

ally wakes
that

erary story
toy cues

on empathy
Huck Finn

criticize
ce of empathic
principles

Empathy and Moral Development

IMPLICATIONS FOR CARING
AND JUSTICE

Martin L. Hoffman

New York University

 **CAMBRIDGE**
UNIVERSITY PRESS

CHAPTER 3

Development of Empathic Distress

As I mentioned earlier, empathic distress seems like a simple response: One feels distressed when observing someone in actual distress. When we look at empathic distress in mature observers, however, its complexity is quickly apparent. First, empathic distress in mature observers includes a metacognitive awareness of oneself as responding empathically: One not only feels distressed but knows this feeling is a response to something unfortunate happening to someone else and to what one assumes to be the victim's feeling of pain or discomfort. Mature empathizers have thus passed the developmental milestone of acquiring a cognitive sense of themselves and others as separate physical entities with independent internal states, personal identities, and lives beyond the situation and can therefore distinguish what happens to others from what happens to themselves.

Second, mature observers have a sense of how they would feel and a general understanding of how most people would feel in the other's situation. Third, mature observers know that the other's outward behavior (facial expression, posture, voice tone) can reflect how he feels internally but they also know that these outward expressions of feeling can be controlled to some extent and mask the other's internal feeling. Furthermore, all of this knowledge plus any personal information a mature observer has about the victim are likely to be quickly integrated into an explanation of the cause of the victim's plight. In short, for a person to experience mature empathic distress, he must have a clear distinction between what happens to

others and what happens to himself and an understanding of how feelings are expressed and how they are shaped by events.

Although infants and very young children lack many of these cognitive capabilities, they can be empathically aroused through the primitive arousal mechanisms: mimicry, conditioning, and association. The difference between infant empathy based on these mechanisms and mature empathy suggests that the development of empathic distress may reflect children's social-cognitive development, especially development of a separate and independent sense of self, a sense of others, and a sense of the relationship between self and others. Because the sense of self and others undergoes dramatic changes developmentally, it provides a framework for a developmental scheme for empathy.

I find it useful to think of four broad stages in the development of self and other: ¹⁾ unclear or confused self/other differentiation; aware- ²⁾ ness of self and others as separate physical entities; awareness of self ³⁾ and others as having independent internal states; awareness of self ⁴⁾ and others as having their own personal histories, identities, and lives beyond the immediate situation. These social-cognitive stages interact with empathic affect aroused through the various arousal mechanisms, to produce the developmental scheme that follows. Before presenting the scheme I note that the age levels assigned to the stages and transitions between stages are approximate and individual differences can be enormous.

NEWBORN REACTIVE CRY

It has long been known by students of infancy and lay people alike that when human infants hear another infant cry they start to cry. The first controlled study of this reactive cry was done by Simner (1971), who found it in 2- and 3-day-olds. Simner also established that the cause of the reactive cry is not the loudness of the other's cry, as infants do not start to cry when they hear a synthetically produced (computer simulated) wail of equal loudness. Simner's findings have been replicated in 1-day-olds by Sagi and Hoffman (1976), who report in addition that the reactive cry is not a simple

imitative vocal re-
vigorously, intense
of an infant who
replicated these f
much to the cry
more aversive th
cry. There thus a
the sound of a hu
state of agitated c

Why is that?
reactive cry is an
being of the sam
adaptive. The pr
be a form of min
the sound of ano
and changes in f
start a feedback p

The reactive cr
tioning. In chapt
response in 1-day
behaviors like re
follows: Reactive
a cue (sound of a
cries) associated v
periences, perhap
other possibility i
Imitation alone, h
noted, is not just a
agitated distress re
of newborn react
mimicry and cond

Regardless of t
distress in others
therefore be consid
distress - precurs
responding is pro

Development of Empathic Distress

imitative vocal response lacking an affective component. Rather, it is vigorous, intense, and indistinguishable from the spontaneous cry of an infant who is in actual discomfort. Martin and Clark (1982) replicated these findings and also showed that infants do not cry as much to the cry of a chimpanzee (which, by the way, adults find more aversive than infant cries), or even to the sound of their own cry. There thus appears to be something uniquely unpleasant about the sound of a human infant crying that throws the newborn into a state of agitated discomfort.

Why is that? The most likely explanation is that the newborn reactive cry is an innate, isomorphic response to the cry of another being of the same species, which survived natural selection and is adaptive. The primary underlying psychological mechanism could be a form of mimicry in which the newborn automatically imitates the sound of another's cry, and the resulting sound of his own cry and changes in facial muscle patterns accompanying his own cry start a feedback process that throws him into an agitated state.

The reactive cry could also be a learned response based on conditioning. In chapter 2 I mentioned the conditioning of the sucking response in 1-day-olds. It seems likely that other frequent newborn behaviors like reactive crying can also be conditioned, perhaps as follows: Reactive crying might be a conditioned distress response to a cue (sound of another's cry) that resembles cues (the infant's own cries) associated with the infant's previous pain and discomfort experiences, perhaps beginning with the birth process itself. Yet another possibility is imitation, which also occurs shortly after birth. Imitation alone, however, cannot explain the reactive cry, which, as noted, is not just an imitated cry but a more generally vigorous and agitated distress response. The most likely psychological explanation of newborn reactive crying, it seems to me, is a combination of mimicry and conditioning, with each getting an assist from imitation.

Regardless of the cause, the newborn is responding to a cue of distress in others by feeling distressed himself. The cry must therefore be considered an early, rudimentary precursor of empathic distress - precursor because the "other" to which the newborn is responding is probably sensed by the newborn as connected to the

"self," that is, as part of the same global psychological entity as the self. Interestingly, the newborn reactive cry may, despite this limitation, make a contribution to more advanced stages of empathic distress by creating a condition in which a distress cue in another (sound of a cry) occurs together with the infant's own experience of distress. Such concurrences may lead infants, through conditioning and association, to experience distress in the future, whenever they witness another in distress, that is, to experience empathic distress.

From a developmental perspective, we would expect the newborn reactive cry to be confined to the early months of life and to be gone by 6 months or so, owing to infants' dawning awareness of themselves and others as separate beings. This awareness should interfere with, or at least slow down, their automatic mimicry and conditioning responses to another's cry. The infants should also be less susceptible to cry sounds because of their growing interest in other things and the ability to regulate their emotions. There is evidence for this expected decline in a study by Hay, Nash, and Pedersen (1981), who observed twelve pairs of 6-month-old infants interacting in a laboratory playroom; both mothers were present. The main finding was that when one infant was distressed, the other generally watched but rarely cried or became distressed himself. There was a cumulative effect, however: After several instances of an infant's showing distress, the other infant did become distressed and started to cry.

The 6-month-old's cry differs from the newborn's cry in another way as well: It is not instantaneous and agitated; at 6 months the infant first looks sad and puckers up his lips before starting to cry, just as infants do at that age when they are in actual distress. It is interesting that Charles Darwin (1877) who carefully observed his son's facial and emotional responses from birth, reported something similar - "empathy was clearly shown at 6 months and 11 days by his melancholy face, with the corners of his mouth well depressed, when his nurse pretended to cry" (p. 293).

The difference between the 6-month-old and the newborn suggests that as infants differentiate from others, the basis of their global

empathi
automat
true "of
from on
other's
the infar
reason i
to grab
the look
they also
the early

EGOO

Towa
tressed p
but their
watching
Most infi
to anothe
reduce th
Three
10-month
and cry,
her mout
when she
Waxler (
month-ol
sad, puck
to her mo
p. 91) obs

had alr
dren's
distress