

**From Interest to Obligation:
The Gradual Development of Human Altruism**

Audun Dahl

University of California, Santa Cruz

Markus Paulus

Ludwig-Maximilians-Universität München

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Abstract

Altruism is a central feature of human morality. Recent research sheds light on the development of altruism in early childhood. In this article, we propose a theoretical framework that systematizes research on how altruism develops from infancy to childhood. The framework includes four phases in the development of human altruism: 1) interest in social interactions, 2) preference for others' goal completion, 3) concern with others' well-being, and 4) a normative stance toward altruistic actions. We point to needs for additional research, especially on developmental processes by which children develop from one phase to another, eventually leading children to acquire forms of altruism that play important roles in human societies.

Key words: *altruism, helping, moral development*

Altruistic acts are acts motivated by concerns to promote the welfare of others, not only as a means of attaining another outcome, but as an end in itself (Nagel, 1970; Oliner & Oliner, 1988). Altruistic acts can be everyday acts of assisting or comforting others, as well as heroic efforts to save lives at great personal risk, like individuals helping Jews survive during World War II (Oliner & Oliner, 1988; Turiel, 2015). In some situations, people think altruistic acts are obligatory, for instance, saving someone's life (Dahl, Gingo, Uttich, & Turiel, 2018; Miller, Bersoff, & Harwood, 1990; Turiel, 2015). In other situations, altruistic acts are considered superogatory: morally good but not required (Kahn, 1992; Killen & Turiel, 1998). The emergence of altruism in humans has puzzled researchers from a variety of disciplines, including philosophy, psychology, and biology.

To explain how altruism develops in humans, researchers have studied early forms of prosocial behaviors: helping, comforting, and sharing (see, e.g., Dahl, 2015; Dunfield & Kuhlmeier, 2013; Paulus, 2014; Roth-Hanania, Davidov, & Zahn-Waxler, 2011; Warneken, 2015). This research speaks to fundamental questions about the origins of altruism: Are infants innately altruistic? If not, how do altruistic tendencies emerge?

In this article, we propose a developmental framework for research on the development of altruism. We argue that a developed altruism, as seen in adults, is accompanied by an ability to normatively evaluate acts as obligatory or prohibited. Moreover, we propose that infants' earliest prosocial behaviors, like instrumental helping, are not motivated by altruistic concerns for others' welfare but by an interest in social interactions. Based on this definition and a review of recent research, we argue that altruism develops gradually, through four phases in early childhood. While much of the research we review has investigated instrumental and empathic responding, our framework applies to all forms of altruism. In delineating these four phases, we

point to important, unanswered questions about the emergence of human altruism.

Altruism from a Psychological Point of View

In this article, we define and discuss altruism from a psychological point of view. By altruistic acts, we mean acts motivated by concerns for the welfare of others. We refer to *welfare* as a positive psychological or bodily state, not the accomplishment of goals *per se* (which may or may not lead to improved welfare). According to this account, the agent may be concerned with immediate welfare (as when comforting a person in distress) or with long-term welfare (as when a parent puts on a child's seatbelt, sometimes to the child's immediate dismay, to prevent the child from being harmed in an accident). This psychological definition of altruism differs from biological definitions of altruism, which refer to behaviors that increase the probability of the recipient's survival while decreasing the probability of the agent's survival (de Waal, 2008). Our psychological definition does not require that altruistic acts pertain to survival or impose a cost to agents.

We use the term *prosocial behavior* for acts that tend to promote the welfare of others, regardless of the motive underlying these acts (for a discussion of different types of prosocial behaviors, see Dunfield & Kuhlmeier, 2013). Since prosocial acts are defined at the level of behaviors rather than motives, prosocial behaviors do not always stem from altruistic motives. For instance, some have argued that infants help others to engage in social interactions, not to promote the well-being of others (Carpendale, Hammond, & Atwood, 2013; Dahl, 2015; Paulus, 2014).

We distinguish two types of altruistic acts that appear to emerge at different developmental stages. The first type of altruistic acts to emerge are those motivated by empathic

concerns for others' welfare but not yet accompanied by evaluations of helping as good or required. Indeed, some have proposed that empathy is a central motivator of altruistic behavior (e.g., de Waal, 2008). However, humans also engage in a second type of altruistic acts—those accompanied by normative evaluations of helping as good or required (Dahl et al., 2018; Miller et al., 1990; Turiel, 2015). Altruistic acts accompanied by perceived obligations or other evaluations set human altruism apart from helpful behaviors in other animals. The human conceptions of normativity and obligation are unique because no other animals appear to possess the kinds of third-party categorical evaluations seen in humans (von Rohr et al., 2012). These human concerns with the well-being of others are central to coexistence in societies.

Furthermore, we propose that infants help before they are motivated by concerns for others' welfare or make normative evaluations. We refer to these first types of helping as *prealtruistic* helping. In recent research, infants helped others from around their first birthday (Warneken & Tomasello, 2007). We consider these early helpful actions prealtruistic for several reasons: Infants' instrumental helpful actions do not usually co-occur, or correlate, with responsiveness to another person's distress (Dunfield & Kuhlmeier, 2013; Paulus, 2018). Infants do not appear to view themselves as obligated to help in standard helping experiments: One-year-olds often play instead of helping an experimenter, even in simple helping tasks (Waugh & Brownell, 2017). Infant helping often has a gamelike character, suggesting that infants might engage in these behaviors because they like to interact with others (Carpendale et al., 2013; Dahl, 2015; Paulus, 2014). In short, infants' earliest acts of helping differ in important ways from altruistic tendencies in older children and adults.

The Gradual Development of Human Altruism: A Framework for Research

We propose that the development of human altruism involves four phases that form a developmental sequence, spanning from infancy to preschool age. As noted, we designate the first two phases prealtruistic since they constitute building blocks for developed altruism but do not yet involve concerns with others' welfare. The four phases are 1) social preference for interacting with others (prealtruistic), 2) preference for action fulfillment (prealtruistic), 3) concern with promoting others' well-being (altruistic), and 4) norm-based concerns (altruistic).

1) Social Preference for Interacting with Others (Prealtruistic)

From early in life, infants are oriented toward and interact with others (Brownell, 2011). From birth, infants depend on caregivers, providing numerous opportunities to receive help and comfort from others. During the first year, infants increasingly derive pleasure from social interactions, smiling and laughing during interactions as well as trying to engage others (Messinger & Fogel, 2007). The exchange of positive emotions in dyadic interactions forms the basis of the subsequent development of triadic interactions, that is, infants' and caregivers' joint action on objects (Brownell, 2011; Moore, 2006).

Infants begin participating in self-care activities in the first year, for instance, by holding their own toothbrush (Hammond, Al-Jbouri, Edwards, & Feltham, 2017). These earliest acts of helping likely build on skills acquired through earlier triadic interactions. In the transition from the first to the second year, children also increasingly understand others' communicative cues (Carpenter, Nagell, & Tomasello, 1998). Thus, by the end of the first year, children are motivated to interact with others, can use others' communicative signals regarding objects, and can act jointly on objects with others. These abilities are crucial components of the next phase in the development of altruism.

Infants' interest in joint activities may explain their engagement in simple instrumental helping activities (Dahl, 2015; Paulus, 2014). For example, most young infants reliably pick up objects from the ground and hand them to another person (Warneken & Tomasello, 2007). Similarly, young infants hand over objects when adults stretch out their hand to signal a request (often described as *sharing*). The act of handing an object to someone is similar to the give-and-take games parents and young infants commonly play. In these games, infants return an object to their play partner, who in turn releases the object or brings it close to the child. Consistent with the notion that early helping behaviors are gamelike, some scholars have noted that infants enjoy participating in chores and do so at little or no cost to themselves (Rheingold, 1982).

Thus, for most of the first year, infants' helping behaviors are limited to simple acts that resemble other social games. The next phase—in which infants help others with more complex goals separable from the child's involvement in the activity—seems to begin around or after the first birthday.

2) Preferences for Action Fulfillment (Prealtruistic)

In the first half of the second year, infants' helping behavior increasingly encompasses actions that promote more complex goals. For instance, at 18 months, but rarely at 14 months, infants can open a cabinet that allows an adult to put items inside or place a dropped book on top of a stack of books an experimenter is trying to build (Warneken & Tomasello, 2007). Similarly, in more complex sharing contexts, young children start to help others obtain a resource they were striving for even when not directly requested (Paulus, 2014). These situations go beyond reciprocal exchange as children help adults achieve a behavioral action goal without receiving an object. Thus, over the second year, children demonstrate an inclination to fulfill others' goals, or

help others complete an action.

The development of these helpful tendencies is likely supported by young children's growing social understanding (Carpendale & Lewis, 2004). Indeed, toddlers develop a more sophisticated understanding of others' actions that helps them deal with more complex interactions. On a theoretical level, some scholars have argued that toddlers can use their emerging representational capacities to imagine others' psychological states (Barresi & Moore, 1996; Moore, 2006). This capacity seems relevant when dealing with unfulfilled action goals. Some scholars have also suggested that goal contagion—when infants are unconsciously “infected” with the other person's goal—plays a role in these forms of helping behavior (Kenward & Gredebäck, 2013; Paulus, 2014).

Representing and promoting others' goals does not imply a concern with others' welfare. In some situations, what a person wants is contrary to the promotion of their welfare, for instance, when they want to ingest something that is bad for them (Martin & Olson, 2013). Indeed, some evidence suggests that helpful actions early in the second year are based on concerns with others' instrumental goals rather than their welfare. Infants rarely seek to relieve others' distress early in the second year (Roth-Hanania et al., 2011; Zahn-Waxler, Radke-Yarrow, Wagner, & Chapman, 1992). Further supporting the claim that infants help without concern for the recipient's welfare, infants also behave helpfully toward inanimate agents (Kenward & Gredebäck, 2013). Finally, 1-½-year-olds did not help more when an experimenter expressed sadness than when she expressed neutral affect (Newton, Goodman, & Thompson, 2014). However, young children gradually become more prone to relieve the distress of another person, as we discuss next.

3) Empathic Concern with Others' Well-Being (Altruistic)

By late in the second year, most children show empathic concern with relieving others' distress (Campbell, Leezenbaum, Schmidt, Day, & Brownell, 2015; Zahn-Waxler et al., 1992). At this age, children often go beyond facial expressions of concern or interest and act to alleviate the other's distress, for instance, by giving a hug or alerting a third party (Paulus, Jung, O'Driscoll, & Moore, 2017; Zahn-Waxler et al., 1992). Late in the second year, children also appear to want to see others be helped, even if they do not provide the help themselves (Hepach, Vaish, & Tomasello, 2012; but for alternative explanations, see Pletti, Scheel, & Paulus, 2017). Helping promote someone's welfare differs conceptually from fulfilling action goals because it requires being attuned to the another person's emotional state, not just to the person's immediate, practical goal.

The ontogeny of empathic helping could be based on perception-action links between others' expressions of emotions that could trigger an equivalent emotional state in the observer (de Waal, 2008). Yet to get beyond simple emotional contagion, children need to attribute their negative state to the other person, that is, to understand that the other person's negative state is the cause of their own sorrow. Some scholars have argued that this involves transitions in self-awareness and the acquisition of self-concept that emerge in the second and third years of life (Moore, 2006; Zahn-Waxler et al., 1992).

Empathic responsiveness to others' emotional states does not require obligations or evaluations. That is, children and adults may respond empathically toward someone without thinking they are obligated to help or without reflecting on whether it is good to help. Indeed, in a study of 6-year-olds, empathic responsiveness and evaluative reasoning predicted helpful behaviors separately (Malti, Gummerum, Keller, & Buchmann, 2009). Hence, to develop

altruism in the sense defined earlier, children must develop a normative stance toward helpful actions.

4) A Normative Stance Toward Altruistic Actions (Altruistic)

The last phase in the development of altruism involves developing a normative stance toward altruistic actions. That is, beyond merely engaging in altruistic actions, for instance, by fulfilling others' the goals or alleviating their distress, children begin to reflect on whether one is obligated to help and, potentially, in which situations helping might be prohibited (e.g., not helping a robber is good). Normative evaluations differ from mere preferences in that they are agent-neutral—that is, they apply whether an individual is an agent, a recipient, or an observer. These evaluations may be informed by more general moral principles regarding the protection of others' welfare (Dahl et al., 2018; Turiel, 2015).

The importance of distinguishing empathy-based altruistic acts from an obligatory stance toward altruism is a central but often overlooked aspect in research on developing altruism (for similar arguments, see Turiel, 2015). Theoretical debates have highlighted that empathy alone is insufficient for fully developed altruism and can even conflict with moral principles (Decety & Cowell, 2014). This demonstrates that humans can transcend the level of merely engaging in empathy-driven behavior by taking a normative stance toward its moral value; it also suggests that scholars need to consider this point as part of a comprehensive framework on the nature of human altruism.

Research on young children's evaluations of helping acts is limited. Studies have demonstrated that children can judge and reason about helping behaviors by ages 7 to 8 years (Kahn, 1992; Miller et al., 1990). However, studies on other social actions (e.g., harming,

stealing) suggest that children can judge and reason about social actions by ages 3 or 4 years (Dahl & Kim, 2014; Nucci & Weber, 1995). A recent study suggested that judgments about helping also develop around this age (Van de Vondervoort & Hamlin, 2017). When presented with a helpful and a hindering puppet, 4- and 5-year-olds, but not 3-year-olds, tended to say that the helpful puppet was nicer and more likeable than the hindering puppet. Although the study involved forced choice between the helper and hinderer puppet, and not separate evaluations of the helper, it suggests that normative evaluations of helping develop in the preschool years.

How children begin to evaluate others' actions normatively around age 3 is not well understood. Some have proposed that normative evaluations are constructed from joint commitments to social interactions (Carpendale et al., 2013). A related approach has stressed that children construct moral and other evaluative concepts from direct social experiences involving acts of helping and harming (Turiel, 2015). According to the latter proposal, these social experiences lead children to distinguish moral issues of welfare and rights from conventional issues regarding authorities and rules, as well as from other evaluative considerations (Dahl & Kim, 2014; Nucci & Weber, 1995).

Evaluative considerations continue to develop during and beyond the preschool period. For instance, 5- and 6-year-olds use more normative terms than 3-year-olds and are more likely than 3- and 4-year-olds to enforce fairness norms regarding others (Wörle & Paulus, 2018). Moreover, the importance of being a good person becomes an integral aspect of children's self-concept (i.e. moral identity; Paulus, 2018). At ages 7 and beyond, children incorporate increasingly complex considerations when evaluating helping, taking into account the relationship between the helper and the recipient as well as the permissibility of the recipient's goal (Killen & Turiel, 1998; Miller et al., 1990). Each of these changes within the moral domain

build on the ability to evaluate prosocial and other behaviors in normative terms.

Conclusion and Outlook

In this article, we defined human altruism as actions based on concerns with others' welfare. We also noted that, in its fully developed form, altruism involves the ability to evaluate acts that promote the welfare of others, for instance, viewing some helpful acts as obligatory. We proposed that altruism emerges gradually through four phases during early childhood. In the first year, infants show an interest in interacting with others. Next, infants develop a preference for goal completion. Later, children increasingly respond to others' distress with actions aimed at remedying their suffering, for instance, by giving them a comforting object. This, we argued, is the earliest phenomenon that qualifies as altruism. Finally, children begin to take a normative stance toward helping behaviors, evaluating some helpful acts as good or obligatory and others as wrong.

This framework for studying the emergence of human altruism leads to several questions and hypotheses for research. One set of questions deals with how the phases are described. In addressing these questions, we need to consider whether they apply to all types of altruistic acts in the same way. For instance, do children view some empathic acts as obligatory around the same age as they view some instrumental helping acts as obligatory? Another set of questions pertains to processes of developmental change. How do children begin to act on their empathic concern for others' distress? What initially leads children to evaluate helpful and unhelpful actions? A third set of questions pertains to developments beyond the preschool years, for instance, how and when do children view previously inaccessible forms of altruism (e.g., saving a life) as morally required (Dahl et al., 2018)?

This developmental framework is useful both for framing research questions and for clarifying how findings are interpreted. If we use the phrase *human altruism* to refer to both infants' acts of handing objects to others late in the first year and older children's and adults' efforts to save others' lives, sometimes at great personal cost, we risk glossing over important developmental transitions. If older children and adults helped others only when they expected an enjoyable social interaction, as infants appear to do, human societies would look quite different than they do today.

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Correspondence concerning this article should be addressed to Audun Dahl, Department of Psychology, University of California, Santa Cruz, CA 95064; e-mail: dahl@ucsc.edu.

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