger Control and Aggression/Benign Control. The only exception to this pattern of null relations was that ease of response ER was negatively related to Aggression/Benign Control (r = -.21, p < .05).

The relation between the situation-specific (i.e., vignette) measures of anger ER (control, expression, and effort to hide) and the established ER style scales (ECQ, AX) were all as expected, confirming the construct validity of the situational measures. First, situational anger control was positively correlated with Anger Control (AX) (r = .23, p < .01), although was not related to Aggression/Benign Control (ECQ). Second, situational anger expression was related to Anger Out (AX) (r = .21, p < .05). Third, the effort to hide anger in the situation was positively related to both Anger In (AX) (r = .23, p < .01) and Rehearsal (ECQ) (r = .21, p < .05).

Main Analyses

Research Question 1: Anger-eliciting Circumstances

To review, this research question explored the children's behaviours that were most likely to elicit men's anger and whether these behaviours differed as a function of
child gender. Participants were instructed to imagine themselves as the father of either a
girl or boy in a series of 14 situations. Cronbach’s alpha for all the 14 situations was .89
with a mean inter-item correlation of .38. The data were first summarized in terms of the
circumstances that evoke the greatest anger, and then these 14 circumstances were
compared as a function of children’s gender.

Anger Ratings

Participants rated the extent to which each situation would result in their
experiencing anger (see Table 3). The six children’s behaviours that evoked the greatest
anger were: (1) “showing a lack of respect for parents, such as talking back or being
rude”, (2) “showing a lack of respect for other people, such as talking or being rude”, (3)
“misbehaving or purposely doing things s/he knows are wrong”, (4) “disobedience”, (5)
“not listening”, and (6) “trying to get around you, or being manipulative while trying to
get their own way”.

Comparison by gender

A Hotelling’s $T^2$ was used to assess whether the 14 dependent variables (anger-
eliciting situations) differed as a function of child gender. Stevens (1996) notes that to
protect against excess type I errors it is usually preferable to have less than 10 dependent
variables. In terms of the present study, it was reasoned that lowering the critical alpha
from .05 to .01 would be sufficient to control type I error. Stevens (1996) also states that
when the multivariate test is significant, this generally keeps the overall alpha level under
control for a subsequent set of univariate tests (Stevens, 1996). Therefore, one can
Table 3

**Anger-Eliciting Children's Behaviours: Anger Ratings**

<table>
<thead>
<tr>
<th>Behaviour of Child</th>
<th>Anger Intensity Rating (see note)</th>
<th>Mean</th>
<th>SD</th>
<th>F - statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>lack of respect - parents</td>
<td></td>
<td>5.85</td>
<td>1.22</td>
<td>.78</td>
</tr>
<tr>
<td>lack of respect - others</td>
<td></td>
<td>5.82</td>
<td>1.19</td>
<td>.01</td>
</tr>
<tr>
<td>misbehaving on purpose</td>
<td></td>
<td>5.32</td>
<td>1.36</td>
<td>1.92</td>
</tr>
<tr>
<td>disobedient</td>
<td></td>
<td>4.77</td>
<td>1.27</td>
<td>1.16</td>
</tr>
<tr>
<td>not listening</td>
<td></td>
<td>4.74</td>
<td>1.33</td>
<td>.07</td>
</tr>
<tr>
<td>manipulative/get own way</td>
<td></td>
<td>4.65</td>
<td>1.44</td>
<td>.00</td>
</tr>
<tr>
<td>not being cooperative</td>
<td></td>
<td>4.52</td>
<td>1.29</td>
<td>1.09</td>
</tr>
<tr>
<td>fighting: sibs/friends</td>
<td></td>
<td>4.02</td>
<td>1.39</td>
<td>.07</td>
</tr>
<tr>
<td>not caring for possessions</td>
<td></td>
<td>3.97</td>
<td>1.41</td>
<td>1.17</td>
</tr>
<tr>
<td>forgetting/repeatedly being re-asked</td>
<td></td>
<td>3.92</td>
<td>1.22</td>
<td>3.74*</td>
</tr>
<tr>
<td>whines/babyish</td>
<td></td>
<td>3.91</td>
<td>1.43</td>
<td>3.18*</td>
</tr>
<tr>
<td>slow/dawdles</td>
<td></td>
<td>3.23</td>
<td>1.35</td>
<td>7.76*</td>
</tr>
<tr>
<td>attention-seeking</td>
<td></td>
<td>2.98</td>
<td>1.33</td>
<td>2.47</td>
</tr>
<tr>
<td>fidgeting</td>
<td></td>
<td>2.81</td>
<td>1.22</td>
<td>.14</td>
</tr>
</tbody>
</table>

| Total                               | M= 4.32                          | SD=.86 |

**Note.** Ratings of anger range from 1 (not angry) to 7 (very angry).
* Significantly differed by gender (p <= .05): Higher for boys.
* Trend to a significant difference by gender (p = .08): Higher for boys.
conduct a post hoc procedure to determine which situations contributed to the overall multivariate significance: i.e., a series of univariate tests with a critical alpha of .05.

The multivariate analysis between the genders was significant, $T^2(14, 109) = .28$, $p = .01$. Univariate tests for the fourteen anger eliciting situations indicated two significant differences and one trend toward significance. Men rated a boy who exhibited the following behaviours as evoking more anger than a girl: “is slow and dawdles”, $F(1, 122) = 7.76, p < .01$; “forgetting / repeatedly being asked for something to be done”, $F(1, 122) = 3.74, p = .05$; while “whining/showing babyish behaviour” approached significance, $F(1, 122) = 3.18, p = .08$. The first two items are from the category “personality deficiencies”, while the last one is from the category “naughty behaviours” (Carpenter & Halberstadt, 1999).

Research Question 2: Emotion Regulation Strategies

To review, this research question examined the type of emotion regulation (ER) strategies that men use – both in terms of frequency and ease of use – when angry at a child, and assessed whether use varies as a function of child gender. It was expected that men would utilize both response-focused and antecedent-focused ER strategies more frequently, and with greater ease, with girls as compared to boys.

Frequency of Use

Participants rated the ER strategies they would use most often when angry with their hypothetical 6-year-old son or daughter. The two strategies participants felt they would use most frequently were: (1) “consciously telling yourself to relax/calm down”; and (2) “trying to think about what your child has done in a more positive way”. The two
ER strategies men indicated they would use least frequently when they were angry toward their (hypothetical) children were: (1) give up on what it is that you wanted them (your child) to do, and let them have their own way”; and (2) “release your feelings of anger elsewhere (e.g., at another person)” (see Table 4).

Ease of Use

Participants’ ratings of the “ease of use” of ER strategies were correlated with “frequency of use” (r = .38, p < .01). The two strategies rated easiest to use were: (1) “consciously telling yourself to relax/calm down”; and (2) “trying to think about what your child has done in a more positive way”. The two ER strategies that were judged least easy to use were: (1) “give up on what it is that you wanted them (your child) to do, and let them have their own way”; and (2) “trying to take control over the feelings of anger or frustration by trying to get it to stop, or not thinking about it, or trying to push it to the back of your mind” (see Table 4).

Combining the ER Strategies

The 14 anger regulation strategies were combined into the two constructs outlined in the process model of emotion (Gross, 1998a, 1999) – antecedent-focused ER and response-focused ER – for both frequency of use and ease of use. While frequency and ease of use ratings were substantially positively correlated for each of antecedent and response-focused ER (for the final subscales: r = .47 and r = .50, p < .001, respectively), they were still considered sufficiently conceptually distinct to be considered separately.

The original antecedent ER scale contained nine items – frequency of use α = .59, mean inter-item correlation (M-ICor) = .14; and ease of use α = .61, M-ICor = .15.
Table 4

Frequency and Ease of Use of Emotion Regulation Strategies

<table>
<thead>
<tr>
<th>ER Strategy (type of strategy)</th>
<th>Frequency of Use (Mean)</th>
<th>Frequency of Use (SD)</th>
<th>Ease of Use (Mean)</th>
<th>Ease of Use (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antecedent-Focused ER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>relax/calm down</td>
<td>5.38</td>
<td>1.45</td>
<td>4.71</td>
<td>1.53</td>
</tr>
<tr>
<td>think more positive</td>
<td>4.98</td>
<td>1.36</td>
<td>4.58</td>
<td>1.39</td>
</tr>
<tr>
<td>find humour</td>
<td>4.62</td>
<td>1.62</td>
<td>4.37</td>
<td>1.62</td>
</tr>
<tr>
<td>avoid such situations</td>
<td>4.37</td>
<td>1.76</td>
<td>4.24</td>
<td>1.74</td>
</tr>
<tr>
<td>talking to somebody</td>
<td>4.29</td>
<td>1.85</td>
<td>4.44</td>
<td>1.70</td>
</tr>
<tr>
<td>distract self</td>
<td>3.68</td>
<td>1.84</td>
<td>3.63</td>
<td>1.79</td>
</tr>
<tr>
<td>separate child/situation</td>
<td>3.63</td>
<td>1.74</td>
<td>4.37</td>
<td>1.68</td>
</tr>
<tr>
<td>control/stop thoughts</td>
<td>3.53</td>
<td>1.63</td>
<td>3.30</td>
<td>1.69</td>
</tr>
<tr>
<td>give up</td>
<td>2.10</td>
<td>1.39</td>
<td>3.29</td>
<td>2.22</td>
</tr>
<tr>
<td><strong>Response-Focused ER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hide feelings/neutral face</td>
<td>4.19</td>
<td>1.76</td>
<td>3.71</td>
<td>1.80</td>
</tr>
<tr>
<td>indirect verbal expression</td>
<td>3.86</td>
<td>1.76</td>
<td>4.17</td>
<td>1.87</td>
</tr>
<tr>
<td>indirect non-verbal expres.</td>
<td>3.61</td>
<td>1.75</td>
<td>4.44</td>
<td>1.76</td>
</tr>
<tr>
<td>express anger fully</td>
<td>3.43</td>
<td>1.87</td>
<td>4.04</td>
<td>2.22</td>
</tr>
<tr>
<td>show another emotion</td>
<td>3.17</td>
<td>1.71</td>
<td>3.37</td>
<td>1.80</td>
</tr>
<tr>
<td>release elsewhere</td>
<td>2.75</td>
<td>1.75</td>
<td>4.21</td>
<td>2.02</td>
</tr>
</tbody>
</table>

Total: $M = 3.84$  $SD = .72$  $M = 4.06$  $SD = .81$

**Note.**

i) Ratings of how often (i.e. frequency) they would use the ER strategy to control their anger, ranged from “almost never” (1) to “almost always” (7). Ratings of ease of use of the ER strategy, ranged from “not at all easy” (1) to “very easy” (7).

ii) ER strategies presented in order of mean frequency used.
However, given that two of the nine items ("separating yourself from your child and the situation" and "give up/let them have their own way") had a corrected item-total correlation of less than .20 for both scales, these two items were dropped from further analyses. Reliability analyses of the final antecedent ER scales (seven items) were as follows: frequency of use $\alpha = .62$, M-I-cor = .19 and ease of use $\alpha = .63$, M-I-cor = .20.

For the response ER scales (five items) the reliability findings were as follows: frequency of use $\alpha = .61$, M-I-cor = .24 and ease of use $\alpha = .63$, M-I-cor = .25.

Given these moderate internal reliability values for this process model it was deemed appropriate to conduct an exploratory principal components analysis on the 14 ER strategies for both frequency and ease of use to assess whether other, more stable and interpretable components, would emerge. In each case, four-factor solutions emerged having a small number of items and generally low Cronbach’s alphas. Therefore, it was considered justified to use the process model constructs (antecedent and response focused ER).

Comparisons Between Child Gender

Independent samples t-tests were employed to examine the hypothesis that men would utilize antecedent- and response-focused ER strategies more often, and with greater ease, with girls than boys. The four t-tests revealed one trend toward significance: participants required less effort to use antecedent-focused ER strategies (e.g., situation avoidance, attentional deployment) to limit their anger toward girls (with higher values indicating less effort) ($M = 4.32$, $SD = .96$) than boys ($M = 4.03$, $SD = .85$),
\( t(124) = -1.81, p = .07 \). No significant differences were found between child gender for either response-focused ER strategies or the frequency of use of antecedent-focused ER strategies.

**Research Question 3: Empathy and Anger Regulation**

To review, this question sought to explore whether men's dispositional empathy is related to the way in which they typically regulate negative emotion generally, and anger more specifically (i.e., their ER style). First, with regard to negative feelings in general, it was predicted that men with higher dispositional empathy would utilize more emotional control (Aggression/Benign Control) than men with lower empathy. Second, with respect to anger, it was expected that men with higher empathy would engage in greater anger control (Anger Control) and less anger expression (Anger Out) than lower empathy men. Third, it was anticipated that men with higher dispositional empathy would report using antecedent-focused ER strategies more often and with greater ease when angry toward a child.

Correlations were computed between the measures of dispositional empathy [Empathic Concern (EC) and Perspective Taking (PT) scales of the IRI] and the measure of negative emotion regulation style [Emotional Control Questionnaire(ECQ)] and the measure of anger regulation style [Anger Expression Scale(AX)] (see Table 5).

**Negative Emotion Control (ECQ Subscales)**

As hypothesized, the two empathy scales were positively related to aggression/benign control (both \( r's = .29, p < .001 \)). With respect to the other ECQ
Table 5

Correlation Matrix of Dispositional Empathy and Emotion/Anger Regulation Styles.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IRI</strong> (dispositional empathy)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. EC</td>
<td></td>
<td>.36**</td>
<td>.29**</td>
<td>-.08</td>
<td>-.01</td>
<td>.28*</td>
<td>.11</td>
<td>-.32**</td>
</tr>
<tr>
<td>2. PT</td>
<td></td>
<td></td>
<td>.29**</td>
<td>-.17*</td>
<td>-.03</td>
<td>.34**</td>
<td>-.13</td>
<td>-.22*</td>
</tr>
<tr>
<td><strong>ECQ</strong> (emotion regulation style)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Aggression/Benign Control</td>
<td></td>
<td>-.28*</td>
<td>.05</td>
<td>.41**</td>
<td>-.12</td>
<td>-.56**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Rehearsal</td>
<td></td>
<td>.22*</td>
<td>-.42**</td>
<td>.56**</td>
<td>.40**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Emotional Inhibition</td>
<td></td>
<td></td>
<td>-.05</td>
<td>.49**</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AX</strong> (anger regulation style)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Anger Control</td>
<td></td>
<td></td>
<td>-.20*</td>
<td>-.52**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Anger In</td>
<td></td>
<td></td>
<td></td>
<td>-.22*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Anger Out</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*  p < .05   **  p < .001,  + p = .06

**Note.** IRI = Interpersonal Reactivity Index, EC = empathetic concern, PT = perspective taking; ECQ = Emotional Control Questionnaire; AX = Anger Expression Scale.
subscales, the correlation between Perspective Taking and Rehearsal showed a trend to significance ($r = -.17, p = .06$). Dispositional empathy was unrelated to emotional inhibition.

**Anger Control (AX subscales)**

As expected, both the Empathic Concern and Perspective Taking subscales were positively correlated with Anger Control (i.e., the tendency to control or repress one’s feelings, preventing the experience of anger) ($r = .28$ and $r = .34$, $p < .001$, respectively). With respect to the other AX subscales, Empathic Concern and Perspective Taking were negatively correlated with Anger Out (i.e., the tendency to fully express one’s angry feelings) ($r = -.31$, $p < .01$ and $r = -.22$, $p < .01$, respectively). Anger In – the tendency to suppress one’s expression of angry feelings – was not related to empathy in the zero-order correlations.

**ER strategies**

Correlations were computed between the Empathic Concern (EC) and Perspective Taking (PT) scales of the IRI, and the two antecedent-focused ER scales (for frequency and ease of use). Only one of the four $r$-values was significant, and this was in the direction predicted: PT was positively correlated with ease of using antecedent-focused ER strategies ($r = .23$, $p < .01$). In addition, a trend of a negative relation was shown between EC and the ease of using response-focused ER strategies ($r = -.16$, $p = .07$).
Research Question 4: Empathy, State Anger Regulation, and Gender of Target Child

To review, this research question sought to assess whether dispositional empathy and child gender influence the extent to which men would regulate anger in specific situations, or state ER, as well as the type of ER strategy they use.

It was anticipated that men who imagined themselves as the father of an anger-eliciting daughter, would report more control over, and find it easier to suppress, their state anger, than those with a son. These gender differences were anticipated to be smaller for high-empathy men than low-empathy men. Also, it was hypothesized that participants would report finding it easier to use antecedent-focused and response-focused ER strategies when responding to an anger-eliciting daughter than to a son. Again, it was anticipated that there would be less differentiation across child gender for men with higher empathy.

Summary of Emotional Responses to the Vignettes

Participants' anger ratings for the first vignette (a child not picking up her/his toys despite being asked to do so by the father) and second vignette (a child repeatedly interrupting her/his father on the phone when the father is talking to a business associate) were compared for each of the five questions: (1) intensity of feelings of anger, (2) control over anger, (3) duration of anger, (4) expression of anger, and (5) effort needed to not express feelings of anger. Correlation coefficients were calculated between the vignettes for each of the five questions in order to assess whether responses could be averaged across vignettes for each participant. Significant correlations emerged in all cases, with $r$-values ranging from 0.42 to 0.60 (all $p$'s < .001). Therefore, it was
considered justifiable to average each of the five responses across the two vignettes for each participant (see Table 6).

In terms of the three questions related to the hypotheses (i.e., degree of control over anger, how much anger would be expressed, and how much effort it would take not to express feeling of anger) participants reported a moderately high sense of control over their feelings of anger, expressing only about half of their feelings of anger, and making a moderate amount of effort to not express their feelings of anger.

Preliminary analysis 1: Assessing Child Gender Manipulation and Group Equivalencies

Prior to the regression analyses, aspects of the manipulation of child gender for the vignettes were considered first. In terms the effect of the manipulation, when participants were asked how clearly and vividly they were able to picture themselves as the father of a six-year-old son/daughter, they gave a mean rating of 5.31 (SD = 1.19), on a scale ranging from “not well” (1) to “very well” (7). The majority of qualitative responses contained gender-specific nouns and pronouns (“daughter”, “son”, “she”, “he”), suggesting a substantial degree of gender awareness. As well, an exploratory correlational analysis was conducted between men’s vividness of imagining themselves as a father and dispositional empathy. Vividness was positively correlated with Perspective Taking (r = .26, p < .01) and showed a trend toward significance for empathetic concern (r = .17, p = .07).

In terms of group equivalency, the data were examined for group differences in personality measures (empathy, ER style) and background measures (affect intensity, temperament, and gender role conflict) between the two groups (i.e., those in the female
Table 6

**Anger Responses to the Two Vignettes**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>intensity of anger</td>
<td>4.50</td>
<td>(1.23)</td>
</tr>
<tr>
<td>control over anger</td>
<td>5.25</td>
<td>(1.10)</td>
</tr>
<tr>
<td>duration of anger</td>
<td>2.50</td>
<td>(1.13)</td>
</tr>
<tr>
<td>degree to which anger</td>
<td>4.19</td>
<td>(1.35)</td>
</tr>
<tr>
<td>anger expressed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>effort to not express</td>
<td>4.09</td>
<td>(1.58)</td>
</tr>
<tr>
<td>anger</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Assessed on a 1 to 7 point Likert scale with higher values indicating a feeling that is: (a) higher in intensity, (b) more under control, (c) longer in duration, (d) more fully expressed toward one’s child, and (e) more effort was made not to express (i.e., hide) one’s feelings.

*a* Measure of antecedent-focused ER  
*b* Measures of response-focused ER: i.e., the degree to which angry feelings were not expressed (lower scores indicating more suppression), and the amount of effort needed to not express anger (higher scores indicating more suppression).
child and male child conditions). One significant difference was found between the
groups: Perspective Taking was significantly higher, $t(124) = -2.11$, $p < .05$, for
participants in the girl condition ($M = 2.66$, $SD = .51$) than the boy condition ($M = 2.44$, $SD = .64$). However, this difference was no longer significant when the 12 fathers were excluded from the analysis, $t(112) = -1.50$, $ns$. In addition, for the entire sample, no significant differences were found between the gender conditions on the other aforementioned personality and background measures.

Also, the relation between the order of presentation of the study materials [i.e.,
variation in the order of (a) anger measures specific to child gender and (b) emotion
regulation questionnaires] and Perspective Taking was examined. Two independent t-
tests (for each type of order variation) conducted for Perspective Taking between the
gender conditions revealed no significant differences.

Thus, these results suggest a small group difference in terms of child gender-
specific manipulation onto the (non gender-specific) measures of empathy and ER style. However, it was expected that multiple regression analyses that entered child gender prior (i.e., statistically controlled) to dispositional empathy and empathy-gender interactions, would address this issue.

Preliminary Analyses II: Regression Diagnostics

All the variables were examined to ensure that the underlying statistical
assumptions were met prior to being subjected to multiple regression analyses. That is, variables were inspected for significant variations from normality using SPSS Explore and SPSS Regression in terms of skewness and kurtosis, as well as residuals and
influential outliers, as suggested by Pedhazur (1997). In addition, all predictor variables were assessed for collinearity. One variable, sociability, was negatively skewed more than the conservative limit of $p < .001$ ($z$-score of -3.29) suggested by Tabachnick and Fidell (1996). Therefore, a re-reflected square root transformation was performed, reducing the skewness to an acceptable level (skewness $z$-score of -1.43).

In addition, a decision was made to combine the two subscales of the Gender Role Conflict Scale that were substantially correlated ($r = .56$, $p < .001$): restricted emotionality (RE) and restricted affectionate behaviour between men (RABBMM).

**Hierarchical Multiple Regression Analyses**

To review, a series of five hierarchical multiple regression analyses (HMRA) were conducted in order to assess whether men’s empathy and child gender interact to predict the following criteria of interest: (1) control of state anger (assessed by, “How much control would you have over your feelings of anger toward you son/daughter?”); (2) expression of anger (assessed by, “How much would you show or express your feelings of anger toward your son/daughter?”); (3) ease of suppression of state anger (assessed by, “If you did not express all your feelings of anger, how much effort would it take you to not show them?”), (4) ease of using antecedent-focused ER strategies, and (5) ease of using response-focused ER strategies (both assessed by their respective subscales from research question two).

In each HMRA the predictor variables were entered in the following sequence. In the first step a series of personality measures that may reflect individual differences in the way men respond to anger-evoking circumstances were entered as statistical control
variables. These variables were: affect intensity (AIM); three adult temperament scales (ATQ: sociability, affective perceptual sensitivity, and attentional control), as well as the subscales of men's gender role rigidity (GRCS; success/power/competition, and restrictive emotionality subscale combined with restrictive affectionate behaviour between men). A correlation matrix between EC, PT, and the six control variables is given in Table 7. In the second step the gender of the hypothetical six-year-old child was entered. In the third step, the two empathy measures — empathetic concern and Perspective Taking — along with the interaction of each with child gender, were entered.

The interactions were assessed by regression analysis by transforming the categorical variable, child gender, into an orthogonally-coded vector (i.e., "-1" for a male, "1" for a female, child). Empathic Concern and Perspective Taking were also transformed by a method termed "centering" as recommend by Aiken and West (1991) and Pedhazur (1997) (i.e., each score was subtracted from the mean of that vector resulting in the same standard deviation but a mean of zero). Finally, two interaction vectors were calculated by multiplying each centered empathy vector by the centered gender vector.

**HMRA I: Predicting control over feelings of anger.** The final regression model for controlling feelings of state anger was significant, $F(11, 114) = 1.86, p = .05$ ($R = .40, p = .05$), with the predictors collectively accounting for 15% of the variance in the criterion scores (see Table 8). After step 1, the control variables — affect intensity, temperament, and the male gender role conflict — were found to significantly contribute to the variance in controlling anger ($R^2\text{ change} = .11, p < .05$). Of these, only sociability
Table 7

**Correlation Matrix of Dispositional Empathy and Control Variables Used in Multiple Regression Analyses**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IRI</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. EC</td>
<td></td>
<td>.36**</td>
<td></td>
<td>.28*</td>
<td>-.10</td>
<td>-.29**</td>
<td>-.20*</td>
<td>.42**</td>
</tr>
<tr>
<td>2. PT</td>
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<td>.14</td>
<td>-.37**</td>
<td>-.26*</td>
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<td>3. Sociability</td>
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<td>-.08</td>
<td>-.38**</td>
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<td>-.33**</td>
<td>-.36**</td>
<td>.32**</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5. Attentional Control</td>
<td></td>
<td></td>
<td>-.26*</td>
<td>-.24*</td>
<td>-.35**</td>
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<tr>
<td>6. Success, Power, Competition</td>
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<td></td>
<td></td>
<td>.44**</td>
<td>.07</td>
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<tr>
<td>7. Restrictive Emotionality / RABBMM</td>
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<td></td>
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<tr>
<td><strong>AIM</strong></td>
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<tr>
<td>8. Affect Intensity</td>
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<td></td>
</tr>
</tbody>
</table>

* p<.05  ** p<.001

**Note.** IRI = Interpersonal Reactivity Index, EC = empathetic concern, PT = perspective taking; ATQ-4 = Adult Temperament Questionnaire-Version IV; GRCS = Gender Role Conflict Scale, RABBMM = restrictive affectionate behaviour between men; AIM = Affect Intensity Measure.
Table 8

HMRA 1: Predicting (a sense of) Control over Anger (N=126)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta</th>
<th>r</th>
<th>(\text{sr}^2)</th>
<th>(R^2\text{change})</th>
<th>F-change</th>
</tr>
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<tbody>
<tr>
<td><strong>Step 1</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sociability</td>
<td>.20</td>
<td>.27</td>
<td>.03*</td>
<td></td>
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</tr>
<tr>
<td>APS</td>
<td>.09</td>
<td>.18</td>
<td>.01</td>
<td></td>
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</tr>
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<td>Attentional Control</td>
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<td>.07</td>
<td>.00</td>
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</tr>
<tr>
<td>Success/Power/Competition</td>
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<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RE / RABBM</td>
<td>-.09</td>
<td>-.24</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affect Intensity</td>
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<td>-.01</td>
<td>.00</td>
<td>.11</td>
<td>2.46*</td>
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<tr>
<td>Gender of Child</td>
<td>.09</td>
<td>.11</td>
<td>.01</td>
<td>.01</td>
<td>1.02</td>
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<td><strong>Step 3</strong></td>
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<tr>
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<td>.01</td>
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<tr>
<td>Perspective Taking (PT)</td>
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<td>.27</td>
<td>.03*</td>
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<td>.02</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT X Gender</td>
<td>.08</td>
<td>.00</td>
<td>.00</td>
<td>.03</td>
<td>1.14</td>
</tr>
</tbody>
</table>

\(R^2\) model = .15*, \(R\) model = .40, Adjusted \(R^2\) = .07, Overall F (11, 114) = 1.86*

* \(p<.05\), ** \(p<.01\), * \(p = .05\)

**Note.** RABBM = Restricted Affectionate Behaviour Between Men; RE = Restricted Emotionality; APS = Affective Perceptual Sensitivity
was found to make a unique contribution ($r^2 = .03$, $p < .05$). The addition of child
gender in the second step did not improve the prediction of anger control ($R^2$ change = 
.01, ns). After step 3, the empathy measures and their interactions with gender, did not
significantly contribute to the variance of the criterion ($R^2$ change = .03, ns). However,
Perspective Taking by itself was found to have a significant unique contribution to
predicting anger control ($r^2 = .03$, $p < .05$). That is, higher Perspective Taking was
associated with more control over angry feelings.

**HMRA II: Predicting the expression of anger.** As shown in Table 9, the final
regression model for anger expression was significant, $F (11, 114) = 2.22$, $p < .05$ ($R =$ .42, $p < .05$), with the predictors collectively accounting for 18% of its variance. After
step 1, the control variables – affect intensity, temperament, and male gender role
conflict – did not significantly contribute to the variance in expressing anger ($R^2$ change = 
.04, ns). The addition of child gender in the second step did significantly increase the
prediction of anger expression ($R^2$ change = .10, $p < .01$). That is, men who responded to a
boy expressed more anger than those who responded to a girl. After step three, EC, PT,
and their interactions with gender, did not significantly contribute to the variance of the
criterion ($R^2$ change = .03, ns).

**HMRA III: Predicting the effort to hide feelings of anger.** The overall regression
model for effort to hide feelings of anger was significant, $F (11, 110) = 1.97$, $p < .05$ ($r =$ .41, $p < .05$), with the predictors collectively accounting for 17% of the variance in the
criterion scores (see Table 10). The control variables – affect intensity, temperament,
and the male gender role conflict – did not contribute significantly to the variance in
Table 9

HMRA II: Predicting the Expression of Anger (N=126)

<table>
<thead>
<tr>
<th>Variable</th>
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<th>$r^2$</th>
<th>$R^2_{change}$</th>
<th>F-change</th>
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<tr>
<td>Sociability</td>
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<td>-.10</td>
<td>.01</td>
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</tr>
<tr>
<td>APS</td>
<td>-.12</td>
<td>-.07</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attentional Control</td>
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<td>-.12</td>
<td>.02</td>
<td></td>
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</tr>
<tr>
<td>Success/Power/Competition</td>
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<td>.01</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RE / RABBM</td>
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<td>-.01</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affect Intensity</td>
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<td>.07</td>
<td>.00</td>
<td>.04</td>
<td>.90</td>
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<td><strong>Step 2</strong></td>
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<tr>
<td>Gender of Child</td>
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<td>-.32</td>
<td>.10</td>
<td>.10</td>
<td>14.19**</td>
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<tr>
<td><strong>Step 3</strong></td>
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<td></td>
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<td>Empathetic Concern (EC)</td>
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<td>-.03</td>
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<td>-.11</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
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<td>PT X Gender</td>
<td>.08</td>
<td>-.12</td>
<td>.01</td>
<td>.03</td>
<td>1.04</td>
</tr>
</tbody>
</table>

$R^2$ model = .18*, $R$ model = .42, Adjusted $R^2 = .10$, Overall $F(11, 114) = 2.22*$

* p<.05, ** p<.01,

Note. RABBM = Restricted Affectionate Behaviour Between Men; RE = Restricted Emotionality; APS = Affective Perceptual Sensitivity
Table 10

**HMRA III: Predicting Effort of Hide Feelings of Anger (N=122)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta</th>
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<th>sr²</th>
<th>R² change</th>
<th>F-change</th>
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<td>-.12</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APS</td>
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<td>-.07</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attentional Control</td>
<td>-.09</td>
<td>-.15</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Success/Power/Competition</td>
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<td>.08</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RE / RABBM</td>
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<td>.02</td>
<td></td>
<td></td>
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<tr>
<td>Affect Intensity</td>
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<td>.01</td>
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<td>1.63</td>
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<td><strong>Step 2</strong></td>
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<td></td>
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<tr>
<td>Gender of Child</td>
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<td>-.24</td>
<td>.05 **</td>
<td>.06</td>
<td>7.23**</td>
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<td><strong>Step 3</strong></td>
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<td>.12</td>
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<td></td>
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<tr>
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<tr>
<td>EC X Gender</td>
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<td>.01</td>
<td></td>
<td></td>
</tr>
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<td>-.19</td>
<td>-.17</td>
<td>.03 *</td>
<td>.03</td>
<td>1.04</td>
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</table>

R² model = .17*, R² model = .41, Adjusted R² = .08, Overall F (11, 114) = 1.97*

*  p<.05,  **  p<.01,  *  p = .06 (marginally significant)

**Note.** RABBM = Restricted Affectionate Behaviour Between Men; RE = Restricted Emotionality; APS = Affective Perceptual Sensitivity.
effort to hide anger ($R^2$ change = .08, ns). The addition of child gender in the second step resulted in a significant increase ($R^2$ change = .06, $p < .01$). Less effort was required to hide angry feelings with girls than boys. After step 3, EC, PT, and their interactions with gender, did not significantly contribute to the variance of the criterion ($R^2$ change = .03, ns). However, the interaction between Perspective Taking and child gender made a marginally significant unique contribution – in a negative direction – to predicting an effort to hide anger ($sr^2 = .03, p = .06$). Even with the addition of variables in step 3, child gender still made a significant contribution to the prediction of effort to hide feelings of anger ($sr^2 = .04, p < .05$), accounting for 4% of the variance.

Post hoc analyses of the trend toward a significant interaction (Aiken and West, 1991) suggested that higher Perspective Taking predicted men’s ease in hiding their feelings but only for girls. The slope (B) of Perspective Taking for the boy group was .29 ($t = .80$, ns), while the slope of Perspective Taking for the girl group was -.81 ($t = -1.78$, $p = .07$).

HMRA IV and V: Predicting the ease of use of antecedent and response-focused ER strategies. The final regression models for both ease of using antecedent-focused ER strategies and response-focused ER strategies were not significant, $F (11, 114) = 1.20$ and $F (11, 114) = 1.40$, ns ($R = .32$ and $R = .35$, respectively). Exploratory HMRA conducted for the criteria, frequency of using antecedent-focused ER and frequency of using response-focused ER also revealed final regression models that were non-significant, $F (11, 114) = .80$ and $F (11, 114) = 1.23$, ns ($R = .27$ and $R = .33$, respectively).
Additional Analyses

In order to assess if the 12 fathers in the sample of 126 participants affected the results the major statistical analyses (i.e., those pertaining to research questions three and four) were conducted excluding the fathers.

For research question three a correlation analysis excluding the fathers resulted in no changes significant versus non-significant results when compared to the original analysis (as per Table 5). The one exception was that the negative relation between Perspective Taking and Anger Out became only a trend (r = -.16, p = .08).

For research question four (the hierarchical multiple regression analyses), no differences were found in the independent variables that significantly predicted, or did not significantly predict, the three criteria of interest in the main analyses (see Tables 8, 9, and 10).
DISCUSSION

The present study examined how men regulate or modify their anger when imagining themselves as the father of a 6-year-old child. The study assessed whether individual differences in dispositional empathy were associated with different amounts and types of emotion regulation. While this investigation focused on male undergraduates rather than actual fathers, it was reasoned that this simulation was an important first step in gaining an understanding of how fathers regulate their anger when interacting with their children.

To review, the four main research questions that were investigated in the current study were: (1) What types of children’s behaviours are most likely to elicit men’s anger, and do these anger responses differ as a function of child gender? (2) Which ER strategies do men employ most often and find the easiest to use when experiencing anger toward their child? (3) Are individual differences in men’s empathy related to their style (i.e., controlling, suppressing) of regulating negative feelings generally, and anger specifically, and their preferred ER strategies (i.e., antecedent-focused, response-focused)? (4) Do child gender and participant’s empathy interact to influence (a) the extent to which men regulate their state anger and (b) type of ER strategy they find easiest to use?

The implications of the findings of the present study for in the areas of emotion regulation, dispositional empathy, child gender, and the relations between these variables are examined in the discussion that follows. This discussion will include how the
findings of the present study integrate with past research, the limitations of the present study, and suggestions for future research.

Emotion Regulation

The Relation Between Emotion Regulation Strategies and Styles

This thesis introduced a new measure for ER types, ER strategies, based on Gross' (1998a, 1999) process model of emotion regulation. Of the twelve specific ER strategies, seven were grouped into the antecedent-focused strategy category and five grouped into the response-focused strategy category. In addition, separate scales assessing the frequency and ease of use of each type of strategy were compiled. The resulting four scales were then analyzed psychometrically. The levels of internal consistency for each measure were slightly lower than would be expected in a psychometrically sound measure. This lack of internal reliability may be in part attributable to the diverse nature of the strategies within each type category.

There was, however, empirical support for the construct validity of the new measures of antecedent- and response-focused ER strategies. The scales for both ER strategies were compared with two established measures of ER style (anger and negative emotion), a moderate amount of correlation being found in the predicted directions. Convergent validity was shown in that antecedent-focused ER correlated significantly with control ER style, and, for the most part, response-focused ER correlated significantly with a suppressive ER style. Discriminant validity was shown in that antecedent-focused ER was not related to suppressive ER style (with the exception of a negative correlation between ease of using antecedent ER and rehearsal ER style) and response-focused ER
was not related to control ER style (with the exception of a negative relation between ease of using response-focused ER and the control of negative emotion).

In sum, while there is evidence that the new scales assessing ER strategies are meaningful, they lack the internal reliability of the established ER style measures. This is consistent with the present study’s finding that there were fewer significant correlations between ER strategies and dispositional empathy than between ER style and dispositional empathy.

**Specific ER Strategies: Descriptive Information**

In addition to establishing psychometric properties of the ER strategy scales, useful descriptive information was obtained by examining men’s ratings of their frequency and ease of use of each individual ER strategy. Generally, antecedent-focused ER strategies were used more often and with greater ease than response-focused ER strategies. When feeling angry toward their (imagined) child, the three most frequently antecedent strategies were “relax/calm down”, “think more positively”, and “find humour”. The ER strategies men found easiest to use were similar, though “talking to somebody” was rated easier to use than finding humour.

For individual response-focused ER strategies, participants stated they would most often regulate their anger toward their (imagined) child by “hiding feelings/keeping face neutral” and “indirect verbal” and “indirect nonverbal” expression of anger (e.g., sigh, roll of the eyes). Interestingly, men indicated they would use these strategies more often than actually fully expressing their anger, suggesting an awareness that unbridled expression of anger is often not needed, or even adaptive, to communicate an adult’s
disapproval of their child’s behaviour. This is consistent with the parenting literature which shows most parents routinely inhibit their anger toward their children (Dix, 1991, 1992; Hakim-Larson et al., 1999). In addition, not surprisingly, in spite of the strategy of “hiding feelings/keeping face neutral” being used most frequently, it was not rated as easiest to use, as its purpose is to completely suppress one’s feelings, which takes considerable effort. While the complete suppression of anger may protect the target child from an uncontrolled angry outburst [possibly due to the parent’s empathy for the child that inhibits destructive expression of anger/loss of control (Feshbach, 1989)] the routine use of this type of strategy is likely not adaptive because parents often need to communicate some degree of corrective response when their child’s behavior is inappropriate (Dix, 1991).

**Emotion Regulation and Dispositional Empathy**

**Emotion Regulation Style and Dispositional Empathy**

The most robust finding of the current study was that individual differences in men’s dispositional empathy were associated with particular styles of ER, both for negative emotions generally, and anger specifically.

**Control ER Style and Empathy**

As predicted, men with higher levels of empathetic concern and perspective taking were found to regulate their feelings more frequently by means of control ER than did men with lower empathy. This relation was found for both the control of negative emotion and the control of anger. Such a relation was also observed for the situational control of anger (assessed with the vignettes), but for perspective taking only. While these findings are consistent with past research on regulation generally (i.e., attentional
and behavioural control: e.g., Eisenberg & Okun, 1996), this is a new finding in the sense that the relation between different types of ER styles has not previously been examined.

The positive correlation between perspective taking and control ER style is consistent with the view of perspective taking as a cognitive ability which enables one to adopt another person's psychological point of view thus directing one's attention (Davis, 1994; Eisenberg, Wentzel, et al., 1998). Perspective taking skills have been linked to early-stage or antecedent-focused ER strategies, particularly in relation to anger-eliciting circumstances (Davis, 1994). Given that a controlling style of ER is associated with the development of strategies to prevent and resolve the experience of anger and other negative emotions (Spielberger et al. 1995), perspective taking and a controlling style of ER appear to share a common element of emotional self-efficacy or competence. The other empathy component, empathetic concern, is also indicative of social, and hence, emotional competence (Davis & Oathout, 1987; Eisenberg & Fabes, 1992). This is consistent with the theory that empathic concern not only arises from perspective taking and but also motivates perspective taking (Davis, 1994). Thus, these two components of empathy are interdependent. This is supported by the present study which found that empathic concern and perspective taking were significantly correlated, consistent with prior research (e.g., Davis, 1983; Eisenberg & Okun, 1996).

The contention that empathy and a controlling style of ER are both related to emotional competence is consistent with the work of Saarni (1999). She asserts that both dispositional empathy and the capacity for the adaptive regulation of negative emotions – i.e., "being able to ameliorate the intensity or temporal durations of such emotional states" (Saarni, 1999, p. 18) – are important facets of an individual's emotional
competence and self-efficacy. Research has suggested that emotional and behavioural control are associated with emotional and social development in children (e.g., Eisenberg & Fabes, 1992; Thompson, 1994). Further, just as competence in the area of empathy improves with age, recent research with adults by Gross et al. (1997) found that control ER also increases with age, and that older adults, as compared to younger adults, are better able to use control ER to selectively dampen their negative emotions and enhance their positive emotions.

In terms of parenting, during parent-child conflict a high-empathy parent may be more likely to appraise their child’s difficult behaviours in a more complex and less judgmental fashion, and to pursue child-oriented goals (Dix, 1991, 1992). Parenting goals which are empathetic in nature (i.e., child-focused) are more likely to result in a parent having a more benign interpretation of their child’s undesirable behaviour (e.g., more situational and less dispositional) and facilitate a parent developing diverse and effective responses to handle their child’s wants and needs (Dix, 1991).

With regard to the present study, it is reasonable to infer that dispositional empathy, by engaging child-directed goals, is related to a parent both using and developing a controlling style of ER. This is consistent with the theory that empathy influences (i.e., reduces) anger through both the cognitive (PT) and affective (EC) channels (Davis, 1994). Having control over one’s negative emotions tends to prevent personal distress, so that the parent has less reason to focus on the self, and can therefore focus on the needs of the child (Eisenberg, Cumberland, & Spinrad, 1998). In contrast, parents who report experiencing high degrees of negative stress are more likely to focus
on the self (anger being a self-focused emotion) and are therefore more likely to use authoritarian and inflexible responses to parent-child conflict (Dix, 1992).

**Suppressive ER Style and Empathy**

The current study’s exploratory examination of empathy and suppressive ER style revealed no significant correlations between these two variables. That is, men higher in dispositional empathy did not report using a suppressive style of ER (both for negative emotions generally and anger specifically) more or less often than lower empathy men. There was one trend toward a negative relation; between perspective taking and rehearsal (a type of suppressive ER style).

Although null findings are susceptible to divergent explanations, one possibility is that given higher empathy men are more likely to experience their anger and negative emotions with greater intensity (see Table 7) and thus need to engage in greater ER. However, as discussed in the previous section, their regulation of emotions appears to be accomplished by largely using a controlling style of ER. Therefore, in terms of a process model of ER, by the end of the process (i.e., when anger is aroused and suppressive ER style would be needed) higher empathy men’s emotional intensity would be equivalent to that of lower empathy men. Thus, both high and low empathy men would use a suppressive ER style to the same extent.

Studies have found that is a cognitive skill that is closely related to ER generally, whereas empathic concern has been inconsistent in its correlation to ER generally (e.g., Eisenberg, Wentzel, & Harris, 1998). The fact that ER has not previously been separated into control and suppressive styles means that the current finding, namely that there is a correlation between empathic concern and a controlling ER style but not between and
suppressive ER style, is a new finding, and important in terms of underscoring the relevance of viewing empathy as a multidimensional construct. Although it may be the case that empathy and a suppressive style of ER are not related, one might have expected high perspective taking individuals to use suppression less, as the ability to take another’s perspective should dampen the intensity of the anger and negative emotion before the emotions develop. The one trend that was observed – a negative relation between perspective taking and a suppressive style of ER for negative emotion (i.e., Rehearsal subscale of the ECQ) – was consistent with this speculation. That is, this trend supports the view that perspective taking is a cognitive skill or tendency that relates to the early-stage, or antecedent-focused ER strategies (Davis, 1994; Eisenberg & Okun, 1996).

A second, speculative explanation for a negative relation between perspective taking and a suppressive style of ER is based on research assessing memory and the regulation of emotion. Richards and Gross (2000) found that individuals who typically use suppression to regulate their negative feelings experience an impairment of cognitive resources and thus remember fewer past events in their lives. This finding is consistent with the ego-depletion model of self-regulation (e.g., Muraven & Baumeister, 2000) which postulates that suppressive ER requires attention through continual self-monitoring and ongoing corrective action during the emotional episode. Thus, if cognitive resources are run-down, perspective taking necessarily suffers. This would not necessarily be the case for EC, which is an affective process. Thus, the trend toward a negative correlation between suppressive ER style and perspective taking does not necessarily imply a similar correlation between suppressive ER style and EC. However, given this relation is
speculative, future research is warranted to further assess the possible relation between PT, EC, and a suppressive style of ER.

**Anger Expression and Empathy**

Consistent with past literature (Davis, 1994), the tendency to express one’s feelings when angry was negatively associated with dispositional empathy. The findings related to empathy were as expected: Individuals with greater dispositional empathy are more aware of the possible harmful consequences of expressing their anger toward the person at which it is targeted. Specific to parenting, as Dix (1991, 1992) notes, more empathetic parents not only have more control over their experience of anger, but their greater sense of control (and the consequent dampening of self-focused motives and strong anger) allows them to better choose how and when they express their anger feelings toward their child. That is, the motives to correct, teach, and support a child (e.g., to teach the child appropriate behaviour) are less likely to be overpowered by more short-term, strong self-focused motives (e.g., to stop a noise the child is making) (Dix, 1991).

**Emotion Regulation Strategies and Dispositional Empathy**

The present study also assessed whether men with higher dispositional empathy would report using a particular type of ER strategy (i.e., antecedent- or response-focused) more often and with greater ease when angry toward a child. As predicted, the ease of use of antecedent-focused ER was moderately related to PT, but contrary to the prediction, it was not related to EC. An exploration of the relation between response-focused ER and empathy showed one trend toward a significant correlation: Ease of use of response-focused ER was negatively related to EC. The frequency of use of both types
of ER strategies were not related to either element of empathy. The lack of significant findings may be related to the relatively weak psychometrics of the ER strategy scales, as discussed earlier.

However, the first significant finding – that dispositional perspective taking and ease of using antecedent-focused ER – is consistent with past literature that has established that the cognitive tendency to take another’s perspective is linked to aspects of antecedent-focused ER such as attentional control (Davis, 1994; Eisenberg & Okun, 1996). In addition, previous research on situational empathy suggests that perspective taking often has an inhibitory effect upon an individual becoming angry and acting aggressively, but only if perspective taking is activated prior to, or in the early stage of, a provoking episode (Richardson et al., 1994; Zillmann, 1988), or if the level of arousal/provocation is not very high (Richardson et al., 1994). Other data (Davis, 1994) supports this: Men higher in dispositional perspective taking had lower levels of hostility. Davis also found that empathic concern was unrelated to hostility, which is consistent with the view that inhibition of anger must occur early on, and that perspective taking occurs before empathic concern, which, being an affective element, can be viewed as contemporaneous with the arousal of anger. Dix (1992) has proposed that a parent who is already very angry at a child will not be open to an empathetic response, as anger is a self-oriented emotion.

The other significant finding (trend only) was that dispositional empathic concern was negatively correlated with the ease of using response-focused ER strategies. This analysis was exploratory, therefore an interpretation of this result is speculative. However, it is noteworthy that this is the only finding in which empathic concern had a
significant correlation while perspective taking did not. One plausible explanation is that since empathic concern is highly positively correlated with dispositional affect intensity (see Table 7), men higher in empathic concern may have had more anger to regulate, thus found it more difficult to use response-focused ER. Although no significant correlation was found between empathic concern and the intensity of anger reported in response to the vignettes, this finding likely reflects post-regulated anger levels, empathic concern being positively related to a controlling style of ER. Recall that in the aforementioned analyses of ER styles, one type of a suppressive style of ER (rehearsal of negative emotion) was found to be negatively correlated with PT, and not EC. Thus, contrasting these two findings suggests how and empathic concern differ: Consistent with previous theory and research (e.g. Davis, 1983, 1994), perspective taking is part of a cognitive process, whereas empathic concern is reflective of an affective process.

Emotion Regulation, Dispositional Empathy, and Child Gender

In addition to assessing how the regulation of emotion differs based on men’s dispositional empathy, the present study also explored how the gender of the child may influence men’s anger and ER responses. Also studied was whether child gender and men’s dispositional empathy interact to predict ER style and strategy.

Child Gender and ER Styles and Strategies

Child Gender and Participants’ Anger Intensity

Of the fourteen anger-eliciting circumstances studied, only the three concerned with personality deficiencies (“slow and dawdles”, “forgetting/repeatedly being asked for something to be done”) and immaturity (“whining/showing babyish behaviour”) evoked a different level of anger in men by child gender; men experienced more anger when these
were displayed by a boy than by a girl. This finding is consistent with past research that suggests that parents, particularly fathers, often expect more instrumental competence and self-control from their sons than their daughters (Eccles, Jacobs, & Harold, 1990).

**Child Gender and ER Strategies**

The current study, as hypothesized, showed a trend toward participants finding it easier to use antecedent-focused ER strategies with girls than with boys. However, contrary to expectations, there were no gender differences in the ease of use of response-focused ER strategies, or in the frequency of use of antecedent- or response-focused ER strategies. It had been expected that men would find it easier to use both types of ER strategies with girls given that previous research has found that fathers tend to report that they experience more anger (Hakim-Larson et al., 1999) and report expressing more anger (Garner, Robertson, & Smith, 1997) toward their sons than their daughters. More frequent use of antecedent-focused ER should mean that anger is experienced less often, and more frequent use of response-focused ER should mean that anger is expressed less often.

One possible explanation for the finding that men found it easier to use antecedent-focused ER strategies with girls than boys, is outlined below. The present study revealed that men express and experience more intense anger toward a boy than a girl; thus, they would find it more difficult to engage in antecedent-focused ER strategies (which are constructive and other-focused) with boys due to their self-orientating experience of anger. However, given that men are more comfortable expressing their feelings of anger toward boys than girls (Sanson & Rothbart, 1995), it should follow that they would find it more difficult to suppress their expression of this anger toward their
(imagined) sons than their daughters. This, however, was not supported in the current study, where no gender difference in difficulty of use of response-focused ER strategies was found. This null finding may be due to the low internal reliability of the ER strategy measures.

**Child Gender and Situational ER**

In response to the anger-arousing vignettes, men indicated that they would express more anger toward boys than girls. They also noted that they would need more effort to hide (a type of suppressive ER) their anger with boys than with girls. These findings are consistent with the observations of the previous section, which related that men report experiencing and expressing more anger toward boys than girls. Situational ER control was not related to child gender. Although this latter null result was situation-specific, it suggests further support for the contention that a controlling style of ER precedes and precludes full emotional arousal; i.e., a controlling ER style precedes the anger intensity differences related to the gender of the target child.

The present study's finding that men must use greater effort to achieve anger suppression for boys than for girls suggests that a suppressive ER style may have more negative consequences for fathers' attitude toward, and relationship with, boys than for girls. Previous research with parents suggests that an excessive use of suppression (which in the vignettes was assessed by effort to hiding angry feelings) is an ineffective ER style for anger, particularly toward boys. That is, fathers' use of anger suppression was related to their children developing emotional and behavioural problems (both greater externalizing and internalizing difficulties), and this relation was stronger for boys (Kerig, 1996; Renk, Phares, & Epps, 1999). One possible explanation for these findings is that
men who routinely use a suppressive style of ER tend to retain higher chronic levels of anger, and this suppressive style likely effects their ability to express positive emotions as well. In addition, the fact that men find it more difficult to suppress their anger toward boys is consistent with the present study’s finding that men experience more intense anger toward boys than girls given the same circumstance.

The Interaction of Child Gender and Dispositional Empathy in Predicting ER

In the present study there was little support for the expectation that child gender and empathy would interact to predict ER. In the single instance where it did occur (as a trend only) it was not in the expected direction.

The expected result, that men with higher empathy would show less gender-discrimination in ER style and strategy, was based on studies showing that individuals with higher dispositional empathy showed less rigid gender-role distinctions (Brody, 1999; Davis, 1994). This is supported in the present study by the finding that empathy was negatively correlated with both subscales of the gender role conflict scale (see Table 7), which measures an overly rigid view of masculinity (e.g., an excessive focus on attaining power and success).

To review, main effects of child gender were observed and these were in the predicted direction: Men reported that they were more likely to express anger toward boys, and indicated more effort to hide anger from boys than girls. These gender effects were not, however, qualified by dispositional empathy, as evidenced by the absence of any significant interactions between child gender and empathy when predicting anger regulation.
Even though null findings are susceptible to disparate explanations, one explanation appears to be the most plausible for the present study. Dispositional empathy may not have been related to the criterion measures of situational ER (i.e., responses to the parenting vignettes: anger control, anger expression, and effort to hide anger) due to the nature of the measures used for empathy and ER in the current study. That is, empathy was assessed as a global index of dispositional empathy, the Interpersonal Reactivity Questionnaire (Davis, 1983), whereas the criterion ER measures were based on two situation-specific parenting scenarios. Therefore, specific parenting responses could be better predicted by using a more narrow measure of empathy that is specific to empathizing with a child. Also, in the present study the majority of participants were not parents and thus may not have (yet) developed the type of elaborate schema for understanding children that parents usually possess (Dix, 1991).

Although it may be the case that dispositional empathy and child gender did not interact to predict situational anger regulation, one might have expected that higher empathy men would regulate their anger more similarly between boys and girls than lower empathy men, considering that past research suggests that individuals higher in dispositional empathy have fewer rigid gender role distinctions (Brody, 1999; Davis, 1994). However, the one trend toward a significant interaction that was observed – that higher perspective taking predicted men’s effort to hide their anger, but only for girls, not boys – was contrary to this expectation. One speculation for this trend is that higher perspective taking men may be more sensitive (i.e., able to take the perspective) of the need to prepare children for the gender role requirements that society prescribes. Brody (1999) relates the finding that parents generally pay more attention to boys’ negative
behaviours, but also encourage greater achievement, independence, control and cognitive mastery in boys than girls. Such findings, as applied to fathers, suggest a greater tendency to judge and place expectations on the behaviour of a son as opposed to a daughter. Fathers, in identifying with their son, apply their own standards and expectations in terms of what they perceive as necessary for their son’s socialization. Thus, higher empathy men may differentiate more in the degree to which they hide their anger toward a daughter or a son, gauging appropriateness on gender-specific socialization requirements (Brody, 1999). This explanation would be consistent with research showing that fathers with greater empathy showed a bias toward more long-term socialization goals with their children, whereas mothers with greater empathy were found to focus more on goals that were short-term and child happiness and family cohesiveness (i.e., relationship-centered goals) (Hastings & Grusec, 1998).

Limitations and Future Research Implications

Although several significant relations between emotion regulation, dispositional empathy, and child gender were found in the present research, it is important to state some of the study’s methodological limitations.

For a variety of logistical reasons, including the difficulty of recruiting fathers, the participants used in this study were male undergraduates who imagined themselves in a fathering role. Out of the 126 participants, only 12 were fathers. Thus, the results of this study likely only approximate how actual fathers would respond in real-life situations. Involved fathers typically develop an elaborate schema for understanding their children (Dix, 1991; 1992). However, in the present study the type of simulation used may tend to assess how men expect or believe, and in some cases hope, they would respond as a
father, usually without very much experience to anchor these mental ideas in reality. The possibility also exists for an effect due to a social desirability bias. However, the fact that three-quarters of the participants who were not fathers did indicate some experience interacting with children, and more than one-half indicated being experienced in caring for children, does give a limited basis for believing that the participants' imaginings to have some relation with how they would respond in real life. Also, some additional support is suggested by the fact that the removal of the 12 fathers from statistical analyses did not result in different findings from when they were included in the analyses. However, it is important the results of the current study be validated by conducting future research which assesses how actual fathers regulate their emotions with their children in real-world contexts.

Like any self-report measures, those used in the current study had limitations. Kazdin (1998) states that the two general categories of problems with self-report inventories are (a) biases on the part of the participants and (b) lack of evidence that the measure assesses the construct of interest. In terms of the former, some participants' responses may, as mentioned, have been influenced by individual conceptions of social desirability, leading them to report use of ER strategies they perceive as more socially acceptable. To minimize the possible effects of such distortions, participants completed the measures under conditions of anonymity and confidentiality.

In terms of construct validity, even established questionnaires such as the Emotion Control Questionnaire (ECQ) and the Anger Expression Scale (AX) may not always be as ecologically valid as would be expected. A recent study by Boddeker and Stemmler (2000) suggests that the AX subscales that assess styles of regulating anger may not
always predict anger responses in everyday life (as measured by physiology, experience, and behaviour) from anger-provoking situations in a laboratory. Also, the measure of dispositional empathy used in the present study – the Interpersonal Reactivity Index (Davis, 1983) – is a global indicator of a person’s tendency to engage in perspective taking and experience empathic emotion. As such, it likely does not capture the contextual factors that influence empathy in particular situations. Further, this measure does not distinguish between perspective taking which is motivated by benevolent intentions towards another person, versus perspective taking which is more self-serving in nature (e.g., manipulation).

In addition to established measures, the present study used new, unestablished measures: the ER strategy scales and the ER response styles to vignettes. These new measures were considered to be justified based on face validity and content validity without any prior formal psychometric evaluation. Although this is common practice in psychological research, this does create some uncertainty as to their construct validity.

On a more general level, the characteristics of the sample limit the generalizability of the study’s findings to a wider population. All participants were university students, and most were young men of European origin. It is possible that the relations between the variables that were studied take a slightly different form within the general population.

In spite of the fact that the current study contains the above methodological limitations, the significant relations observed between dispositional empathy, type of emotion regulation, and child gender can be used to inform future research. In particular, this study lends support to the view that researchers need to assess ER as a
multidimensional construct as Gross (1998a) and others (e.g., Eisenberg, Fabes, Guthrie, & Reiser, 2000; Garnefski, Kraaij, & Spinhoven, 2001) have suggested.

Future investigations could further develop and refine the ER strategy scales used in the present study. This measure could be used to inform research into the degree to which ER strategies or styles are adaptive for parents when interacting with their children in particular types of situations. As Gross (1998b) notes, no one strategy of ER is likely to be uniformly superior to all others across all contexts. Another direction for future research is to assess whether parents' particular ER styles are associated with experiencing and expressing positive emotions toward their children (e.g., pride, forgiveness) in daily parent-child interactions.

Future research could also assess the relation between dispositional empathy and an optimal ER style. Recent research by Eisenberg et al. (2000) has addressed the question of emotionally optimal regulation versus under-controlled and highly inhibited ER styles. They propose that optimally-regulated individuals are moderately high in both antecedent- and response-focused regulation, and are flexible in their use of ER in general (i.e., their inhibitory mechanisms are voluntarily and adapted to the particular circumstance). This optimal ER style has been linked to high social competence (Eisenberg, et al., 2000). Since previous research has found that dispositional empathy is positively associated with quality of social functioning (Eisenberg, Wentzel, & Harris, 1998), individuals with higher empathy may be more likely to use an "optimal" ER style.

Conclusions

Support for the usefulness of Gross' process model (1998a, 1999) of emotion regulation was at least partially established by the findings of the present study. This
suggests the utility of this model for better understanding how emotions are generated, controlled, and prevented.

Participants' dispositional empathy was found to correlate with the preferred way in which they regulate their negative emotion and anger, as predicted. Specifically, men with higher empathy typically used a controlling style of ER more frequently than lower empathy men. Men higher in perspective taking found it easier to use antecedent-focused ER strategies; cognitive processes and actions that modify an emotion or reduce its intensity. In contrast, response-focused ER strategies and a suppressive ER style were not related to dispositional empathy.

As predicted, men reported greater ease in using antecedent-focused ER strategies, and expressed their anger less, with a daughter than a son. Only one interaction between empathy (perspective taking) and child gender was found when predicting ER style or strategy: Men with higher levels of perspective taking found it easier to suppress their angry feelings, but only toward girls.

While the participants in the present study were not (for the most part) fathers, the findings represent an important first step in better understanding the role of fathers' dispositional empathy in effectively regulating negative affect and anger toward their children. The finding that empathy appears to play a vital role in effective parenting is consistent with past research, which has found that fathers' empathy levels are associated with long-term positive developmental outcomes for their children (e.g., Dix, 1991, Eisenberg et. al, 1998).
REFERENCES


APPENDIX A

Background Information Form

Please complete the following four sections regarding your background. Please keep in mind this information, like all information collected for this study, is strictly confidential.

Part One:

➤ Your age:  ➤ Number of years in university completed:
    ➤ Major:

➤ Marital Status:  □ single  □ married  □ common-law (> 6 months living together)
    □ separated  □ divorced  □ spouse deceased

➤ Do you have any children/step-children?
➤ If so please give the age and gender of each:

➤ Number of siblings/their gender:
➤ Your birth order (e.g., 1\textsuperscript{st} = oldest):

➤ Your country of birth:
➤ What cultural group do you most closely identify with? (check one)
    □ Canadian  □ African-Canadian (e.g., Nigerian, Somali)
    □ Aboriginal  □ Middle Eastern (e.g., Egyptian, Israeli)
    □ Eastern European (e.g., Polish, Russian)  □ East Asian (e.g., Chinese, Korean)
    □ Northern European (e.g., English, French)  □ South Asian (e.g., Indian, Pakistani)
    □ Southern European (e.g., Greek, Italian)  □ South/Central American (e.g., Brazilian)
    □ Carribean (e.g., Jamaican, Cuban)

➤ Your current living arrangements:
    □ with parents  □ with mother only  □ with father only  □ on your own
    □ with extended/adopted family  □ with roommate(s)  □ in residence

➤ Your permanent residence:
    □ with parents  □ with mother only  □ with father only
    □ with roommate(s)  □ on your own  □ with extended/adopted family

➤ Your reason(s) for participating in the current study:
    □ course credit  □ interested/curious
    □ lottery  □ to help out the researcher
Part Two:
Please rate each of the following questions on a 7-point scale (circle one).

a) Do you want to be a parent some day?
   
   not at all   1  2  3  4  5  6  very much  7

b) How much do you enjoy spending time with children?
   
   not at all   1  2  3  4  5  6  very much  7

c) How much experience have you had interacting with children? (e.g., siblings, cousins, coaching, etc.).
   
   not experienced   1  2  3  4  5  6  very experienced  7

d) How much experience do you have caring for young children? (e.g., babysitting).
   
   not experienced   1  2  3  4  5  6  very experienced  7

Part Three:

➤ As a child, were you raised by:
   □ both your parents   □ your father alone   □ other family member(s) (please specify)
   □ step/foster parent(s) □ your mother alone

➤ Please read each statement below and rate how accurately each applies to your parent(s)' [or other primary care-giver(s)] behaviour with you when you were a child.

1a). My mother felt that a child should be given comfort and understanding when he is scared or upset.
   
   does not describe   1  2  3  4  5 describes my
   my parent well   6  7

1b). My father felt that a child should be given comfort and understanding when he is scared or upset.
   
   does not describe   1  2  3  4  5 describes my
   my parent well   6  7
(Part Three - continued)

2a). My mother expressed affection by hugging, kissing, and holding my hand.

<table>
<thead>
<tr>
<th>does not describe my parent well</th>
<th>describes my parent well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

2b). My father expressed affection by hugging, kissing, and holding my hand.

<table>
<thead>
<tr>
<th>does not describe my parent well</th>
<th>describes my parent well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

3a). My mother was easy going and relaxed with me when I was a child.

<table>
<thead>
<tr>
<th>does not describe my parent well</th>
<th>describes my parent well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

3b). My father was easy going and relaxed with me when I was a child.

<table>
<thead>
<tr>
<th>does not describe my parent well</th>
<th>describes my parent well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

4a). My mother would often joke and play with me.

<table>
<thead>
<tr>
<th>does not describe my parent well</th>
<th>describes my parent well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

4b). My father would often joke and play with me.

<table>
<thead>
<tr>
<th>does not describe my parent well</th>
<th>describes my parent well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
(Part Three - continued)

5a). My mother and I had many warm and intimate times together when I was a child.

<table>
<thead>
<tr>
<th>does not describe my parent well</th>
<th>describes my parent well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

5b). My father and I had many warm and intimate times together when I was a child.

<table>
<thead>
<tr>
<th>does not describe my parent well</th>
<th>describes my parent well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

6a). When my mother was angry with me she let me know it.

<table>
<thead>
<tr>
<th>does not describe my parent well</th>
<th>describes my parent well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

6b). When my father was angry with me he let me know it.

<table>
<thead>
<tr>
<th>does not describe my parent well</th>
<th>describes my parent well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Part Four:

▶ Please rate the parenting style that would best describe your parent(s) [or care-giver(s)] as you were growing up by circling the appropriate number.

<table>
<thead>
<tr>
<th>restrictive</th>
<th>permissive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother:</td>
<td>1 — 2 — 3 — 4 — 5 — 6 — 7</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>restrictive</th>
<th>permissive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father:</td>
<td>1 — 2 — 3 — 4 — 5 — 6 — 7</td>
</tr>
</tbody>
</table>
(Part Four - continued)

➤ Please rate the parenting style that would best describe your parent(s) [or care-giver(s)] as you were growing up by circling the appropriate number.

<table>
<thead>
<tr>
<th></th>
<th>warm</th>
<th>hostile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mother:</strong></td>
<td>1 —— 2 —— 3 —— 4 —— 5 —— 6 —— 7</td>
<td></td>
</tr>
<tr>
<td><strong>Father:</strong></td>
<td>1 —— 2 —— 3 —— 4 —— 5 —— 6 —— 7</td>
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<table>
<thead>
<tr>
<th></th>
<th>responsive</th>
<th>unresponsive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mother:</strong></td>
<td>1 —— 2 —— 3 —— 4 —— 5 —— 6 —— 7</td>
<td></td>
</tr>
<tr>
<td><strong>Father:</strong></td>
<td>1 —— 2 —— 3 —— 4 —— 5 —— 6 —— 7</td>
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<table>
<thead>
<tr>
<th></th>
<th>demanding</th>
<th>undemanding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mother:</strong></td>
<td>1 —— 2 —— 3 —— 4 —— 5 —— 6 —— 7</td>
<td></td>
</tr>
<tr>
<td><strong>Father:</strong></td>
<td>1 —— 2 —— 3 —— 4 —— 5 —— 6 —— 7</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B

Anger-Eliciting Situations

**Directions:** The following is a list of some of the things that parents tell us commonly get them upset or annoyed with their children. Please imagine yourself as a father of a six-year old (girl/boy). Read each of the 14 situations below, and rate how angry it would make you feel if you had a child who behaved that way using the following 7-point scale ranging from 1 (not at all angry) to 7 (very angry).

<table>
<thead>
<tr>
<th>not at all angry</th>
<th>somewhat angry</th>
<th>very angry</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

**Rating (please circle one)**

**Child’s behaviour:**

- disobedient.
- is slow and dawdles.
- forgetting to do what is asked or needed; or repeatedly having to ask for something to be done.
- breaking, losing or not taking care of possessions.
- showing a lack of respect for parents, such as talking back or being rude.
- showing a lack of respect for other people, such as talking or being rude.
- not listening.
- being uncooperative.
- trying to get around you, or being manipulative while trying to get their own way.
- misbehaving or purposely doing things she/he knows are wrong.
- attention-seeking.
- whines/shows babyish behaviour.
- fidgeting or not being able to sit still.
- fighting with siblings, or with friends.

►From the list above, circle the two circumstances that would make you feel most angry. Why do you think these two types of behaviour would make you angry?
APPENDIX C

Emotion Regulation Strategies

Instructions: It seems that parents often feel that they should be trying to control their anger toward their child. There are a number of different ways that they could go about doing that. Imagine how you might control your anger if you were the father of a 6-year-old (girl/boy). Below is a list of 15 things that parents have told us that they sometimes do. Please rate each strategy using the following two questions for each.

1) If you were a father feeling angry at your child, how often would you try to do this to control your anger?

<table>
<thead>
<tr>
<th>almost never</th>
<th>sometimes</th>
<th>almost always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

2) How easy do you think this strategy would be in terms of helping you control your anger to a level that you were more comfortable with? (scale: 1 = not at all to 7 = very)

<table>
<thead>
<tr>
<th>not at all easy</th>
<th>somewhat easy</th>
<th>very easy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

How often easy use? Strategy to Deal With the Child’s Anger

(input emotion regulation)

<p>| Trying to avoid situations that you know are going to lead to you getting annoyed with you child. |
| Separating yourself from your child and the situation which caused you to angry or frustrated with him/her (e.g. leaving them on their own or with somebody else to care for them), OR removing him/her from the situation which has caused you to be annoyed or frustrated (e.g., sending him/her to their room). |
| Trying to distract yourself by thinking about something else other than your anger or frustration. |
| Reduce future feelings of anger toward your child by talking to somebody else about past situations with your child that made you angry. |</p>
<table>
<thead>
<tr>
<th>How often</th>
<th>Strategy to Deal With the Child’s Anger</th>
</tr>
</thead>
<tbody>
<tr>
<td>easy use?</td>
<td>(1-7)</td>
</tr>
<tr>
<td>to use?</td>
<td>(1-7)</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trying to think about what your child had said or done in a <strong>more positive</strong> way (e.g., find something good in the situation)</td>
</tr>
<tr>
<td></td>
<td>Trying to find humour in the situation that made you feel angry.</td>
</tr>
<tr>
<td></td>
<td><strong>Give up</strong> on what it is that you wanted them to do, and let them have their own way.</td>
</tr>
<tr>
<td></td>
<td>Trying to <strong>take control</strong> over the feelings of anger or frustration by trying to get it to stop, or not thinking about it, or trying to push it to the back of your mind.</td>
</tr>
<tr>
<td></td>
<td>Consciously tell yourself to <strong>relax/calm down</strong>.</td>
</tr>
<tr>
<td></td>
<td>Try <strong>not</strong> to let your feelings of anger or frustration show by keeping the <strong>expression on your face neutral</strong>.</td>
</tr>
<tr>
<td></td>
<td>Try to <strong>show a different emotion</strong> in place of anger or frustration (e.g., try to look busy sad or happy, instead of angry).</td>
</tr>
<tr>
<td></td>
<td><strong>Express</strong> your feelings of anger toward your child <strong>fully</strong>.</td>
</tr>
<tr>
<td></td>
<td><strong>Release</strong> your feelings of anger <strong>elsewhere</strong> (e.g., at another person, by punching a pillow, or screaming away from your child).</td>
</tr>
<tr>
<td></td>
<td>Using <strong>indirect verbal</strong> ways to convey how you feel (e.g., sarcasm, speaking quietly, stop talking).</td>
</tr>
<tr>
<td></td>
<td>Using <strong>indirect non-verbal</strong> ways to show how you feel (e.g., sighing, rolling your eyes, hand(s) on hips/forehead).</td>
</tr>
</tbody>
</table>

3) From the above list of 15 strategies to deal with anger, please circle the **two** you stated you would use the most often. Please briefly explain why you would use these (two strategies) more than other ways to deal with anger.

- **1st:**
- **2nd:**

- **Why?:**
VITA AUCTORIS

Brian Keith was born in August 1963 in Prince George, British Columbia ("The white spruce capital of the world."). He graduated with an Honours B.A. in psychology from York University in 1989. Thereafter, he was employed in Toronto, Ontario as an employment counsellor and employment insurance adjudicator with Human Resources Development Canada, and as a HRDC-certified job search instructor with the Ontario March of Dimes. Since September 1998 he has been enrolled in the doctoral programme in Adult Clinical Psychology at the University of Windsor.