Part VIII

Helping and Moral Reasoning

Recent research has focused on understanding different dimensions of social competence and their unique contributions to psychosocial adjustment (e.g., Chen, Li, Li., Li, & Liu, 2000). In that vein, how children develop altruistic and moral patterns of social behavior has been the subject of conceptual and empirical scrutiny for several decades. The first two chapters synthesize the literature in these areas and chart directions for promising new developments in our understanding of the nature and implications of altruistic and moral constructs. The third chapter helps us step back and consider how societies are characterized by collections of different social, gender, occupational, political, ethnic, and religious groups. Children glean many of their values that can be translated into more or less altruistic and moral behaviors from these societal institutions that are connected to their immediate settings such as family, neighborhood, and school environments (Bronfenbrenner, 1979).

Joan Grusec, Maayan Davidov, and Leah Lundell focus on prosocial behavior (e.g., helping, sharing, comforting). Although children often engage in behaviors that are beneficial to others at a personal cost, caring actions can also stem from self-serving motivations. Grusec and her colleagues examine the phenomenon of prosocial behavior by first delineating the term from altruism. Prosocial behavior may have a variety of motivations while altruistic behavior only comes at some cost to the donor. Having settled that issue, the authors move on to synthesizing the literature on biological underpinnings of prosocial behavior. Empathetic concern is then elaborated as a motivator for prosocial behavior, followed by a careful review of the literature on how parents can promote the internalization of values with specific attention paid to the interaction of nature and nurture. Peers and siblings also play a role. How prosocial behavior increases with age, as well as sex differences in prosocial behavior are explicated. Grusec and colleagues also delineate how prosocial behavior is enacted depending on children's perceived abilities to help and the nature of the situation (e.g., helping someone who is liked rather than disliked). Their chapter concludes with a review of literature on linkages involving social class and culture in the development of prosocial behavior.

Regarding moral development, Charles Helwig and Elliot Turiel begin their chapter by briefly explaining how several disciplines, including philosophy, anthropology, psychology, and sociology have each brought different perspectives to this area of inquiry. The theories of Piaget and Kohlberg are overviewed and then followed by more recent perspectives that separate the moral domain (issues of harm, fairness, and rights) from the social conventional domain (e.g., organizational rules for dress and etiquette). Research indicates that very young children are able to distinguish these domains, but do so in increasingly complex ways over the course of early and middle childhood. How children's actions are actually influenced by their judgments in these domains has been a fruitful field of study. The authors present convincing evidence that how children approach behavioral situations is related to domains of judgment. Of particular interest is the section on culture and social development. How do moral and social conventions vary across Eastern and Western societies? How do religious beliefs affect moral judgments in different cultural settings? These and other issues concerning how children develop concepts of autonomy, rights, and democracy in the context of culture are addressed in illuminating ways.

The discussion of cultural influences by Helwig and Turiel provides a meaningful transition to the final chapter. Martyn Barrett and Eithne Buchanan-Barrow treat readers to a discussion of children's understanding of society. As noted earlier, the way children operate in society is based, in part, on their understanding of societal rules and conventions. Barrett and Buchanan-Barrow examine the most significant societal institutions that touch children beyond the family. How children come to understand the social organization of schools, economics, social class, politics, law, ethnic groups, and nationalities are carefully explicated from a developmental perspective across the early and middle childhood years. In so doing, the authors draw heavily upon Piagetian perspectives when providing stage-based descriptions of children's understandings of societal phenomenon.

References

Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.

Chen, X., Li, D., Li, Z., Li., B., & Liu, M. (2000). Sociable and prosocial dimensions of social competence: Common and unique contributions to social, academic, and psychological adjustment. *Developmental Psychology, 36*, 302–314.

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Prosocial and Helping Behavior

Joan E. Grusec, Maayan Davidov, and Leah Lundell

Most people believe they should not harm others. However, beliefs about the extent to which they should engage in actions that will benefit others, particularly if that action is costly to themselves, are less certain. The ambiguity that surrounds helping others, then, is one reason that its study is so interesting. Presumably, parents want to raise children who are caring and concerned, and who will go out of their way to assist others whenever they can. Moreover, children who help others tend to have positive relationships and interactions with their peers (Eisenberg & Fabes, 1998), and people who were prosocial as children are less likely to be antisocial as adults (Hamalaimen & Pulkiinen, 1995). Balanced against these positive outcomes, however, is the fact that help is not always wanted by potential recipients, as well as the possibility that too much devotion to others can be harmful to the self, for example, excessive concern for others may place children at risk for depression (Zahn-Waxler, Cole, & Barrett, 1991). Moreover, agents of socialization appear to have mixed reactions when children show concern for others. Prosocial behavior is often not praised by parents or teachers (Caplan & Hay, 1989; Grusec, 1991) and parents claim they do not encourage it in young children (Rheingold, 1982). It should be noted, however, that ambivalence about prosocial behavior is more characteristic of Anglo-American cultures where social responsibility is less duty-based than in cultures such as the Hindu Indian, where prosocial concern is deemed to be as important as ensuring the achievement of justice (Miller & Bersoff, 1992).

Not all acts that are beneficial to others, of course, have a personal cost. Children can engage in caring actions for self-serving reasons, including gaining a feeling of mastery over the environment, facilitating social interactions, in hope of praise, or in anticipation of future reciprocity. Even caring behavior that is motivated by feelings of empathic arousal can be seen as self-serving if its goal is reduction of the helper's uncomfortable emotional state. The term "prosocial behavior" is used to deal with the fact that it is often difficult to know exactly which of the diverse motivations underlying helpful actions is operating in a

given situation. Thus prosocial behavior is defined as any voluntary, intentional action that produces a positive or beneficial outcome for the recipient regardless of whether that action is costly to the donor, neutral in its impact, or beneficial. In this sense it is distinguished from "altruism" which clearly implies that assistance to others came at some cost to the donor.

Actions included in the category of prosocial behavior have been helping, sharing, consideration, concern, and defending. Thus we know a considerable amount about their development and socialization. Greener and Crick (1999), however, recently have pointed out that these behaviors have been somewhat arbitrarily selected by researchers. They asked children aged 8 to 11 years what boys and girls do when they want to be nice to people. The children's responses fell into categories having little overlap with those usually studied. For them, being nice to others included using humor, being friends (e.g., asking about them), avoiding being mean, including them in the play group, ending a conflict, sharing or caring, hanging around with them, and trusting them (e.g., telling them secrets). The most frequently cited exemplars of being nice were, in order, being friends, inclusion in the group, and sharing/caring. Traditionally studied prosocial behaviors – sharing or caring – were deemed more appropriate for peers of the opposite sex, while group inclusion or relationship-centered activities were emphasized more for peers of the same sex. Clearly then, although sharing and caring are salient to children, the most frequently cited instances of nice behavior are not part of the usual definition of prosocial behavior. The reader should keep this limitation in mind in considering the material discussed in this chapter.

Already noted is the fact that prosocial behaviors may have a variety of motivations. Two have been of primary interest to researchers. Each, although not satisfying fully the criteria for altruism, that is, behavior that is costly, still has to do with internally-governed behavior. This focus is a reflection of the fact that developmental psychologists who study socialization, although recognizing that much behavior is controlled by the external environment, have tended to look ultimately for conditions that would promote long-lasting acceptance of standards that occurs even when external reward and punishment contingencies are not operative. The first source of internally-governed motivation has to do with feelings of empathy or sympathy that are generated in response to another person's need state and that may promote attempts to modify that state. The second has to do with adherence to a norm because it seems to have been self-generated. Each of these will be discussed below.

Chapter Overview

The core of this chapter deals with the origins of children's prosocial responding in biology, its relation to empathy, and its promotion through socialization experiences, including the impact of peers and siblings. After a brief discussion of sex differences in prosocial responding and its situational determinants we turn to a consideration of prosocial action in the broader social class and cultural context and what discoveries here mean for a more complete understanding of the topic.

Biological Underpinnings of Prosocial Behavior

Evolutionary theorists have addressed the role of biological factors in the development of prosocial behavior, focusing specifically on altruism, or prosocial behavior involving self-sacrifice. The very notion of altruism seems at odds with traditional evolutionary approaches, which stress survival of the fittest and self-preservation strategies. Nevertheless, contemporary sociobiological theories have tried to account for altruism in evolutionary terms, asserting a distinct survival advantage in helping others.

Several mechanisms have been proposed to explain the evolution of altruism. Wynne-Edwards (1962), for example, suggests that natural selection operates at the group level. For a group to survive, individuals must act in ways that help the group as a whole, even if this limits their personal gain. Other models are based on selection operating at the individual level. For example, Hamilton (1964) proposes that genetic fitness depends not only on the survival of individuals' genes but also on those of their genetic relatives. Kin selection can explain altruism in that acts are selected that have the potential to help those who share the same genes survive, even at the risk of endangering the self, with altruism more likely the closer the relationship between donor and recipient. A third explanatory mechanism is Trivers' (1971) notion of reciprocal altruism whereby individuals help others because of the expectation that this will ultimately benefit and enhance their own survival: What drives altruism is the self-serving belief that the beneficiary of the altruistic act will one day reciprocate a similar act.

Evolutionary perspectives point to the universal potential for prosocial behavior. However, there are also individual differences in the innate capacity for prosocial responding. Studies comparing the concordance patterns of adult monozygotic and dyzygotic twins (e.g., Rushton, Fulker, Neale, Nias, & Eysenck, 1986) indicate that approximately 50% of the variance on scales of altruism, empathy, and nurturance can be attributed to genetic influence. Zahn-Waxler, Robinson, and Emde (1992) have reported evidence for the heritability of prosocial acts and empathic concern at 14 and 20 months, although much less than the 50% obtained in twin studies with adults. One explanation for the increasing hereditary influence with age involves the concept of niche picking, or the tendency to select environments that fit with genetic tendencies. Young children's environments are more likely to be selected for them by adults, but as they grow older, they become increasingly more active in choosing their own.

If the tendency to behave prosocially is inherited, what is it that one inherits? One possibility is biologically based temperamental characteristics that are related to empathy. Thus temperamental differences in emotionality and emotion regulation have been implicated in differential empathic and subsequent prosocial responding in children (see Eisenberg & Fabes, 1998). In general, children who are well regulated and low in impulsivity and, accordingly, who are emotionally positive tend to be more prosocial. The relation between negative emotionality, empathy, and prosocial behavior is more complicated and may depend on the intensity and type of negative emotions (e.g., anger or sadness). Further, emotionality may interact with regulation in different ways to affect the incidence of prosocial responding. For example, the tendency to experience negative emotions like sadness or anxiety may be associated with empathic responding for individuals who are well regulated

with respect to their emotions but not for those who become overwhelmed by such emotions (Eisenberg, Fabes, Guthrie, & Reiser, 2000).

Clearly, the capacity for prosocial behavior is founded in biology. But prosocial behavior is also strongly influenced by different socialization experiences and, necessarily, the interaction of these experiences with biological givens. We shall turn to a discussion of these experiences, but first we discuss empathy, one of the sources of internally-governed motivation described above, and a source that has received detailed attention.

Empathy and Prosocial Behavior

Empathic concern is an important motivator of prosocial behavior. Both empathy – responding to another's distress with a similar emotion – and sympathy – responding to another's distress with feelings of sadness or concern – are vicarious affective responses that can be experienced in the face of another person's emotion or situation. These uncomfortable responses lead individuals to take even costly action in order to alleviate the other person's need. Although empathy and sympathy are not identical, researchers generally have not distinguished between them.

Early studies examining empathy and prosocial behavior in children failed to show a consistent relationship between the two (Underwood & Moore, 1982). Recent methodological and conceptual advances, however, have enabled researchers to demonstrate a linkage. With respect to methodological advances, early measures involved children reporting their own feelings in response to stories depicting a child experiencing distress (e.g., Feshbach & Roe, 1968). These stories, however, were probably too short to evoke sufficient affect in the child, and the procedure may have created strong demand characteristics to respond in a socially desirable manner. When physiological arousal and facial expression are used to infer empathy, however, the relation with prosocial behavior becomes more compelling (Eisenberg & Miller, 1987). A conceptual advance that led to clearer understanding of the relation between empathy and prosocial behavior involves the distinction between different kinds of vicarious emotional responses. In particular, Batson and his colleagues (see Batson, 1991) have suggested that empathy and sympathy need to be differentiated from personal distress. The former are other-focused emotional reactions whereas the latter is a self-focused response involving such negative emotions as anxiety and feelings of disturbance. While both can lead to prosocial actions, empathy is more likely to do so, given that the primary goal of the individual experiencing it is to increase the other's welfare. In contrast, in the case of personal distress, the individual's primary goal is to relieve his or her own discomfort. In the latter case prosocial behavior occurs only if it is the most cost-effective way of reducing the individual's own distress. If other less costly means exist, for example, escaping from the distress-provoking situation, those alternatives will be preferred and prosocial behavior will not occur.

Considerable research with adults has supported the importance of this distinction (Batson, 1991). Researchers have also obtained similar findings with children (see Eisenberg & Fabes, 1998). In these studies, children typically watch a short film depicting other individuals in a state of distress or need, and their emotional reactions to the film are

measured. To distinguish empathy from personal distress children are asked to indicate how they feel by rating adjectives, pointing at line drawings depicting feelings, or simply verbalizing how they feel. Facial expression during the film is also used to make the distinction, with expressions of anxiety and distress indicating personal distress and concerned attention indicating empathy. As well, physiological indices are employed, with heart rate deceleration a marker of other-oriented sympathetic responding and heart rate acceleration and skin conductance reactivity corresponding to a self-focused distress reaction. Following assessment of vicarious emotional reactions, children are given the opportunity to help others at some cost to themselves by, for example, giving up their recess time in the near future to help gather homework materials for injured children, or putting crayons into small boxes for hospitalized children instead of playing with attractive toys. The situation is also structured so that they have the opportunity to escape the emotion-inducing situation, and they are made aware of the fact that no one will know if they have behaved prosocially because the opportunity to do so occurs in private. Overall, a consistent pattern of results has emerged from these studies. In general, the more empathy and sympathy children exhibit in reaction to another's distress, as indicated by self-report and facial and physiological indices, the more they tend to behave prosocially by helping others in need. In contrast, when children respond to another's distress by demonstrating self-focused personal distress, they tend to exhibit less prosocial behavior.

Determinants of empathy and personal distress

Several child characteristics affect emotional responsiveness to the distress of others. One is the ability to take the perspective of others: Chalmers and Townsend (1990), for example, have demonstrated that training in perspective taking increased the self-reported empathy level of maladjusted girls. Temperament, as noted earlier, also plays a role in empathic responding. Children prone to intense and frequent negative emotions tend to exhibit less sympathy and often more personal distress. As well as children who can effectively regulate emotional reactions exhibit more sympathetic responding and sometimes less personal distress than those who have more difficulty with self-regulation (see Eisenberg, Wentzel, & Harris, 1998). Thus it appears that the ability to maintain an optimal level of arousal in response to another's distress is conducive to high empathy and relatively low personal distress, whereas becoming overly aroused leads to high personal distress and low empathy. Finally, the effects of parental characteristics and childrearing practices have been linked to empathic responding. Mothers who are empathic and high on perspective taking and who respond sensitively to their children's needs for comfort have children who are highly empathic (e.g., Eisenberg et al., 1992; Tromsdorff, 1991). Indeed, these maternal characteristics are the hallmark of secure mother–child attachment, with secure attachment associated with greater empathic responding to peers (Kestenbaum, Farber, & Sroufe, 1989) and with more sympathy and fewer distress reactions in response to mothers' enactments of negative emotions (Denham, 1994). With respect to childrearing practices, the use of induction or directing children to consider how their behavior has affected others has also been linked to more child empathy and, consequently, more prosocial behavior (Krevans & Gibbs, 1996).

Of course, the various factors described above may be related to or interact with, one another, although research to date has not focused on such relations. Some possibilities with respect to such interaction, for example, temperament and experience, are discussed in the following section.

Socializing Prosocial Behavior

Promoting internalization of values

Socialization researchers have tried to identify actions by agents of socialization (primarily parents) that will encourage children to adopt a caring orientation that seems to come from within, to be self-generated, or is internalized. Grusec and Goodnow (1994) have suggested that effective internalization of values involves two steps: 1) children's accurate perception of the socialization agent's (usually the parent's) message and 2) acceptance of that message. The first step is accomplished through clear, frequent, and consistent expression of a value in a way that matches the cognitive capacity of the child. The second step is facilitated by three sets of variables. The first set involves the child seeing a value as acceptable or appropriate, that is, parental demands seem reasonable, arguments made to support a position are believable, and the intervention is matched appropriately to the child's temperament and mood state. Parents whose children tend to become aroused in response to other people's expressed emotion, for example, might want to favor arguments for prosocial behavior that focus on the distress of others (cf. Kochanska, 1997a, who has demonstrated an interaction between children's temperament and their responsiveness to reasoning). Grusec, Dix, and Mills (1983) have reported that Anglo-European parents rarely punish children for a failure to share or help: Punishment in this context, then, should be viewed by the child as unfair and would therefore be less likely to promote internalization. The second set of variables affecting acceptance has to do with motivation to accept the message. Facilitating this are such variables as empathic arousal, desire to please the parent, and minimal threats to autonomy. Finally, the child must feel that the action is guided by a norm that has been self-generated.

Relationship variables.   How do parents achieve acceptance of the value of concern for others? One way involves the parent–child relationship. There are at least three aspects of the relationship that have been considered by researchers. First, parents who are warm, that is, who nurture their children and provide noncontingent approval have children who display increased prosocial behavior, although the relation is not always evident (Eisenberg & Fabes, 1998), possibly under conditions where the child has not accurately perceived the prosocial value. Presumably, warm parents increase their children's self-esteem and thereby make them more inclined to assist others (Hoffman, 1970). As well, children may wish to please parents who are nurturant and loving by adopting their values. Second, children who are securely attached have parents who are protective and sensitive to their distress and emotional needs. Not surprisingly, then, they have been shown to be more sympathetic as preschoolers (Waters, Hay, & Richters, 1986) and to display more concern

for others at the age of 5 years (Kestenbaum, Farber, & Sroufe, 1989). Finally, parents who are responsive to the reasonable demands and requests of their children have children who are, in turn, more compliant to the requests of their parents (Parpal & Maccoby, 1985) and who score higher on tests of internalization of parental values (Kochanska, 1997b). In this atmosphere of mutual reciprocity child and parent develop shared goals, with the child positively oriented to compliance with the parent's demands.

Parenting practices: Reasoning, modeling, character attributions, and routines. A second set of socialization variables moves beyond features of the relationship and focuses on parenting practices. Hoffman (1970), for example, argued for the superiority of reasoning, particularly other-oriented reasoning, in promoting prosocial behavior: Reasoning avoids the hostility and oppositional behavior aroused by strong punitive or power assertive interventions used alone (Hart, DeWolf, Wozniak & Burts, 1992), and it promotes the child's empathic capacity. As noted earlier, Krevans and Gibbs (1996) have reported that reasoning that orients children to the impact of their actions on others is associated with prosocial behavior, with empathy playing a mediating role. Other parenting practices include modeling of prosocial actions. Thus children exposed to adults (parents and strangers) who display prosocial behavior are more inclined to be prosocial themselves (Grusec & Lytton, 1988). Character attributions, that is, applying trait labels, as in telling children that they are kind and helpful people, are also effective (Grusec & Redler, 1980). Such labeling (which is effective for 7–8 year olds, but not for 5–6 year olds) presumably leads children to find explanations for their positive behavior in themselves rather than in features of the external environment, and thereby to attribute their actions to a self-generated value. Everyday routines provide another source of internalized values: When socialization agents involve children in activities as a part of the natural course of everyday living strong habits develop, with no feeling of external coercion. Accordingly, in an attempt to evaluate the effectiveness of household work as a way of teaching children a sense of social responsibility, Grusec, Goodnow, and Cohen (1997) found that children who routinely did work around the house that involved benefits to other family members showed greater evidence of general concern for others and prosocial action than those who worked only in response to parental request or who helped with tasks that were of benefit only to themselves. Thus it seems that practice in assisting others that has become routinized may lead to habits of engaging in helpfulness toward others.

Parenting style. Parenting style also has a role to play in the development of prosocial behavior. Children of parents who are authoritative, that is, firmly controlling but sensitive and responsive to their children's needs, are more prosocial in the home (e.g., Robinson, Zahn-Waxler, & Emde, 1994), at school (e.g., Krevans & Gibbs, 1996), and in a laboratory setting (e.g., Eisenberg, Fabes, & Murphy, 1996). In a recent longitudinal study (Hastings, Zahn-Waxler, Robinson, Usher, & Bridges, 2000) mothers' authoritativeness did not predict children's prosocial behavior at the time of its measurement, but did predict it 2 years later, both at home and at school, even when the child's initial level of concern for others was held constant. Thus the suggestion that authoritative parenting causes prosocial action, rather than the reverse, is further strengthened.

Peers and siblings as socializers

The reciprocal and relatively egalitarian nature of peer and sibling relationships enables, if not compels, the consideration of another's thoughts and feelings. Accordingly, peers and siblings provide, in addition to parents, a source of influence on prosocial development as children learn to respond emotionally to and help each other. Interactions among children provide prosocial opportunities that differ in nature from those that arise from adult–child interactions (Zahn-Waxler, Ianotti, & Chapman, 1982). For example, children are more likely to witness another child (vs. an adult) in distress because a child's distress is often more salient, and thus they will have more opportunities to practice comforting behaviors with peers. Also, children are often in situations that dictate mutual sharing, for example, of toys. Finally, in interactions with adults, children are more likely to be the recipients of aid whereas, in interactions with children, they are equally likely to give and to receive aid. Further, the motivations underlying children's prosocial behavior may differ depending on whether they are interacting with children or adults. For example, young children cite more authority- or punishment-related reasons for complying with an adult's requests, whereas they are more likely to comply with a peer's requests for relational reasons such as friendship (Eisenberg, Lundy, Shell, & Roth, 1985). Consequently, the peer context may be particularly conducive to the learning of other-oriented rather than compliance-oriented prosocial responding.

Experiences with siblings are important in promoting prosocial behavior in part because of differences in age between siblings. Older siblings have more opportunities to practice prosocial behaviors and younger siblings can learn from the behaviors of their older siblings (Brody, Stoneman, MacKinnon, & MacKinnon, 1985; Dunn & Munn, 1986). Whiting and Whiting (1973) have noted the greater frequency of prosocial behavior in cultures where children are assigned the responsibility of taking care of infants. Perhaps, by taking care of younger infants, children learn greater sensitivity to what others are feeling and, further, how to respond to those needs. As well, sibling caregiving is positively related to mature cognitive and emotional perspective-taking skills (Garner, Jones, & Palmer, 1994; Stewart & Marvin, 1984), which contribute to effective and appropriate responding to the distress and needs of younger children. Although the direction of the relationship is unclear (that is, does caregiving promote perspective taking or are children with these skills more likely to care for younger children?) it is plausible that sibling caregiving is an important contributor to the development of perspective taking and thus prosocial responding. The importance of age heterogeneity is further emphasized in Bizman, Yinon, Mivtzari, and Shavit's (1978) finding that children in age-heterogeneous kindergartens display more prosocial behaviors than those in age-homogeneous kindergartens. Age-homogeneous kindergartens, in contrast, lead to more competitive environments in which children might not be as inclined to help each other.

The Development of Prosocial Behavior

Even toddlers are capable of substantial displays of concern for others (Zahn-Waxler, Radke-Yarrow, Wagner, & Chapman, 1992). Indeed, the precursors of empathic responding appear midway through the first year of life as babies cry when they hear others cry – a primitive form of empathy. During the second year of life, as they acquire a concept of person permanence, perceptual role-taking abilities, and a sense of personal identity, young children begin to try to comfort both peers and adults who appear upset (Hay, 1979) and forms of cooperation such as attempts to help with household work emerge (Rheingold, 1982). At this time children also begin to display the precursors of conscience or internalization, with a developing awareness of rules and standards (Kagan, 1981) and an increasing capacity to regulate their own behavior (Kopp, 1982).

   A meta-analysis reported by Eisenberg and Fabes (1998) found that, overall, prosocial behavior increases in each age period (infancy, preschool, childhood, and adolescence), although the magnitude of effect sizes depends on a variety of variables including the type of prosocial behavior under investigation, method of data collection, and target of behavior. Nevertheless, although the capacity for prosocial responding may well increase with age, it is clear that children also need to learn a great deal about issues around the appropriateness of its expression. There is a large social psychological literature indicating that help is not always appropriate under all circumstances (e.g., Fisher, Nadler, & Witcher-Alagna, 1982): It threatens the recipient's self-esteem, induces internal attributions for failure (Gross, Wallston, & Piliavin, 1979), and leads to feelings of indebtedness (Greenberg & Shapiro, 1971). Help given to strangers is particularly likely to raise issues of indebtedness and concern about repayment, whereas that given to family members is not (Clark, 1983). These complexities, along with the need not to engage in too much self-sacrifice, provide a challenging learning experience that has yet to receive a great deal of attention in the developmental literature.

Sex Differences in Prosocial Behavior

Although girls are commonly believed to be more prosocial than boys the evidence is in fact equivocal (Radke-Yarrow, Zahn-Waxler, & Chapman, 1983). Eisenberg and Fabes (1998) describe a meta-analysis that found modest sex differences favoring girls. However, these differences appeared to depend on the type of prosocial behavior studied, the methodology employed, and the target of behavior. For example, girls were more likely to be kind or considerate, but not more inclined to share, comfort, or help. Also, girls were more likely to be prosocial when the measure consisted of self or other reports as opposed to direct observation, possibly a reflection of the stereotypes individuals have about how boys and girls should behave rather than reflecting how they actually do behave. Finally, sex differences in favor of girls were more likely when prosocial behavior was directed toward an adult than toward another child, perhaps an indication of greater compliance with adults on the part of girls than boys. Fabes and Eisenberg also reviewed sex differences in

empathy and found that girls tended to be more empathic than boys. However, once again, these differences were more pronounced in self-report studies than in observational studies, not appearing when physiological and other, more subtle, measures of empathy were employed.

Some sex differences, however, may be more than artifacts of measurement. Grusec (1987), for example, found that both mothers and fathers rated acts of self-sacrifice, such as donating money to starving children, as more important for girls than boys as well as rated themselves as more pleased when their daughters, rather than their sons, engaged in such actions. Parents also reported that they were more likely to praise girls for self-sacrifice and to criticize or discourage boys for the same actions. These findings support the possibility of differential socialization pressures for boys and girls at least in some areas of prosocial behavior.

Situational Determinants of Prosocial Behavior

Prosocial behavior also depends on a number of characteristics of the helping context. One of these is perceived ability to help. Peterson (1983) found that children whose level of competence was enhanced by training in required helping skills and who were assigned specific responsibility for helping responded by helping more. This finding is complemented by Midlarsky and Hannah's (1985) report that young children, when asked why they had not helped in an emergency situation, reported that they were not sure what to do and feared disapproval. In contrast, adolescents' reasons for not helping reflected concern that the recipient might feel embarrassed or hurt. Related to competence is having an understanding of the need to help. For example, Pearl (1985) found that 4 year olds were more inclined to help in problem situations when both the distress level of the recipient and the cause of distress were made explicit, whereas helping among the older children did not depend on the explicitness of the cues. Thus young children need unambiguous cues that the situation requires intervention and that they have the ability to intervene in ways relevant to the cause of the distress. Children are also more likely to help those who are important in their lives and who they like (e.g., Costin & Jones, 1992), those who are younger and therefore more dependent (Midlarsky & Hannah, 1985), and those they believe do not have control over their own misfortune (Barnett & McMinimy, 1988).

A situational determinant of helping that has received considerable attention is the actor's temporary mood state. Being in a good mood seems to foster prosocial responding in children of all ages, as well as adults (Cialdini, Kenrick, & Baumann, 1982; Isen, 1970; Moore, Underwood, & Rosenhan, 1973). Many explanations have been proposed for this relationship but each to some extent implicates priming processes. A good mood increases the likelihood that other positive thoughts and associations will be generated in response to subsequent events. As a result, individuals in a good mood will view a prosocial opportunity more favorably than those in a neutral or negative mood and will be more inclined to offer assistance (Carlson, Charlin, & Miller, 1988). Findings with respect to negative moods and prosocial behavior are not as consistent and may depend on the age of the helper, with negative moods inhibiting helping in younger children (e.g., Moore et al., 1973) but pro-

moting it in older children (Cialdini et al., 1982). Cialdini et al. suggested that this developmental change results from increasing experiences with adult approval for prosocial behavior which leads these acts to be experienced as secondarily reinforcing. Thus their performance becomes a source of self-gratification and thereby capable of producing a self-generated improvement in mood that can be used to relieve states of sadness. Young children, without this kind of experience, cannot use prosocial action as a way of producing a positive mood. Alternatively, Rosenhan (e.g., Rosenhan, Salovey, Karylowski, & Hargis, 1981) has argued that negative mood enhances helping when the focus of the negative mood is on another person but inhibits it when attention is on the self. He suggests older children and adults have learned to focus their sad thoughts on others which, in turn, arouses empathy and prosocial action. Younger children, on the other hand, may be more inclined to focus sad thoughts on themselves, leading them to be more self-preoccupied and thus less likely to help others.

Prosocial Behavior in its Social Context

Already noted is the fact that most of the research on prosocial development has been conducted in a middle-class, Anglo-European context. In this final section we turn to what is known about it in other social class and cultural contexts. Such attention broadens knowledge of the different cultural manifestations of prosocial action. As well, it allows revision and expansion of the ways it can be conceived of in the middle-class, Anglo-European context about which most is known and from where most of our theory has come.

Social class differences

Studies of social class differences in prosocial behavior have provided mixed findings. Some find that children from lower socioeconomic backgrounds are more prosocial than those from higher socioeconomic backgrounds. Others find they are less prosocial, and yet others that there are no differences (see Eisenberg & Fabes, 1998). The answer to this complexity no doubt lies, as it seems to with other similar complexities in the area, in a consideration of type of prosocial behavior under examination and the processes by which each is socialized, rather than in children's overall prosocial inclinations. For example, children growing up in different classes have different opportunities to help and act prosocially. Thus Call, Mortimer, and Shanahan (1995) found that adolescents from lower income families reported spending more time helping with household chores and taking care of other family members compared to adolescents from higher income families (where such tasks may be done in large part by hired help). In contrast, adolescents from higher income families reported more opportunity to help others in their job setting than did adolescents from lower income families, perhaps due to differences in their job environments or in their attitudes towards their job.

    Children are also exposed to different social norms as a function of social class. Class-linked factors such as parents' occupation and sharing and helping arrangements within

the family likely convey different norms regarding prosocial behavior, which may in turn be reflected in children's behavior with others. For example, middle-class children shared more candies with peers when they thought their identity would be known to the recipient than in an anonymous condition, while lower-class children either did the opposite or made no differentiation (Dreman & Greenbaum, 1973; Gupta, 1982). This suggests that middle-class children rely more on a norm of social exchange, as opposed to lower class children's greater reliance on norms of communal sharing and mutual aid, characteristics which probably stem from their different experiences at home and in the community.

Cultural differences

The most systematic examination of cultural differences in prosocial behavior has been undertaken by Whiting and Whiting (1973, 1975), whose work we have already mentioned. Observing children between 3 and 11 years of age in six different countries, Whiting and Whiting found that those from Kenya, Mexico, and the Philippines displayed more nurturant behavior (e.g., offering help or support and making responsible suggestions to others) than did those from Okinawa, India, or the United States. The factor that most strongly accounted for these differences in prosocial behavior was assignment of chores to children, particularly the care of infants. Responsibility for chores also explained some of the differences in prosocial behavior observed among the children within each culture. These findings emphasize – now in a cross-cultural context – the importance of everyday routines or practice in the promotion of concern for others (see above). The findings also underline how different aspects of the socioeconomic organization of a culture can limit or expand the opportunities its children have to acquire particular social behaviors. Specifically, the more prosocial cultures were also those in which conditions were such that women's overall workload and contribution to the family's economy were greater, and hence women delegated more responsibility to their children in these cultures (thus providing them with more opportunities to practice prosocial behavior). Interestingly, Whiting and Whiting also studied friendly sociable behavior which, as noted earlier, is closer to the way children rather than researchers have defined prosocial behavior. Here the pattern of relations was different from that found for nurturant behavior, with American children more friendly and Kenyan children less friendly, and with cultures having an independent nuclear family as the modal household structure associated with greater sociability. Thus another feature of cultural organization is highlighted as having an impact on one form or aspect of concern for others.

Socioeconomic organization is frequently associated with differential emphasis of values, and we turn now to a consideration of such emphasis and its impact on differences in prosocial action across cultures.

Cultural values

Cultures that value prosocial behavior, such as those where the help of family members is essential for the family's subsistence, would be expected, of course, to instill higher levels of

prosocial tendencies in their children. In other cultures, however, prosocial behavior may contradict other values that receive even greater emphasis. For example, cultures that place great value on personal success may encourage self-enhancing tendencies such as competitiveness and the pursuit of personal academic achievement, because such behaviors can enhance the child's likelihood of future social success. Such a focus on self-enhancement is at least somewhat inconsistent with a focus on helping others (Schwartz, 1994). However, as we shall argue below, the most important difference between cultures in this respect may not lie in the degree to which they each value prosocial behavior, but rather in how they each define it and socialize it.

Individualism and collectivism. A value dimension that has attracted much research interest is that of individualism versus collectivism. In individualist cultures individuals are seen as independent and autonomous, and their actions as determined by their own inner motivations and dispositions. In collectivist cultures individuals are seen as part of a closely knit social network in which they are interconnected entities, and where their identity is derived from participation in the group and fulfillment of social roles. Individualist cultures (loosely linked to Western countries) value assertion, self-expression, and self-actualization. Collectivist cultures (loosely linked to Asian, African, and Latin American countries) value propriety, fitting in, and harmonious relationships with others (Markus & Kitayama, 1991).

Given this emphasis on harmony and relatedness in collectivist cultures, some researchers have hypothesized that children reared in those cultures would show less aggression and more prosocial behavior compared to children reared in individualist cultures. In general, research has supported the contention regarding aggression (Zahn-Waxler, Friedman, Cole, Mizuta, & Hiruma, 1996). However, the evidence to date has been less persuasive with respect to predictions about prosocial behavior. Although Stevenson (1991) reported greater sharing, comforting, and helping among kindergartners in Japan and Taiwan compared to the United States, the differences were small, and the incidence of prosocial behavior was high in all three cultures. Trommsdorff (1995) found equal levels of empathy and prosocial behavior among Japanese and German 5-year-old girls in their responses to a distressed adult and Zahn-Waxler et al., (1996) report that American preschoolers enacted the same amount of, and in some contexts more, prosocial themes in response to hypothetical social dilemmas compared to Japanese preschoolers. Part of the difficulty here may be that there is heterogeneity of values in any culture, which is possibly greater in some than others. Thus, while Japan may be more likely to be cited as a collectivist culture, it may not be a strong exemplar of the construct.

It is also possible that cultural values reveal themselves not in total amount of prosocial behavior but in other of its aspects, such as which type of prosocial behavior is most valued. Members of individualist cultures seem to evaluate unsolicited or spontaneous prosocial behavior more highly than that which is reciprocal or solicited, while individuals with a collectivist orientation (Hindus and Israelis of Middle-Eastern descent) think equally highly of, or even prefer, reciprocal or solicited prosocial behavior (Jacobsen, 1983; Miller & Bersoff, 1994). These studies suggest cultural differences, then, in conceptions of what constitutes desirable prosocial behavior, with reciprocity and responsiveness to other's needs judged more positively in a culture more strongly characterized by interdependence and

compliance with social roles than one more strongly characterized by autonomy and feelings of self-generation.

Different conceptions of what constitutes desirable prosocial behavior are also reflected in cultural differences in socialization. Rather than focusing on techniques that facilitate feelings of self-generation, cultures favoring interdependence and reciprocity emphasize social structure and one's role in it (Schwartz, 1994). Thus authoritative parenting is relatively uncommon among Japanese mothers, with parenting more likely to be either indulgent or strict (Power, Kobayashi-Winata, & Kelly, 1992). Similarly, Stevenson (1991) reports that Japanese and Chinese parents promote interdependence by forming strong affectional bonds with their young children, and making firm demands for adherence to social norms when they grow older. Reliance on the formation of strong parent–child bonds and later strong demands for prosocial behavior may be a better approach for teaching reciprocity and responsiveness than is an approach that emphasizes autonomy and choice.

Different conceptions of prosocial behavior and differences in socialization are reflected in the nature of attributions made for prosocial behavior. Miller (1984) found that although 8- and 11-year-old American and Hindu children do not differ in the kinds of explanations they provide for prosocial (as well as deviant) acts, by the time they reach adulthood Americans make more references to the actor's dispositions (e.g. personality traits) and fewer references to the context (e.g. the actor's social role) compared to Hindu individuals. Again, this suggests that Americans learn to view prosocial behaviors as emanating from inner motives and dispositions, whereas Hindus are socialized to view prosocial behavior as stemming from the social context. There is no reason to think that attributions to personality traits are more likely to promote positive behavior than are attributions to social role demands. Indeed, each should probably be seen as fitting with the particular context in which it occurs. And, as noted above, different socialization practices are required in order to achieve the particular outcome stressed by the culture. One is left to wonder, however, given the increasing inclusion in Western culture of so many people from cultures where autonomy is not so central, whether current emphases on autonomy and self-generation may need to be replaced. Thus, the growing heterogeneity of Western culture challenges researchers to rethink some very basic theoretical issues in the study of socialization.

Conclusion

In this survey we have attempted to demonstrate that, although much is known about children's prosocial behavior, much remains to be learned. It is evident that the multifaceted nature of the construct has led to confusions and vagueness that can only be resolved with greater care in identification of the kind of prosocial action under consideration. As well, increasing information about the meaning and the antecedents of prosocial behavior in a variety of cultural contexts requires questioning of some of the most basic concepts of socialization theory. We have come a considerable distance in our understanding of concern for others, but we still have some distance to go.

References

Barnett, M. A., & McMinimy, V. (1988). Influence of the reason for other's affect on preschoolers' empathy response. *Journal of Genetic Psychology, 149*, 153–162.

Batson, C. D. (1991). *The altruism question: Towards a social-psychological answer*. Hillsdale, NJ: Erlbaum.

Bizman, A., Yinon, Y., Mivtzari, E., & Shavit, R. (1978). Effects of the age structure of the kindergarten on altruistic behavior. *Journal of School Psychology, 16*, 154–160.

Brody, G. H., Stoneman, Z., MacKinnon, C. E., & MacKinnon, R. (1985). Role relationships and behavior between preschool-aged and school-aged sibling pairs. *Developmental Psychology, 21*, 124–129.

Call, K. T., Mortimer, J. T., & Shanahan, M. J. (1995). Helpfulness and the development of competence in adolescence. *Child Development, 66*, 129–138.

Caplan, M. Z., & Hay, D. (1989). Preschoolers' responses to peers' distress and beliefs about bystander intervention. *Journal of Child Psychology and Psychiatry, 30*, 231–242.

Carlson, M., Charlin, V., & Miller, N. (1988). Positive mood and helping behavior: A test of six hypotheses. *Journal of Personality and Social Psychology, 55,* 211–229.

Chalmers, J. B., & Townsend, M. A. R. (1990). The effect of training in social perspective taking on socially maladjusted girls. *Child Development, 61*, 178–190.

Cialdini, R. B., Kenrick, D. T., & Baumann, D. J. (1982). Effects of mood on prosocial behavior in children and adults. In N. Eisenberg (Ed.), *The development of prosocial behavior* (pp. 339–359). New York: Academic Press.

Clark, M. S. (1983). Some implications of close social bonds for help seeking. In B. M. DePaulo, A. Nadler, & J. D. Fisher (Eds.), *New directions in helping: Vol. 2. Help seeking* (pp. 205–233). New York: Academic Press.

Costin, S. E., & Jones, D. C. (1992). Friendship as a facilitator of emotional responsiveness and prosocial interventions among young children. *Developmental Psychology, 28*, 941–947.

Denham, S. A. (1994). Mother–child emotional communication and preschoolers' security of attachment and dependency. *Journal of Genetic Psychology, 155*, 119–121.

Dreman, S. B., & Greenbaum, C. W. (1973). Altruism or reciprocity: Sharing behavior in Israeli kindergarten children. *Child Development, 44*, 61–68.

Dunn, J., & Munn, P. (1986). Siblings and the development of prosocial behavior. *International Journal of Behavior Development, 9,* 265–284.

Eisenberg, N., & Fabes, R. A. (1998). Prosocial development. In. W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology, vol. 3: Social, emotional, and personality development* (5th ed., pp. 701–778). New York: Wiley.

Eisenberg, N., Fabes, R. A., Carlo, G., Troyer, D., Speer, A. L., Karbon, M., & Switzer, G. (1992). The relations of maternal practices and characteristics to children's vicarious emotional responsiveness. *Child Development, 63*, 583–602.

Eisenberg, N., Fabes, R. A., Guthrie, I .K., & Reiser, M. (2000). Dispositional emotionality and regulation: Their role in predicting quality of social functioning. *Journal of Personality and Social Psychology, 78*, 136–157.

Eisenberg, N., Fabes, R. A., & Murphy, B. C. (1996). Parents' reactions to children's negative emotions: Relations to children's social competence and comforting behavior. *Child Development, 67*, 2227–2247.

Eisenberg, N., Lundy, N., Shell, R., & Roth, K. (1985). Children's justifications for their adult and peer-direct compliant (prosocial and nonprosocial) behaviors. *Developmental Psychology, 21*, 325–331.

Eisenberg, N., & Miller, P. (1987). The relation of empathy to prosocial and related behaviors. *Psychological Bulletin, 101*, 91–119.

Eisenberg, N., Wentzel, M., & Harris, J. D. (1998). The role of emotionality and regulation in empathy-related responding. *School Psychology Review, 27*, 506–521.

Feshbach, N. D., & Roe, K. (1968). Empathy in six- and seven-year-olds. *Child Development, 39*, 133–145.

Fischer, J. D., Nadler, A., & Witcher-Alagna, S. (1982). Recipient reactions to aid. *Psychological Bulletin, 91*, 27–54.

Garner, P. W., Jones, D. C., & Palmer, D. J. (1994). Social cognitive correlates of preschool children's sibling caregiving behavior. *Developmental Psychology, 30*, 905–911.

Greenberg, M. S., & Shapiro, S.P. (1971). Indebtedness: An adverse aspect of asking for and receiving help. *Sociometry, 34*, 290–301.

Greener, S., & Crick, N. (1999). Normative beliefs about prosocial behavior in middle childhood: What does it mean to be nice? *Social Development, 8*, 350–363.

Gross, A. E., Wallston, B. S., & Piliavin, I. M. (1979). Reactance, attribution, equity, and the help recipient. *Journal of Applied Social Psychology, 9*, 297–313.

Grusec, J. E. (1987). The socialization of self-sacrifice in boys and girls. In L. Shamgar-Handelman & R. Palomba (Eds.), *Alternative patterns of family life in modern societies* (pp. 265–274). Rome: Instituto di Recherche Sulla Popolazione.

Grusec, J. E. (1991). Socializing concern for others in the home. *Developmental Psychology, 27*, 338–342.

Grusec, J. E., Dix, T., & Mills, R. (1982). The effects of type, severity and victim of children's transgressions on maternal discipline. *Canadian Journal of Behavioural Science, 14*, 276–289.

Grusec, J. E., & Goodnow, J. J. (1994). Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. *Developmental Psychology, 30*, 4–19.

Grusec, J. E., Goodnow, J. J., & Cohen, L. (1997) Household work and the development of children's concern for others. *Developmental Psychology, 32*, 999–1007.

Grusec, J. E., & Lytton, H. (1988). *Social development: History, theory, and research.* New York: Springer-Verlag.

Grusec, J. E., & Redler, E. (1980). Attribution, reinforcement, and altruism: A developmental analysis. *Developmental Psychology, 16*, 525–534.

Gupta, P. (1982). Altruism or reciprocity: Sharing behavior in Hindu kindergarten children. *Psychological Studies, 27,* 68-73.

Hamalaimen, M., & Pulkiinen, L. (1995). Aggressive and non-prosocial behavior as precursors of criminality. *Studies on Crime and Crime Prevention, 4*, 6–21.

Hamilton, W. D. (1964). The genetic evolution of social behavior. *Journal of Theoretical Biology, 7*, 1–52.

Hart, C. H., DeWolf, M. D., Wozniak, P., & Burts, D. C. (1992). Maternal and paternal disciplinary styles: Relations with preschoolers' playground behavioral orientations and peer status. *Child Development, 63*, 879–892.

Hastings, P. D., Zahn-Waxler, C., Robinson, J., Usher, B., & Bridges, D. (2000). The development of concern for others in children with behavior problems. *Developmental Psychology, 36*, 531–546.

Hay, D. (1979). Cooperative interactions and sharing between very young children and their parents. *Developmental Psychology, 15*, 647–653.

Hoffman, M. L. (1970). Moral development. In P. H. Mussen (Ed.), *Carmichael's manual of child psychology* (Vol. 2, pp. 261–360). New York: Wiley.

Isen, A. M. (1970). Success, failure, attention, and reaction to others: The warm glow of success.

Journal of Personality and Social Psychology, 15, 294–301.

Jacobsen, C. (1983). What it means to be considerate: Differences in normative expectations and their implication. *Israel Social Science Research, 1*, 24–33.

Kagan, J. (1981). *The second year: The emergence of self-awareness.* Cambridge, MA: Harvard University Press.

Kestenbaum, R., Farber, E. A., & Sroufe, L. A. (1989). Individual differences in empathy among preschoolers: Relation to attachment history. *New Directions in Child Development, 44*, 51–64.

Kochanska, G. (1997a). Multiple pathways to conscience for children with different temperaments: From toddlerhood to age 5. *Developmental Psychology, 33*, 228–240.

Kochanska, G. (1997b). Mutually responsive orientation between mothers and their young children: Implications for early socialization. *Child Development, 68*, 94–112.

Kopp, C. B. (1982). Antecedents of self-regulation: A developmental view. *Developmental Psychology, 18*, 199–214.

Krevans, J., & Gibbs, J. C. (1996). Parents' use of inductive discipline: Relations to children's empathy and prosocial behavior. *Child Development, 67*, 3263–3277.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224–253.

Midlarksy, E., & Hannah, M. E. (1985). Competence, reticence, and helping by children and adolescents. *Developmental Psychology, 21*, 534–541.

Miller, J. G. (1984). Culture and the development of everyday social explanation. *Journal of Personality and Social Psychology, 46*, 961–978.

Miller, J. G., & Bersoff, D. M. (1992). Culture and moral judgment: How are conflicts between justice and interpersonal responsibilities resolved? *Journal of Personality and Social Psychology, 62*, 541–554.

Miller, J. G., & Bersoff, D. M., (1994). Cultural differences in the moral status of reciprocity and the discounting of endogenous motivation. *Personality and Social Psychology Bulletin, 201*, 592–602.

Moore, B. S., Underwood, B., & Rosenhan, D. L. (1973). Affect and altruism. *Developmental Psychology, 8*, 99–104.

Parpal, M., & Maccoby, E. E. (1985). Maternal responsiveness and subsequent child compliance. *Child Development, 56*, 1326–1334.

Pearl, R. (1985). Children's understanding of others' need for help: Effects of problem explicitness and type. *Child Development, 56*, 735–745.

Peterson, L. (1983). Influence of age, task competence, and responsibility focus on children's altruism. *Developmental Psychology, 19*, 141–148.

Power, T. G., Kobayashi-Winata, H., & Kelly, M. L. (1992). Childrearing patterns in Japan and the United States: A cluster analytic study. *International Journal of Behavioral Development, 15*, 185–205.

Radke-Yarrow, M., Zahn-Waxler, C., & Chapman, M. (1983). Children's prosocial dispositions and behavior. In P. Mussen (Series Ed.) & E. M. Hetherington (Vol. Ed.), *Handbook of child psychology, vol. 4: Socialization, personality, and social development* (pp. 469–545). New York: Wiley.

Rheingold, H. (1982). Little children's participation in the work of adults, a nascent prosocial behavior. *Child Development, 53*, 114–125.

Robinson, J. L., Zahn-Waxler, C., & Emde, R. N. (1994). Patterns of development in early empathic behavior: Environmental and child constitutional influences. *Social Development, 3*, 125–145.

Rosenhan, D. L., Salovey, P., Karylowski, J., & Hargis, K. (1981). Emotion and altruism. In J. P. Rushton & R. M. Sorrentino (Eds.), *Altruism and helping behavior: Social, personality, and*

developmental perspectives (pp. 233–248). Hillsdale, NJ: Erlbaum.

Rushton, J. P., Fulker, D. W., Neale, M. C., Nias, D. K. B., & Eysenck, H. J. (1986). Altruism and aggression: The heritability of individual differences. *Journal of Personality and Social Psychology, 50*, 1192–1198.

Schwartz, S. H. (1994). Beyond individualism/collectivism: New cultural dimensions of values. In U. Kim, H. C. Triandis, C. Kagitcibasi, S.-C. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications* (pp. 85–119). Thousand Oaks, CA: Sage.

Stevenson, H. W. (1991). The development of prosocial behavior in large-scale collective societies: China and Japan. In R. A. Hinde & J. Groebel (Eds.), *Cooperation and prosocial behavior* (pp. 89–105). Cambridge, England: Cambridge University Press.

Stewart, R. B., & Marvin, R. S. (1984). Sibling relations: The role of conceptual perspective taking in the ontogeny of sibling caregiving. *Child Development, 55*, 1322–1332.

Trivers, R. L. (1971). The evolution of reciprocal altruism. *Quarterly Review of Biology, 46*, 35-57.

Trommsdorff, G. (1991). Child-rearing and children's empathy. *Perceptual and Motor Skills, 72*, 387–390.

Trommsdorff, G. (1995). Person-context relations as developmental conditions for empathy and prosocial action: A cross-cultural analysis. In T. A. Kindermann & J. Valsiner (Eds.), *Development of person-context relations* (pp. 113–146). Hillsdale, NJ: Erlbaum.

Underwood, B., & Moore, B. (1982). Perspective-taking and altruism. *Psychological Bulletin, 91*, 143–173.

Waters, E., Hay, D., & Richters, J. (1986). Infant–parent attachment and the origins of prosocial and antisocial behavior. In D. Olweus, J. Block, & M. Radke-Yarrow (Eds.), *Development of antisocial and prosocial behavior: Research, theories, and issues* (pp. 97–125). Orlando, FL: Academic Press.

Whiting, B. B., & Whiting, J. W. M. (1973). Altruistic and egoistic behavior in six cultures. In L. Nader & T. W. Maretzki (Eds.), *Cultural illness and health*. Washington, DC: American Anthropological Association.

Whiting, B. B., & Whiting, J. W. M. (1975). *Children of six cultures: A psycho-cultural analysis.* Cambridge, MA: Harvard University Press.

Wynne-Edwards, V. C. (1962). *Animal dispersion in relation to social behavior*. Edinburgh, Scotland: Oliver & Boyd.

Zahn-Waxler, C., Cole, P., & Barrett, K. (1991). Guilt and empathy: Sex differences and implications for the development of depression. In J. Garber & K.A. Dodge (Eds.), *The development of emotion regulation and dysregulation. Cambridge studies in social and emotional development* (pp. 243–272). New York: Cambridge University Press.

Zahn-Waxler, C., Friedman, R. J., Cole, P. M., Mizuta, I., & Hiruma, N., (1996). Japanese and United States preschool children's responses to conflict and distress. *Child Development, 67*, 2462–2477.

Zahn-Waxler, C., Iannotti, R., & Chapman, M. (1982). Peers and prosocial development. In K. H. Rubin & H. R. Ross (Eds.), *Peer relationships and social skills in childhood* (pp. 133–162). New York: Springer-Verlag.

Zahn-Waxler, C., Radke-Yarrow, M., Wagner, E., & Chapman, M. (1992). Development of concern for others. *Developmental Psychology, 28*, 126–136.

Zahn-Waxler, C., Robinson, J., & Emde, R. N. (1992). The development of empathy in twins. *Developmental Psychology, 28*, 1038–1047.