

Empathy-Related Responding and Its Relations to Socioemotional Development¹⁾

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Abstract

Empathy-related responding relates to a variety of socioemotional outcomes for children. However, for a coherent pattern to emerge, it has been important to differentiate among various empathy-related reactions, including empathy, concern, and personal distress. Sympathy, in particular, has been associated with higher levels of prosocial behavior, whereas personal distress reactions tend to be negatively or unrelated to prosocial behavior. Sympathy and empathy also have been positively related to children's prosocial moral reasoning and socially competent behavior, and negatively related to externalizing problems. Individual differences in self-regulation, as well as socialization experiences, also have been associated with children's sympathy vs. personal distress responses.

Keywords : empathy, sympathy, adjustment, prosocial behavior

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Introduction

Empathy often has often been assumed to be a moral emotion and of broad relevance to the quality of human functioning. Indeed, for centuries, a minority of philosophers (e.g., Hume, 1977/1966; Blum, 1980), and more recently, many psychologists (e.g., Eisenberg, 1986; Hoffman, 1987), have argued that empathy and related emotional reactions motivate caring behaviors. However, in a 1982 meta-analytic review of relevant research, Underwood and Moore found no relation between empathy and prosocial behavior such as helping/sharing. In this article, I argue that empathy-related reactions do play a crucial role in socioemotional and moral development but that it is critical to make important conceptual distinctions among empathy-related reactions. In addition, I briefly summarize theory and research on the relation of self-regulation to empathy-related responding and briefly discuss the socialization of empathy-related responding. Because the review reflects the content of my keynote address at the PECERA conference, I focus primarily on research conducted by my collaborators and me. Problems with the Early Research on Empathy-related Responses.

Prior to the Underwood and Moore's (1982) review, much of the work on empathy in children was conducted using the story-picture methods. Unfortunately, there were methodological problems with this measure of empathy. It typically involved reading children short (e.g., several sentences) stories, each of which involved a potentially emotional situation and then asking the child how the story protagonist felt (a measure of cognitive perspective taking) and how the child felt (an index of empathy). Because the stories were so short, they likely were not very evocative. In addition, the procedure typically involved switching quickly between stories pertaining to different emotions (e.g., anger, fear, sadness, or happiness). This method appeared not to induce much empathy; rather, whether children gave the correct response was likely influenced by self-presentational issues and/or how much they wanted to please the experimenter (see Eisenberg & Lennon, 1983; Eisenberg & Miller, 1987; Lennon, Eisenberg, & Carroll, 1983).

In addition, in studies prior to the 1980s (and often thereafter), there often was a lack of conceptual differentiation within the construct of empathy. We have found it useful to differentiate several empathy-related responses. Specifically, we define *empathy* as an affective response that stems from the apprehension or comprehension of another's emotional

state or condition, and is similar to what the other person is feeling or would be expected to feel. Sympathy often may stem from empathy (although it can also stem from cognitive perspective taking or pulling up relevant information from memory) and is defined as an emotional response stemming from the apprehension of another's emotional state or condition, which is not the same as the other's state or condition but consists of feelings of sorrow or concern for the other. Finally, personal distress, which might often stem from empathic overarousal, is defined as a self-focused, aversive affective reaction to the apprehension of another's emotional state (e.g., discomfort, anxiety; Batson, 1991; Eisenberg, Fabes, & Spinrad, 2006).

It is important to differentiation between various modes of empathy-related responding because sympathy is believed to motivate altruism, a type of prosocial behavior (i.e., voluntary behaviors intended to benefit another) that is motivated by other-oriented or moral concerns or emotion rather than concrete or social rewards or the desire to reduce one's own aversive affective state (Batson, 1991; Eisenberg et al., 2006). In contrast, personal distress is believed to involve egoistic motivation (the desire to make oneself feel better) and thus typically leads to escape and avoidance of needy individuals, if it is easy to do so (Batson, 1991).

The Relation of Empathy-Related Responding to Prosocial Behavior

Consistent with the distinction among various empathy-related responses, Batson (1991), in a series of experimental studies, found that situational sympathy was related to adults' prosocial behavior whereas personal distress tended to be negatively (or less) related. However, his methods were not optimal for use with children and he generally did not focus on individual differences in empathy/sympathy. Thus, we began a series of studies to develop physiological, facial, and self-report measures of empathy-related responding to use with children.

The first set of studies were designed to valid these measures. In general, we found that children and adults exhibited facial concerned attention (or empathic sadness) in sympathy-inducing contexts and, to a lesser degree, facial distress in situations believed to elicit personal distress. Moreover, heart rate (HR) and skin conductance (SC) tended to be

were higher in the vicarious distress condition than in the sympathy (or baseline) condition. Self-reports of emotion in evocative contexts were somewhat consistent with the emotional context, even for younger children (albeit less so; Eisenberg & Fabes, 1990; Eisenberg, Fabes, et al., 1988; Eisenberg, Schaller, et al., 1988; Eisenberg, Fabes, et al., 1991a, b; Eisenberg et al., 2006).

In additional studies, we used these measures to assess children's responses to empathy-inducing stimuli (e.g., films) and then examined the relations of individual difference in responding to helping or sharing children in the film or similar children. In general, markers of sympathy were positively related to prosocial behavior whereas markers of personal distress were negatively related (or unrelated). Specifically, prosocial behaviors (or the intention to help) were predicted by heart rate deceleration (during short evocation sections of films), lower SC, facial concerned attention or sadness while watching the films, low facial distress (more for children than adults), self-reported sadness/sympathy or low happiness (more so for older children and adults than young children; e.g., Eisenberg, Fabes, et al., 1989, 1990, 1991a; see Eisenberg & Fabes, 1990; Eisenberg et al., 2006). Thus, we obtained evidence that markers of sympathy were positively related to children's prosocial behavior, at least in the context in which it was elicited, whereas personal distress tended to be negatively related.

Sympathy/empathy may account for the emergence of a prosocial personality-stable individual differences in prosocial behavior. In a longitudinal study, we initially observed naturally occurring prosocial behaviors in 4-5 year olds' preschools. We coded if behaviors were spontaneous (occurred without a verbal or nonverbal request) versus compliant (i.e., in response to a request), and if the behavior was sharing (giving up an object or space; such behavior generally involves a cost) or helping (low cost acts of assistance such as passing paint the child is not using; Eisenberg-Berg & Hand, 1979). Only spontaneous sharing was related to references to others' needs in prosocial moral reasoning. In contrast, compliant prosocial behaviors were related to preschoolers' nonassertiveness and proneness to personal distress (e.g., Eisenberg, Cameron, Tryon, & Dodez, 1981; Eisenberg, McCreath, & Ahn, 1988; Eisenberg et al., 1990).

Moreover, prosocial behavior at age 4-5 predicted prosocial dispositions over time. In the same study, prosocial constructs were assessed every 2 years from 9-10 years old to 31-32

years. We obtained behavioral prosocial measures as well as self and mother reports of prosocial behavior in adolescence; self-reported sympathy/empathy in late childhood to adulthood; and self- and friend-reported prosocial dispositions in adulthood. We found that spontaneous sharing behavior in preschool was related to these prosocial measures, often at multiple assessments (Eisenberg et al., 1999, 2002, 2013). Preschool spontaneous sharing related to costly donating or helping in preadolescence and adolescence, self-reported helping/prosociality in mid-adolescence and early adulthood (until 27-32), mothers' reports of helpfulness in mid- to late-adolescence, sympathy at numerous assessments, and friend-reported sympathy in the 20s-30s (sometimes at $p < .10$); it was *not* related to self-reported personal distress or low-cost helping. In contrast, there were relatively few relations between the other types of prosocial behavior and later prosocial responding. However, preschoolers higher in compliant sharing sometimes reported being prosocial in adolescence/adulthood, were high in self-reported sympathy and in moral reasoning in the mid-20s, and were marginally higher in internalized and stereotypic prosocial moral reasoning (but lower in rudimentary needs-oriented reasoning) in the late 20s to early 30s (see below; Eisenberg et al., 2002, 2013). Thus, sympathy appears to predict not only prosocial behavior in specific contexts, but also over time.

Empathy-Related Responding and Prosocial Moral Reasoning

Empathy-related responding also might contribute to the development of moral reasoning. Cognitive developmental theorists (e.g., Kohlberg, 1981) have argued that cognition (e.g., perspective taking, abstract reasoning) promotes advances in moral reasoning and in the quality of moral behavior. In contrast, Hoffman (1987) argued that sympathy/empathy stimulates the development of internalized moral reasoning reflecting concern for others' welfare. I would agree with Hoffman and also suggest that sympathy in a given situation might prime the use of preexisting other-oriented moral cognitions (see Eisenberg, 1986).

Although some relations have been found between empathy-related responding and moral reasoning that is not prosocially oriented (see Eisenberg, 1986; Underwood & Moore, 1982), the association is more consistent for prosocial moral reasoning, that is, reasoning about moral dilemmas in which one person's needs or desires conflict with those of others in a context in

which the role of prohibitions, authorities' dictates, and formal obligations is minimal (Eisenberg, 1986). We have found relations between sympathy and higher level prosocial moral reasoning in adolescence and adulthood in longitudinal and concurrent analyses (e.g., Eisenberg, Carlo, Murphy, & Van Court, 1995, Eisenberg et al., 2002; Eisenberg, Miller, Shell, McNalley, & Shea, 1991; see Eisenberg, 1986). Similar relations found for Brazilian adolescents (Eisenberg, Zhou, & Koller, 2001). Thus, sympathy likely contributes to prosocial moral reasoning, although the relation between the two might be bi-directional.

Relations of Empathy-Related Responding with Maladjustment and Social Competence

It is also logical to expect empathy-related responding to affect children's adjustment. Feshbach and Feshbach (1982) and others have suggested that empathy plays an important function in the reduction or inhibition of aggressive or antisocial actions. In fact, deficits in empathy and remorse are common in individuals with psychopathic traits (e.g., Blair, 1999; Frick, 1998).

In a meta-analytic review conducted in 1988, Miller and Eisenberg found that questionnaire measures of empathy/sympathy were negatively related to aggression/ externalizing behaviors; however, no relations when empathy/sympathy was assessed with facial/gestural reactions or self-reports in reaction to experimental stimuli. However, as previously noted, there were problems with early measures of empathy and researchers seldom differentiated among various types of empathy-related responding or between empathy with positive and negative emotions. Eisenberg and Miller (1987) also found a weak, positive relation between empathy and social competence, but again, the measures of empathy used in the analysis generally were undifferentiated.

More recent work has provided clearer support for the relations of sympathy (and sometimes empathy) to aggression and social competence. For example, in a longitudinal study, in mid-elementary school, children's facial empathy in response to negative emotion slides (but not self-reported reactions) was negatively related to adults' reports of children's externalizing problems. Two years later, facial empathy to negative slides and reported empathy with both positive and negative slides were related to social skills and lower levels of externalizing problems. In a structural equation model, empathy with the negative emotion

slides had stronger unique relations with social skills and maladjustment than did empathy with positive emotion slides (Zhou, Eisenberg, et al., 2002).

In other studies, teacher- and self-reports of elementary school children's dispositional sympathy related to numerous measures of maladjustment (e.g., externalizing) and socially appropriate behavior assessed concurrently and up to 6 years prior (Eisenberg, Fabes, Murphy, Karbon, et al., 1996; Eisenberg et al., 1998; Murphy Shepard, Eisenberg, Fabes, & Guthrie, 1999). Moreover, Eisenberg, Liew, and Pidada (2001) found similar relations between Indonesian 3rd graders' sympathy and adjustment and popularity. Conversely, children's aggression maybe positively related to their personal distress. In a study of elementary school children, mothers' reports of children's aggressive coping were positively associated with markers of boys' (but not girls') personal distress (i.e., heart rate acceleration and facial distress) when reacting to a crying infant (Fabes, Eisenberg et al., 1994b).

These results (and others; see Eisenberg et al., 2006) demonstrate relations of sympathy (and sometimes empathy) with low levels of externalizing problems (which harm others), and with socially appropriate and skilled behavior. This relation is likely partly due to the other-orientation inherent in sympathy. However, the relation may exist because self-regulation affects both sympathy & moral or social functioning.

Empathy-Related Responding and Self-Regulation

Based on our early work on empathy-related responding in young children and its relations to socially competent behaviors and prosocial behaviors, we developed a set of predictions regarding the role of self-regulation in empathy-related responding. We define emotion-related self-regulation as processes used to manage and change if, when, and how (e.g., how intensely) one experiences emotions and emotion-related motivational and physiological states, as well as how emotions are expressed behaviorally (Eisenberg & Spinrad, 2004). Self-regulation involves temperamental effortful control (EC), defined as "the efficiency of executive attention, including the ability to inhibit a dominant response and/or to activate a subdominant response, to plan, and to detect errors" (Rothbart & Bates, 2006). EC provides a set of skills that can be used for managing emotion as well as other aspects of

responding.

We hypothesized that if empathic overarousal involving negative emotion leads to an aversive emotional state which results in self-focused personal distress, individuals unable to maintain their emotional reactions within a tolerable range would be expected to experience personal distress. In contrast, people who maintain their vicarious arousal at a moderate level were predicted to be more likely to experience sympathy (Eisenberg et al., 1994; Eisenberg, Fabes, Murphy, et al., 1996). Based on these expectations, we predicted that processes involved in the self-regulation of emotion relate in a positive, linear manner to sympathy, and that low levels of self-regulatory capacities (especially those involved in modulating emotional arousal) would be associated with personal distress. We also expected self-regulatory capacities and emotionality to interact when predicting sympathy.

Why might self-regulation contribute to sympathy? In addition to managing emotional arousal, the executive attention involved in self-regulation is likely to be involved in integrating information, planning, and executing other mental activities that help interpret information about another and contribute to feeling competent to deal with negative vicarious emotion. In addition, self-regulation may contribute to the ability to enact sympathy-based prosocial behavior when there is a cost to the self.

In empirical studies with children and adults, we have obtained evidence that dispositional differences in empathy-related responding are related to individual differences in self-regulatory skills. In studies with college students and/or elderly, we found that personal distress was negatively related to self-reported regulation and to friends' reports of students' coping (Eisenberg et al., 1994). Sympathy was positively related to regulation in zero-order correlations or when the effects of negative emotional intensity were controlled (Eisenberg et al., 1994; Eisenberg & Okun, 1996; Okun, Shepard, & Eisenberg, 2000). (Results in regard to empathy-related responding in a specific context are more complicated; see Eisenberg et al., 1994).

Similar findings have been obtained when examining children's dispositional empathy-related reactions. In a longitudinal study of school children, children's dispositional sympathy related to adults' reports of children's regulation, within time and across 2 to 4 years. HR and SC physiological arousal when exposed to others in distress negatively related to boys' sympathy (Eisenberg et al., 1996, 1998; Murphy et al., 2004). Moreover, there was an

interaction between individual differences in temperamental emotionality and self-regulation. For children moderate or relatively high in regulation, sympathy increased with the level of general emotional intensity (Eisenberg et al., 1996, 1998).

In a different longitudinal sample, 4.5- to 7-year olds' reported sympathy in response to an empathy-inducing film and their self-reported dispositional sympathy were positively related to parent- and teacher-reported effortful control. In contrast, children's reported personal distress reactions to the film were negatively related to adult-reported effortful control (Valiente et al., 2004). Moreover, adults' reports of children's self-regulation predicted sympathy up to 8 years later, even across reporters, especially for boys, and behavioral measures of persistence and sitting still when asked (measures of regulation) often related to concurrent or future child sympathy (Eisenberg et al., 2007). In Indonesia, we also found a positive relation between school-children's adult-reported sympathy and their regulation (Eisenberg, Liew, & Pidada, 2001, 2004). Thus, it appears that self-regulatory mechanisms could be involved in the experience of sympathy versus personal distress and perhaps in the association between sympathy and positive developmental outcomes (self-regulation could contribute to both).

The Origins of Empathy-Related Responding

Although empathy-related responding clearly has a genetic basis (see Eisenberg, Spinrad, & Knafo, in press), socialization also seems to play a role. In general, warm and supportive parents are expected to have children prone to sympathy (due to modeling, secure attachment, help learning to manage emotions, etc.). In fact, parents' observed warmth/positive affect, encouragement, and low negative affect while doing a puzzle with child were related to their children's self-reported empathy/ sympathy (Spinrad et al., 1999). Moreover, Swiss children high and stable in trajectories of self-reported sympathy from age 6-9 reported greater maternal support than those low and increasing or low and stable in sympathy (Malti, Eisenberg, Kim, & Buchmann, in press; see Eisenberg et al., 2006 Eisenberg et al., in press, for other studies).

We have argued that parental practices/behaviors that help children to manage their

emotions are likely to foster sympathy rather than personal distress. Consistent with this view, parental emphasis on the use of instrumental problem solving to deal with emotions related to boys' comforting behavior (Eisenberg, Fabes, & Murphy, 1996) and markers of boys' sympathy (low skin conductance; high reported sympathy/sadness) in response to empathy-inducing video (Eisenberg, Fabes, et al., 1991). Moreover, mothers' reported encouragement of child to express his/her own negative emotion at 18 months predicted child empathy at 24 months (Taylor et al., in press).

Emotion-related parenting practices/behaviors that expose children to moderate levels of emotional arousal may foster sympathy rather than personal distress, perhaps by providing opportunities to learn about emotions. In one study of young school children (about 5-7 years), sympathy was measured with children's self-reported reactions to an evocative films and parents' reports of children's dispositional sympathy. Parental expression of emotion was assessed with self-reports and observations of parental positive or negative expressivity. Sympathy related to moderate levels of both parental positive and negative expressivity (Valiente et al., 2004). Young children might learn from parental expressivity but may be overaroused if it is too intense. In contrast, personal distress was especially related to high parental negative expressivity and to low parental positive expressivity (Valiente, Eisenberg, et al., 2004). The sample in this study was nonclinical; the findings for sympathy might be quite different if a clinical sample were used in which parents expressed very intense emotions.

Some potential effects of parental emotion socialization on sympathy may be mediated by children's regulation. In a sample of Indonesian children, Eisenberg, Liew, et al. (2001) found evidence that parental negative expressivity predicted low regulation, which in turn predicted low sympathy.

Children's self-regulation also might moderate the relation of parental socialization to child outcomes by child characteristics. Valiente et al. (2004) found that young school children's regulation and parental expressivity interacted when predicting children's dispositional and situational sympathy. For example, there was a positive relation of sympathy with parental negative expressivity for young school children high in regulation and a negative relation for less regulated children. Unregulated children were high in personal distress regardless of their parents' expression of negative emotion whereas regulated children were high in personal

distress only if their parents expressed high levels of negative emotion.

Parental reactions and expressivity with their children are likely affected by children's regulation and emotionality: Relations between the two are likely bi-directional. In one study, mothers of kindergartners viewed their children as more emotionally reactive than did mothers of 2nd graders. Moreover, mothers displayed more positive versus negative emotion when telling emotional stories (from picture books without words) to kindergartners than to 2nd graders, particularly if they viewed their children as emotionally reactive. Mothers of reactive children seemed to attempt to modulate the level of negative emotion experienced by their children who were vulnerable to distress. Of most interest, maternal use of positive emotion when telling stories to kindergartners was related to their children's helpfulness.

A different pattern was found for 2nd graders. Mothers who viewed 2nd graders as emotionally reactive were less involved and warm when telling the stories; these mothers may have "backed off" from socialization efforts that actively involve children with distressing emotion. In general, maternal attempts to direct their child's attention to the story material, when combined with warmth, were related to high levels of 2nd graders' prosocial behavior and sympathy, and low levels of personal distress. It is like that such maternal behavior served to direct their children's attention to the stories, and highlighted the emotions of story protagonists (Fabes, Eisenberg, et al., 1994a). The overall pattern of findings suggested that mothers' behavior varied with the perceived vulnerability of their children to negative emotions (affected by both grade level and individual differences) and that certain maternal behaviors were associated with higher levels of children's sympathy and prosocial behavior.

Conclusions

Overall, the findings reviewed support the view that empathy and sympathy contribute to moral behavior and prosocial moral reasoning, as well to adjustment and social competence. Self-regulatory processes with a partly biological origin are related to empathy-related responding. Socialization practices that foster sympathy are likely to increase moral/prosocial behavior, moral reasoning, and low levels of externalizing, aggressive problems. The findings further suggest that interventions that promote children's sympathy, in part through fostering

adults' supportive socialization and use of developmentally appropriate discipline, may enhance prosocial behavior. This is a needed direction for future research (see Eisenberg et al., 2006, in press, for reviews of work on interventions for prosocial behavior).

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