Antecedents, Correlates, and Sequelae of Children’s Empathy-related and Prosocial Responding

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Empathy often is assumed to be a moral emotion and of broad relevance to the quality of human functioning.

- for centuries, a minority of philosophers (e.g., Hume, Blum), and more recently, many psychologists, have assumed that empathy and related emotional reactions motivate caring behaviors.
however, in a 1982 paper (Underwood & Moore) that combined existing research (i.e., meta-analysis), researchers found no relation between empathy & prosocial behavior

and recent paper by Jordon, Amir, & Bloom (2016) did not confirm an empathy-prosocial behavior relation
Goal of this presentation:

- argue that some empathy-related responding plays a crucial role in prosocial, socioemotional, & moral development
  - critical to make important conceptual distinctions
- briefly discuss the socialization of empathy-related responding and prosocial behavior
empathy - 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**--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.

**personal distress**--a self-focused, aversive affective reaction to the apprehension of another’s emotional state (e.g., discomfort, anxiety).
Empathy can lead to sympathy or personal distress, which is elicited depends on factors such as intensity of empathy, degree of self-regulation, and contextual factors such as who is involved, degree of threat to self, cost of helping, values, etc.
**prosocial behavior**--voluntary behavior intended to benefit another

- **altruistic behavior**—those prosocial behaviors motivated by other-oriented or moral concerns or moral emotion rather than concrete or social rewards or the desire to reduce one’s own aversive affective states
Sympathy/Empathic Concern-Based: motivated by the ultimate goal of increasing another’s welfare (i.e., altruism a la Batson)

Egoistic: motivated by the ultimate goal of increasing one’s own welfare

Eisenberg et al., 2016, CD
Importance of conceptual differentiation between various modes of empathy-related responding

- **Sympathy** -----> motivation to help and sometimes altruism (Batson)

- **Personal distress** -----> avoidance of needy individuals (if easy to escape) or egoistic prosocial behavior;
  - egoistic, not moral, emotion, with a self-focus
How does compassion relate to empathy & sympathy?

- sympathy overlaps substantially with the construct of compassion: “the feeling that arises in witnessing another’s suffering and that motivates a subsequent desire to help”; Goetz, Keltner, & Simon-Thomas, 2010

- both involve concern for others; however, sympathy may not always motivate the desire to assist another

- compassion often is viewed as necessarily involving the desire to help another
- The emotions of warmth, tenderness, & love may be more integral to compassion than sympathy (Goetz et al., 2010)

- Whether sympathy is compassion likely depends on costs to the actor of assisting, the intensity of felt sympathy, affordances for assisting in the context of helping behavior (e.g., if it is possible to assist), & other contextual factors (e.g., other demands on attention)
Is sympathy related to more other-oriented prosocial behavior?
Dan Batson’s work

- Batson found that situationally induced sympathy was related to adults’ prosocial behavior whereas personal distress tended to be negatively (or less) related.

- His methods were not optimal for use with children.

- He generally did not focus on individual differences in empathy/sympathy.
Measures of Empathy-Related Responding

- Self-reports
- Facial expressions
- Physiological responses
Heart rate deceleration
• marker of sympathetic concern
  (taking in information from outside the self)

Heart rate acceleration
• marker of personal distress

High skin conductance
• marker of personal distress

Also facial distress, concerned attention, & sadness, and self-reported reactions
Validation studies

- 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
HR & SC were higher in the vicarious distress condition than in the sympathy (or baseline) condition.

Self-reports of emotion while watching the film were somewhat consistent with the emotional context, even for younger children’s (albeit less so).

used these measures to assess children’s responses to empathy-inducing stimuli (e.g., films)

children then had an opportunity to help the 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)
Prosocial behavior predicted by:

- heart rate deceleration
- lower skin conductance
- facial sadness or concerned attention
- low facial distress (more for kids than adults)
- self-reported sadness/sympathy or low happiness (more so for older children and adults than young children)

Does sympathy contribute to the emergence of a prosocial personality change in mother-reports of children’s empathy across age 24 to 54 months predicted teacher-reported prosocial behavior at 72/84 months of age (Taylor, Eisenberg, et al., 2013, *Emotion*)
In another longitudinal study,

- observed prosocial behaviors in 4-5 year olds
  - spontaneous (without a request)
  - compliant (with request)
  - sharing (giving up an object or space; higher cost)
  - helping (low cost act of assistance)
    - Eisenberg-Berg & Hand, 1979, CD
only spontaneous sharing was related to references to others’ needs in prosocial moral reasoning

compliant prosocial behaviors were related to preschoolers’ nonassertiveness and proneness to personal distress

- e.g., Eisenberg et al., 1981, *DP*; Eisenberg et al., 1988, *PSPB*; Eisenberg et al., *MPQ*)
Relations of prosocial behavior to prosocial dispositions over time

- prosocial constructs assessed every 2 yr. from 9-10 years old to 31-32
  - behavioral prosocial measures & self- and mother-reported helping in adolescence
  - self-reported empathy in late childhood
  - self-reported sympathy in late childhood to adulthood
  - self- & friend-reported prosocial dispositions and values in adulthood

(Eisenberg et al., 1999, CD; 2002, JPSP; 2014, DP)
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
- empathy & sympathy at numerous assessments
- perspective taking in late adolescence & early adulthood
- friend-reported sympathy in the 20s-30s
- *not* related to self-reported personal distress, low-cost helping, and adult friends' reports of perspective taking
relatively few relations for the other types of early prosocial behavior

- but preschoolers higher in compliant sharing 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 needs-oriented reasoning) in the late 20s to early 30s (Eisenberg et al., 2002, *JPSP*; 2014, *DP*)
Does empathy-related responding contribute to the development of prosocial moral reasoning?
cognitive developmental theorists (e.g., Kohlberg) have claimed that cognition (e.g., perspective taking, abstract reasoning) promotes advances in moral reasoning and in the quality of moral behavior

Hoffman: sympathy/empathy stimulates the development of internalized moral reasoning reflecting concern for others' welfare

Eisenberg: situational sympathy primes the use of preexisting other-oriented moral cognitions
an association of empathy/sympathy with moral reasoning is especially likely for prosocial moral reasoning

prosocial moral reasoning
  - 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 formal prohibitions, authorities’ dictates, and formal obligations is minimal (Eisenberg-Berg, 1979, CD)
Findings for sympathy & moral reasoning

- relations between sympathy and higher level prosocial moral reasoning (or higher levels of other-oriented reasoning) in childhood and adulthood in longitudinal and concurrent analyses (e.g., in our longitudinal sample)
  - similar relations found for Brazilian adolescents
  - prosocial moral reasoning mediated the relations between perspective taking or sympathy & prosocial behavior
The best fitting model

Eisenberg, Zhou, & Koller, 2001
No direct effects of cognitive perspective taking on prosocial behavior!! (think about psychopaths)
Links with maladjustment & social competence?
Feshbach and others have suggested that empathy plays an important function in the reduction or inhibition of aggressive or antisocial actions. Deficits in empathy and remorse are common in individuals with antisocial personality disorders. E.g., work of Blair, Frick, Strayer.
In a longitudinal study

- mid-elementary students’ facial empathy to slides of negative faces/events was negatively related to adults’ reports of children’s externalizing problems

- 2 years later, facial empathy to negative slides and reported empathy with both positive and negative slides were related to better social skills and lower levels of externalizing problems

- empathy with the negative slides had stronger unique relations with social skills and maladjustment (Zhou, Eisenberg, et al., 2002, CD)
Other samples

- Teacher- and self-reports of elementary school children’s dispositional sympathy related to numerous measures of socially appropriate behavior & low maladjustment (e.g., externalizing) assessed concurrently and up to 4 years prior/after (Eisenberg et al., 1996, 1998, *DP*)

- Found similar relations between Indonesian 3rd graders’ sympathy and adjustment and popularity, concurrently and at 3-year follow-up (Eisenberg, Liew, & Pidada, 2001, *Emotion*)
So are relations of sympathy (and sometimes empathy) to moral reasoning, socially appropriate and skilled behavior, & low levels of externalizing problems...Why?

- likely partly due to the other-orientation inherent in sympathy
- also self-regulation might affect both sympathy & moral or social functioning
  - dispositional self-regulation is associated with high sympathy & low personal distress
Origins of empathy/sympathy

- some hereditary basis of empathy, but socialization also seems to play a role
- e.g., warm & supportive parents expected to have children prone to sympathy
  - due to modeling, secure attachment, help learning to manage emotions, etc.
Sample findings

- 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, *JME*)

- Swiss children high and stable in self-reported sympathy from age 6-9 reported greater maternal support than those low and increasing or low and stable in sympathy (Malti et al., 2013, *SD*)
In our longitudinal study,

- friends’ reports of participants’ sympathy and concern at age 25–32 predicted by mother-reported use of rational discipline (including reasoning) and warmth/support during childhood and adolescence
  - and negatively to mother-reported negative affect during adolescence
self-reported sympathy/concern at 19-24 years predicted by maternal warmth/support during childhood and (near significantly) low mother-reported negative affect during childhood

most relations held when controlling for early empathy/sympathy (Eisenberg et al., 2015, DP)
What about parents’ specific responses to children’s expressions of emotion?

If parents respond negatively to a child’s displays of negative emotion, it has been hypothesized that:

- child learns to hide emotions
- but feels anxious/upset when in emotionally evocative situations because he/she associates emotion with adults’ sanctions (Ross Buck)
Parental restrictiveness in response to boys' expression of negative emotion when unlikely to hurt another

- associated with boys' facial and physiological markers of distress (heart rate & skin conductance) when viewing an empathy-inducing film
- associated with boys' reports of low distress in reaction to the film
  - boys seemed prone to experience distress when confronted with others' distress, but did not want others to know (Eisenberg et al., 1991, CD)
mothers’ reported encouragement of child to express negative emotion at 18 months predicted child empathy at 24 months (Taylor et al., 2013, *Emotion*)

moderate levels of parental encouragement of emotional expression related to quality of school-age girls’ comforting of an infant; high levels related to boys’ quality of comforting (Eisenberg et al., 1996, *CD*)
Emotion-related parenting practices/behaviors that evoke moderate emotional arousal may foster sympathy rather than personal distress in young typical school children.

- **sympathy**: children’s self-reported reactions to an evocative films & parents’ reports of children’s dispositional sympathy.
- **parenting**: reported and observed parental positive or negative expressivity.
- **sympathy related to moderate levels of both parental positive and negative expressivity**
  - young children learn from parental expressivity but may be overaroused if it is too intense.
Quadratic relations

Situational Sympathy

- low
- mean
- high

- Negative Expressivity
- Positive Expressivity
parental negative expressivity and low parental positive expressivity were related to children’s personal distress (Valiente, Eisenberg, et al., 2004, *DP*)
Some potential effects of parental emotion socialization on sympathy may be mediated by children’s regulation.

- In a sample of Indonesian children, found evidence that parental negative expressivity → low regulation → low sympathy (mediation)
In the US,
observed authoritative parenting at 42 months

—> children’s regulation at 54 months (reported by multiple adults)

—> children’s sympathy at 72/84 months (reported by multiple adults)
 when controlling for sympathy at 42 months (DP, 2015)
Child regulation moderates the relation of parental negative expressivity to children’s sympathy when parents expressed high negative emotion, regulated children were high in sympathy & unregulated children were low in sympathy.
The graph illustrates the relationship between situational sympathy and negative expressivity. There are three levels of negative expressivity: low, medium, and high. The graph shows a trend where situational sympathy decreases as negative expressivity increases. Each level is represented by a different symbol: low with a square, medium with a diamond, and high with a triangle. The x-axis represents negative expressivity, with low, medium, and high categories, and the y-axis represents situational sympathy, ranging from -1.5 to -1.2.
Personal distress?

- unregulated children were high in personal distress regardless of their parents’ expression of negative emotion
- regulated children were high in personal distress only if their parents expressed high negative emotion (Valiente et al., 2004)
Conclusions

- It is important to differentiate among various empathy-related responses when thinking about compassion and prosocial behavior.
- Sympathy (and empathy when it leads to sympathy) likely contribute to moral behavior & moral reasoning, as well to adjustment and social competence.
- Supportive parenting & parenting/teaching practices that foster sympathy (and regulation?) are likely to increase moral/prosocial behavior, moral reasoning, & low levels of externalizing, aggressive problems.
Collaborators

- Tracy Spinrad
- Richard Fabes
- Mark Reiser
- Sri Pidada
- Silvia Koller
- Eva Skoe
- Sandra Losoya
- Gus Carlo
- Amanda Cumberland
- Ivanna Guthrie
- Jeffrey Liew
- Bridget Murphy
- Carlos Valiente
- Qing Zhou
- Nicole Michalik
- Claire Hofer
- Michael Sulik
- Anne Kupfer
- Bridget Murphy
- Stephanie Shepard
- Zoe Taylor
- Tina Malti
- Michael Sulik
- Sarah VanSchnydel
In the US, observed authoritative parenting→ regulation→ to sympathy (DP, 2015)
Quadratic relations

Personal Distress

- Negative Expressivity
- Positive Expressivity

low, mean, high
Moderation by regulation of the relation of children’s dispositional sympathy to parental negative emotionality.

-1.5  -1.2

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Negative Parent Expressivity

low      medium      high
Parental reactions & expressivity likely affected by children’s regulation and emotionality: 2-way street

- kindergartners were viewed by mothers as more emotionally reactive than 2\textsuperscript{nd} graders
- mothers displayed more positive versus negative emotion when telling emotional stories to kindergartners than 2\textsuperscript{nd} graders, particularly if children were viewed as reactive
- mothers seemed to attempt to modulate the level of negative emotion experienced by more vulnerable children
- maternal use of positive emotion was related to kindergartners' helpfulness
• mothers who viewed 2nd graders as emotionally reactive were less involved and warm when telling the stories
• with older reactive children, mothers may have "backed off" from socialization efforts that actively involve children with distressing emotion
• maternal attempts to direct their child's attention to the story material, when combined with warmth, were related to 2nd graders' high prosocial behavior and sympathy, and low personal distress
  - such maternal behavior may affect children’s attention and highlight others’ emotions (Fabes, Eisenberg, et al., 1994, DP)
Problems with the early research on empathy-related responses

- often a lack of conceptual differentiation
- methodological problems with the measure of empathy commonly used with children
Is sympathy related to self-regulation?

Hypothesized:

- empathic overarousal involving negative emotion $\rightarrow$ aversive emotional state $\rightarrow$ self-focused personal distress
- individuals unable to maintain their emotional reactions within a tolerable range are expected to experience personal distress
- people who maintain their vicarious arousal at a moderate level are likely to experience sympathy
  - e.g., Eisenberg et al., 1996, *DP*; 1994, *JPSP*
Predictions: relations of EC to sympathy/personal distress

- Processes involved in the self-regulation of emotion (e.g., effortful control; EC) positively relate in a positive, linear manner to sympathy.
- Low levels of regulatory capacities (especially those involved in modulating emotional arousal) are associated with personal distress.
- Self-regulatory capacities and emotionality interact when predicting sympathy.
What do we mean by emotion-related self-regulation?

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, *CD*

- Involves temperamental effortful control (EC)

- "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)
in addition to managing emotional arousal, the executive attention involved in self-regulation is likely to be involved in integrating information, planning, & executing other mental activities that help interpret information about another & contribute to feeling competent to deal with negative vicarious emotion.

self-regulation may contribute to the ability to enact sympathy-based prosocial behavior when there is a cost to the self.
In studies with college students and/or elderly, we found:

- personal distress was negatively related to self-reported self-regulation and to friends’ reports of students’ coping

- sympathy was positively related to self-regulation in zero-order correlations or when the effects of negative emotional intensity were controlled

Longitudinal study of school children

- children reported to be sympathetic (or report being sympathetic are reported by adults to be high in regulation, within time and across 2 to 8 years
- children’s reports of responding with sympathy to an empathy-inducing film related to self- and teacher-reported self-regulation, whereas reports of personal distress related to low regulation
- the positive relation between sympathy and regulation was also found in Indonesia
- behavioral measures of regulation (persistence & sitting still when asked) often related to concurrent or future child sympathy
- physiological arousal when exposed to others in distress negatively related to boys' sympathy

- respiratory sinus arrhythmia (RSA or vagal), a measure of physiological emotion regulation, sometimes related to higher sympathy

- interaction of regulation and emotionality: for children moderate or relatively high in regulation, sympathy increased with the level of general emotional intensity

Interaction of Regulation and General Emotional Intensity: Prediction of Teachers’ Reports of Children’s Sympathy

Children’s Sympathy

- .5

- 0

- .5

General Emotional Intensity

-1SD

Mean

+1SD

Eisenberg et al., 1996
so self-regulation may be involved in the association between sympathy and positive developmental outcomes
Motives range from other-oriented to egoistic: empathic concern/sympathy, adherence to internalized principles related to others’ well-being or moral principles, internalized norms/group norms, empathic joy, social relatedness, feelings of competence/self-esteem, reduction of aversive arousal, desire for social rewards, desire for material rewards or avoidance of punishment (Eisenberg et al., 2016)