

Continuities and Discontinuities in the Development of Moral Judgments

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Abstract

Prior research has outlined developmental changes within the conventional and personal domains. Research thus far has provided only limited understanding of age-related changes within the moral domain. That research indicates that there are continuities and discontinuities across ages in moral judgments. The aims of the research presented here were to examine moral judgments in childhood and adolescence, taking into account applications of moral judgments in contexts and the coordination of different considerations in evaluations and decisions. Participants were 167 children and adolescents drawn from two regions of the United States, from diverse ethnic and SES backgrounds, distributed across four age groups from 8 to 17 years. Moral judgments were assessed through interviews around issues of direct harm (hitting), indirect harm (returning dropped money), and helping. Each situation was presented within three conditions: unconflicted situations; situations of conflict with needs of self; and conflicts with needs of another. Situations varied in terms of characteristics of the person who was the object of moral decisions: a generic other, vulnerable other, or antagonistic other. Participants made two types of judgments: whether the action was right or wrong; and whether the actor would have a right to engage in the action if that was the actor's choice. Justifications were elicited for judgments. Cross-age continuities in moral judgments were observed in judgments of acts as wrong in the unconflicted contexts. In contrast, a U-shaped age-related pattern was revealed in judgments of acts as well as the right to engage in acts in the conflicted situations with 8- and 16-year-olds judging acts as wrong and 10- to 14-year-olds more likely to judge acts as right and the actor as having a right to engage in the action. This U-shaped pattern was accompanied by three age-related *levels* in the coordination of moral and nonmoral elements of situations.

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In contemporary times, many researchers study what some refer to as “moral psychology.” A number of these researchers, including those using neuroscience methods, do not study the development of morality in ontogenesis, but instead restrict themselves to a period of generic adulthood (often with college undergraduates). Moreover, in many instances it is proposed that moral functioning is nonrational or irrational, stems from unconscious processes, and is largely driven by emotions. In those perspectives, moral evaluations and actions do not centrally involve thinking, reflection, moral meaning-making, or interconnections between thought and emotions.

By contrast, there is a long tradition within developmental psychology of theorizing and research on the formation of morality from childhood to adulthood. In one tradition, the emphasis has been on the acquisition of societal standards or values through socialization by adults and social learning on the part of children [e.g., Aronfreed, 1968; Bandura & McDonald, 1963; Freud, 1930; Grusec, 2006, 2017; Hoffman, 1970; Mischel & Mischel, 1976; Skinner, 1971; Thompson, 2014]. Another tradition within developmental psychology proposes that individuals, starting in childhood, form moral judgments through their social interactions that involve reasoning, reflection, and interconnections between thought and emotion [Baldwin, 1906; Kohlberg, 1963, 1969, 1971; Nucci, 1981; Piaget, 1932, 1960/1995; Turiel, 1966, 1978, 1983a, 1983b]. Both Piaget and Kohlberg – and others working within their frameworks – described levels or development stages of moral judgments involving progressive differentiations of moral judgments of welfare, justice, and rights from matters like prudence, self-interest, and the conventions of social systems. The validity of these types of characterizations of moral judgments in children and adolescents has been brought into question by research showing that, starting at young ages, children form patterns of moral thinking that are distinct from patterns of thinking about prudence, self-interest, or social conventions. A body of research suggests that there are developmental pathways within each of the domains. Moreover, the research on these domains indicates that there are continuities and discontinuities across ages in moral judgments, that there is an interaction of moral judgments with social contexts, and that moral-social decisions can involve coordination of moral and social considerations and goals, as well as coordination between different moral goals. By continuities we mean that there are contexts in which similar moral judgments are made across age. By discontinuities, we are referring to qualitative age-related changes in moral judgments. Research conducted thus far within the domain approach has provided only limited understanding of age-related changes within the moral domain. The aims of research discussed here were to examine moral judgments in childhood and adolescence, taking into account the application of moral judgments in social-situational contexts and the coordination of different considerations in evaluations and decisions.

What We Know and Do Not Know about the Development of Moral Judgments

Prior to the 20th century, philosophers [e.g., Kant, 1785/2002; Mill, 1863/2001] formulated propositions of morality grounded in substantive concepts of justice and rights – as have many in the 20th and 21st centuries [e.g., Dworkin, 1977, 1993; Gewirth, 1982; Habermas, 1990; Nussbaum, 1999, 2000; Rawls, 1971, 1993; Sen, 1999,

2009]. Piaget [1932] was the first to report extensive and systematic empirical research into the moral judgments of children of different ages. His research included several different types of specific studies: interviews examining children's conceptions (and application) of rules in games; interview responses to paired stories about intentions and consequences regarding material damage, theft, and lying; and interviews about retributive justice, distributive justice, equality, and authority.

In Piaget's interpretation, these different components of the research yielded findings that revealed two levels of development (he did not use the term stages at the time) representing, as he put it, "the two moralities of the child and types of social relations" [Piaget, 1932, p. 326] involving the development of *heteronomous* moral thinking in early childhood that becomes transformed into *autonomous* moral thinking in late childhood or early adolescence. In the level of heteronomous morality, coming after a premoral phase, children do not distinguish judgments about harm or fairness from social rules and authority. Judgments about right and wrong are based on adherence to rules, whether they are in games or any other type of rules, such as in the family and school. At this level of thinking, rules are seen as fixed, unchangeable, and everlasting. Rules are seen as emanating from omniscient adults in authority, for whom there is unilateral respect. Part of the heteronomous form of thinking is that children do not take others' perspectives and do not judge by an actor's intentions. Instead, they judge on the basis of consequences; thus, for instance, they evaluate unintentional greater material damage as worse than intentional smaller material damage. In the shift to the level of autonomous morality, children judge by intentions and apply concepts of welfare, fairness, equality, and the need for cooperation. Adherence to rules and to the dictates of authority is seen as flexible and based in the promotion of goals of fairness and justice.

The proposed sequence from heteronomy to autonomy constitutes a differentiation model of development in that thinking at the earlier level involves an inability to distinguish morality from nonmoral domains, such as rules, authority, and the force of custom. At that level, there is a failure to distinguish the descriptive from the prescriptive in that children "identify what is with what ought to be" [Piaget, 1932, p. 347], as well as "that if distributive justice is brought into conflict with adult authority... the youngest subjects will believe authority right and justice wrong" [Piaget, 1960/1995, p. 304]. The transformation of thought that comes about with the shift to the autonomous level entails understandings that allow "for the emancipation of what ought to be from what is" [Piaget, 1932, p. 350]. The shift also entails a displacement of sentiments of unilateral respect by mutual respect, such that authority can be seen as subservient to justice.

Since the early work of Piaget on the development of moral judgments, many studies were designed to test various aspects of his formulations [see Keasey, 1977, for a review]. However, research by Kohlberg [1963], published about 30 years after Piaget's publication, resulted in a major and influential reformulation of the description of the development of moral judgments into six stages (a term he did use). Although the six-stage sequence differed in its specifics from Piaget's two levels, Kohlberg, too, proposed that moral development involves progressive differentiations and that moral understandings distinct from other domains do not emerge until the most advanced stages. Since the highest stages of thinking were only found in late adolescence or early adulthood, in Kohlberg's formulations differentiated moral judgments develop later in life than in Piaget's formulation.

As explicitly stated by Kohlberg [1971], distinct moral judgments, with understandings of justice and rights, only emerge at the highest stages, whereas at lower stages they are not differentiated from understandings based on punishment, self-interest, prudence, adherence to rules, respect for authority, and commitments to societal conventions:

The individual whose judgments are at Stage 6 asks “Is it morally right?” and means by morally right something different from punishment (Stage 1), prudence (Stage 2), conformity to authority (Stages 3 and 4) etc. Thus, the responses of lower-stage subjects are not moral for the same reasons that responses of higher-stage subjects to aesthetic or other morally neutral matters fail to be moral...This is what we had in mind earlier when we spoke of our stages as representing an increased differentiation of moral values and judgments from other types of values and judgments. (p. 216)

The methods used by Kohlberg and his colleagues to study moral judgments differed from those used by Piaget. On the assumption that moral decisions involve conflict resolution, Kohlberg [1958, 1963] presented participants with a set of hypothetical situations entailing conflicts among different considerations and goals. The multiplicity of considerations embedded in the hypothetical situations is illustrated by a story of a man whose wife is dying of cancer and has to decide if he will steal medication to try to save her life from a pharmacist who is overcharging for it and that the husband cannot afford to buy. The situation includes considerations of the value of life, family obligations, property rights, legally prohibited acts, and the characteristics of one of the protagonists (i.e., a self-interested pharmacist). Posing such multifaceted situations with their serious conflicts might serve to draw participants to think about moral conflicts or dilemmas, but the complexity of the situations also runs the risk of making it more difficult for respondents (especially the younger ones) to express concepts they possess. In addition, such situations, insofar as they include moral and nonmoral considerations, may have resulted in errors in explanations of participants’ judgments because judgments about nonmoral domains were being analyzed from only the lens of morality.

Consider another multifaceted situation in Kohlberg’s set of stories. It is a story in which a doctor is deciding whether to meet a request of a dying woman in great pain that he give her drugs that would make her die sooner. The situation does raise moral issues regarding the value of life, the responsibilities of doctors regarding the well-being of patients, and the legality of assisted suicide. However, the situation also raises issues about the quality of life and personal choices, as well as when it may be legitimate for an individual to end her life in the context of a terminal illness and great pain.

We can consider the following responses by a 10-year-old boy in one of Kohlberg’s [1963] studies: “From the doctor’s point of view, it could be a murder charge” (p. 23). He also stated, “From her point of view, it isn’t paying her to live anymore if she’s just going to be in pain,” and “It should be up to her; it’s her life, not the law’s life.” These responses were interpreted (in the application of the coding system) as if they entailed only moral judgments. Therefore, the responses were coded mainly as responses in the second stage of Kohlberg’s sequence; that is, thinking of morality as involving instrumental hedonism and a person’s ownership rights. An alternative interpretation is that the boy was making nonmoral judgments, as well, taking into account the perceived legitimate realm of personal jurisdiction and choice bearing on the quality of one’s life. He may have also been considering the pragmatic component for the doctor in violating the law [see Turiel, 2008a, for further discussion].

In the absence of further investigation into the boy's thinking, we cannot know if he was making nonmoral judgments about the domain of personal jurisdiction and trying to coordinate them with moral judgments about the value of life. We do know from other research, however, that children even younger than 10 years of age make judgments about the domain of personal jurisdiction [Nucci, 2001], as well as about the domain of social conventions [Turiel, 1978, 1983a], which are distinct from moral judgments that are not based solely on personal choice, adherence to rules or laws, or authority dictates.

Domains of Judgments Developing Alongside Each Other

The research findings of judgments in the moral, social conventional, and personal domains are *not* consistent with the differentiation models of moral development put forth by both Piaget [1932] and Kohlberg [1963, 1969, 1971]. A large and extensive program of research begun in the 1970s [Nucci & Turiel, 1978; Turiel, 1975, 1978, 1979] and carried into later years [for summaries see Nucci, 2001; Smetana, Jambon, & Ball, 2014; Turiel, 1998, 2015a] showed that children make distinctions between morality in their judgments about welfare and fairness, and the social conventions of the family, school, and society. Children do not fail to differentiate morality from prudence, the perspectives of persons (self or others), or self-interest [Nucci, 1981].

The research on domains was initially conducted by disentangling and thereby separating different components in the complex types of situations that had often been used in prior research. For example, participants were presented descriptions of transgressions or of positive actions that were straightforward and not juxtaposed with other considerations (e.g., inflicting harm, theft, helping, sharing, violation of rights, or unequal treatment). In turn, they were presented with straightforward transgressions pertaining to societal conventions (e.g., pertaining to modes of dress, forms of address, or classroom rules), as well as personal choices that did not involve impinging on the welfare or rights of others and which were not regulated by convention.

It was found in these studies, conducted with members of several cultures, that children as young as 4–6 years of age have formed patterns of thinking about morality which are *differentiated* from patterns of thinking about the conventional and personal domains. In drawing such distinctions, children do not judge moral issues on the basis of the need to follow fixed rules, or adhere to the dictates of persons in authority, or by following common practices within a group. Underlying ways of thinking about the noncontingency (on rules or authority) and generalizability (across groups or societies) of moral prescriptions are conceptions regarding the need to maintain and further welfare, justice, and rights (though understanding of justice and rights are not well formed at the youngest ages). By contrast, social conventions are judged to be contingent on rules, authority, and common practice. Research has also shown that children and adolescents make similar judgments about hypothetical situations and situations in which they have been involved within school settings [Turiel, 2008b].

These understandings of the connections of authority to evaluations of acts in the moral domain are especially pertinent to views that children's moral judgments

are not differentiated from unilateral respect (as in Piaget's heteronomous level) or the maintenance of authority in the social order (as in Kohlberg's Stage 4 of an authority maintaining orientation). Several studies specifically examining judgments about authority have shown that younger and older children, as well as adolescents, make distinctions between welfare or justice and do not believe "authority right and justice wrong" when the two are in conflict. As one example, even 5-year-olds maintain that a school authority could not legitimately impose a rule that would allow children to hit each other, but that a person in authority could impose a rule regarding dress because of his or her position [Weston & Turiel, 1980]. More generally, it has been found that the legitimacy of parents and others in positions of authority is accepted with regard to conventional norms but not when they prescribe or promote actions violating moral norms [Kim, 1998; Kim & Turiel, 1996; Laupa & Turiel, 1986; Tisak, 1986]. Children also draw distinctions regarding contexts in which persons in positions of authority have legitimate jurisdiction, such as a principal in a school, as opposed to the home or a playground [Laupa, 1991].

The findings that young children distinguish among the domains do not imply a nativist position on the sources of the judgments [see Glassman & Zan, 1995, for an example of a misattribution of a nativist position]. Rather, thinking within each domain develops through constructions out of children's early social experiences and interactions [Nucci & Nucci, 1982; Nucci & Turiel, 1978; Turiel, 1983a]. We have proposed that the domains constitute different developmental pathways and identified age-related sequences in the conventional [Geiger & Turiel, 1983; Midgette, Noh, Lee, & Nucci, 2016; Turiel, 1983a] and personal [Nucci, 2001] domains. Yet, age-related changes within the moral domain, as distinct from other domains, have not been studied directly or systematically.

Evidence of Age-Related Changes in the Moral Domain

We have conducted research attempting to systematically examine age-related changes in reasoning about moral issues of human welfare and harm. Our goal was to explore whether there are developmental trends in moral reasoning while also examining the potential connection of contextual situations to moral judgments. The need for such research stems from two major considerations. One is, as already indicated, that attempts to explain the development of moral judgments as involving a *linear* process of qualitative stages or cohesive ways of thinking have not been successful (e.g., as in Kohlberg's stages). The second and related consideration is that research indicates that there are variations in moral judgments and decisions in accord with variations in situational contexts. By taking contextual variations into account, we expected to find that age-related changes do not follow a linear progression, that there are continuities and discontinuities, and that nonlinearity is associated with different approaches to different situational contexts in arriving at moral decisions. Although prior research has not provided these types of systematic analyses of age-related changes within the moral domain, there have been a number of studies that have pointed to the likelihood that reasoning about fairness, rights, and human welfare undergoes development and in concert with contextual variables.

One of the early studies in the program of research on domains indicated that concepts of harm and welfare are formed earlier than concepts of justice [Davidson,

Turiel, & Black, 1983]. In that study, children between 6 and 10 years of age were presented with a number of moral and conventional transgressions in hypothetical situations that were varied by their familiarity to participants. Evaluations of the acts and judgments about rules and authority jurisdiction were assessed, along with reasons or *justifications* for the evaluations. It was found that the familiarity of situations made a difference in the judgments of the youngest children, but not across the board. The youngest children tended to judge familiar acts (e.g., a child stealing money from another) more consistently with moral criteria than unfamiliar acts (e.g., an employee embezzling money). The older children judged familiar and unfamiliar acts more consistently with moral criteria.

As with other studies, children at all ages judged moral transgressions differently from the conventional transgressions. Analyses of the justification categories for the moral transgressions (using a reliable coding system) showed that the children most often used reasons pertaining to welfare (avoiding harm and preserving the interests of a victim) and fairness (maintaining a balance of goods and rights). Reasons of welfare were the most used by the children and were used equally at all ages. However, age differences did emerge regarding the justification of fairness: it was used more by 10- than 8-year-olds, who in turn used it more than 6-year-olds. At least with regard to the situations in that study, 6-year-olds displayed little use of concepts of fairness to justify their evaluations or judgments.

A number of subsequent studies have obtained findings in line with those of Davidson et al. [1983], indicating that younger children's moral judgments are based on concrete harm and welfare of others, whereas at older ages there is a greater emphasis, as well, on fairness involving equality and equal treatment between persons [Damon, 1975; Kahn, 1992; Nucci, 2001; Tisak & Turiel, 1988]. An example of very young children's use of welfare comes from a study by Smetana [1981] with preschoolers. She found that they more consistently used moral criteria in situations involving physical harm (such as one child hitting another) than to situations involving fairness (such as a child failing to share). Even within the context of welfare, age differences were found. Acts of inflicting physical harm were judged to be wrong more consistently than acts inflicting psychological or emotional harm [Helwig, Hildebrandt, & Turiel, 1995]. It appears that young children do not interpret situations of psychological harm to entail welfare as readily as they can interpret the welfare involved in acts of physical harm [Helwig, Zelazo, & Wilson, 2001; Jambon & Smetana, 2013]. In addition, the research documented that by early adolescence concepts of fairness are applied as generalizable across situations.

However, it is not sufficient to simply characterize the development of moral reasoning as entailing a shift from concepts of harm and welfare to fairness and equal treatment – or more precisely a shift from judgments of welfare (with emerging concepts of fairness) to judgments based on both welfare (which are still maintained at older ages) and fairness. In the first place, there are continuities in development that need to be taken into account. Younger and older children make the same evaluations in many situations, with the same justifications about actions like inflicting harm or the importance of helping others in distress [Turiel, 2015b]. Most importantly, evaluations and justifications vary by age in a nonlinear way and in accord with situational contexts. For example, age-related changes in children's judgments about fair distribution of goods are associated with whether the goods to be distributed are necessities. When asked to distribute goods that are nice and fun to play with children

below the age of 10 years tend to employ concepts of equality and not equity. However, when the goods are described as necessary (e.g., school supplies or medical equipment), children of the ages of 5 or 6 years employ concepts of equity to ensure that disadvantaged children have access to needed goods [Elenbaas, Rizzo, Cooley, & Killen, 2016; Rizzo, Elenbaas, Cooley, & Killen, 2016]. Research on judgments about rights [Helwig, 1995a, 1995b, 1997, 2006; Helwig, Ruck, & Peterson-Badali, 2014], social inclusion [Killen, Lee-Kim, McGlothlin, & Stangor, 2002; Killen, Elenbaas, Rizzo, & Rutland, 2016], and trust [Gingo, 2017; Perkins & Turiel, 2007] has also yielded results indicating that in many situations decisions might involve coordination of different moral goals and of moral and nonmoral social goals that do not show a straightforward relation to age.

Rights and Social Exclusion

A good deal of early large-scale survey research with adults clearly shows that the development of attitudes towards rights does not lead to a straightforward increase in their endorsement. Put briefly, most American adults endorse rights when put in general or abstract terms. However, when placed into particular contexts, with possible conflicts with other considerations, adults sometimes endorse rights and other times subordinate rights to other considerations [Hyman & Sheatsley, 1953; McClosky & Brill, 1983; Stouffer, 1955].

Developmental research on reasoning yields similar findings [Helwig, 1995a, 1995b, 1997, 2006]. In that research, adolescents and young adults (12–22 years of age) were presented with questions about rights in general, as well as with different types of situations in social contexts. In response to general questions, it was found that across ages, rights to speech and religion are endorsed, and it is reasoned that the rights are not contingent on laws or practices (e.g., it would be wrong for laws or governments to place restrictions on freedom of speech). Some of the contextualized situations were framed in terms of a straightforward application of the right (e.g., a public speech critical of governmental policy). Other situations depicted conflicts between the right or freedom and other social and moral considerations (e.g., a public speech advocating violence). Responses to the situations involving straightforward applications of the rights were consistent with the responses to the general questions. At all ages, the abstract judgments about rights were applied to examples of concrete manifestations of the freedom in straightforward situations. In some situations of conflict, however, the freedoms were not supported – such as when freedom of speech was in conflict with physical harm. Some age differences were found. Younger adolescents were more likely than older adolescents or adults to judge that restrictions could be placed on rights or freedoms when in conflict with equality (e.g., speech advocating exclusion of low-income people from political parties).

Other studies indicate that by about 6 years of age children have formed some concepts about rights to speech [Helwig, 1997]. For instance, young children judge that children have a right to talk about topics of interest even if parents or others disapprove. Endorsements of freedom of speech by 6-year-olds are based on psychological justifications, including needs for expression and negative consequences of its restriction. Older children and young adolescents are more likely to base their endorsements on facilitating processes of communication, whereas older adolescents

conceptualize it in terms of democratic processes and justice. In addition, younger children do not draw distinctions between the rights of adults and children to freedom of speech or religion. They maintained that children and adults have rights to the freedoms even in the face of restrictions imposed by governmental, school, or parental authorities. They based those judgments on reasons of personal choice and individual autonomy. By the age of 11 years, distinctions were drawn between the rights of children and adults in different social contexts. For instance, the older children and adults accepted the legitimacy of restrictions placed by parents on their young children's right to practice a different religion from that of the parents. By contrast, they did not accept the legitimacy of such restrictions by school or governmental authorities. The acceptance of parental authority over young children's rights was based on assumptions that young children lack competencies to make certain decisions. In this regard, older individuals were more likely than younger children to restrict rights and freedoms.

The early development of moral concepts, along with different patterns in applications in situational contexts, is also evident in evaluations and judgments about inclusion and exclusion within group activities. Some of these studies were conducted by presenting children with situations in which a child is excluded from a group activity because of gender or race [e.g., Killen & Stangor, 2001]. As examples, children were asked if it is all right for a group of girls playing with dolls to exclude a boy; or a group of boys playing with trucks to exclude a girl [see also Killen, Pisacane, Lee-Kim, & Ardila-Rey, 2001]. In line with findings on rights, children of different ages, starting with preschoolers, judged it wrong and unfair to exclude a child solely on the basis of gender or race. Similarly, the large majority of children and adolescents judged it wrong to deny educational opportunities because of gender or race [Killen et al., 2002]. In contrast with the judgments made about such straightforward situations, it has been found that exclusion was not judged to be wrong when due to reasons pertaining to the optimal functioning of a group in particular activities. For instance, even older children and adolescents judge exclusion as acceptable when it occurs because the child does not have as much ability as another for the activity (e.g., a White child excluded from a basketball team in favor of a Black child; a Black child excluded from a math club in favor of a White child). It has also been found that exclusion is judged differently in the contexts of friendships, peer groups, and the school as a social institution – with greater acceptance of exclusion in friendships and peer groups than in the school context.

Honesty, Trust, and Deception

Another topic yielding analogous findings of nonlinear age-related shifts is in decisions regarding honesty or trust when in conflict with other moral and nonmoral goals. With regard to honesty, too, adults make different judgments in accord with situational contexts. For example, one study [Freeman, Rathore, Weinfurt, Schulman, & Sulmasy, 1999] showed that physicians judge it acceptable to deceive insurance companies in order to obtain treatments for patients for the severe and life-threatening conditions. However, in the case of less severe conditions, most physicians did not endorse deception. These results suggest that adults are aware of considerations of welfare and trust, decided on the side of welfare in some situations

and on the side of trust in other situations. Several other studies investigated reasoning and coordination regarding trust and other moral and social considerations with children [Gingo, 2017] and adolescents [Perkins & Turiel, 2007].

In the research with children (aged 7–12 years), parents or teachers were depicted as directing their children (or students) to engage in acts considered morally wrong (e.g., cutting in line), acts in the personal domain (e.g., pertaining to choice of friends), and prudential acts (e.g., climbing a wall at a park). The person receiving the directions, who does not want to engage in the action, chooses not to do so and then lies about it. The children evaluated the legitimacy of the directives of parents or teachers, acts of noncompliance by the child protagonists in the situations, and the acts of deception. Children at all ages negatively evaluated the directives from parents or teachers regarding the acts in the moral domain, and positively evaluated noncompliance with such directives. However, most did not judge deception of parents or teachers positively. The large majority of the 7- to 8-year-olds (90%) judged deception regarding the moral acts negatively. Negative evaluations of deception did decrease with age: 70% of the 9- to 10-year-olds and 50% of the 11- to 12-year-olds.

In the research on deception with children [Gingo, 2017], age differences were found with regard to acts in the personal domain. It was found that younger children were more accepting of the directives from parents or teachers and more likely to reject noncompliance than older children. In turn, with age, there was increased acceptance of deception regarding the acts involving personal choices (corresponding with the moral domain evaluations of deception). Judgments regarding the prudential acts were different in that at all ages the legitimacy of parental or teacher jurisdiction was accepted, and both noncompliance and deception were judged as wrong.

The age patterns found in the study by Gingo [2017] with judgments among those of later adolescent ages, as shown by a study [Perkins & Turiel, 2007] with groups of 12- to 13- and 16- to 17-year-olds who were asked to judge acts of deception after directives from parents in the moral, personal, and prudential domains (acts identified as age appropriate). The large majority in both adolescent age groups did not accept the legitimacy of the parental directives in the moral domain and judged deception regarding those acts as acceptable. Therefore, among adolescents a little older than those in the Gingo [2017] study, moral goals are given priority over honesty. It was also found that in these groups honesty is subordinated to fulfilling personal goals. The majority of the 12- to 13-year-olds judged deception of parents regarding the personal acts as acceptable (62%), and an even larger percentage of the 16- to 17-year-olds judged this kind of deception as acceptable (92%). There were no differences in the judgments of the adolescents and younger children regarding the prudential acts since most rejected the legitimacy of deception.

Harm and Human Welfare in Context

With respect to judgments about harm, the most consistent finding has been that unprovoked harm is evaluated as wrong by very young children, and that judgments about unprovoked harm do not vary with age [Smetana et al., 2014]. It should be noted that there are age-related differences in the ways young children apply all of the criteria for treating harm as a moral transgression [Smetana, Rote, Jambon, Tasopoulos-Chan, Villalobos, & Comer, 2012]. Children below the age of 4 years do not view

acts such as hitting and teasing as wrong independent of the dictates of authority. Thus, even in the case of unprovoked harm, there is evidence of age-related changes in children's moral understandings.

In the present study, we used unprovoked hitting and hurting as a way of studying judgments about harm and helping in contexts where the harmful or helpful act competes with other considerations. Prior work has indicated that children adjust their evaluations of harm if it is employed in self-defense, or if it is intended to deter aggression in protection of someone else [Jambon & Smetana, 2014]. In such cases engaging in hitting, another may be viewed as both fair and necessary. Results indicated that older (9- to 11-year-old) children were more accepting of hitting in cases of self-defense and to protect another person than were younger (6- to 9-year-old) children. Jambon and Smetana [2013] found that the older children made greater reference to the protective purposes of the hitting than did the younger children. That is, the older children appeared to better coordinate the competing elements and goals of the act of hitting in the unprovoked and protective contexts.

In addition to weighing the moral purposes of inflicting harm, research has uncovered developmental effects on children's and adolescents' evaluations of harm as a function of the relationship to the person being harmed. Posada and Wainryb [2008] found that Colombian children and adolescents from age 7–15 years all evaluated it as wrong to engage in unprovoked harm (hit, kick, and hurt someone), and most of them maintained these same judgments in cases where harm would aid in their own personal welfare (hit another child and steal his bike to use for transportation to a job). However, these judgments were different when the person who would be the target of the harm was someone who had previously harmed a family member. In this “revenge” condition, the study participants were more likely to accept harm, with adolescents twice as likely as children to endorse harm in the revenge condition.

The role of relationship in moral judgments about harm has been observed in children's judgments about harm to friends and siblings [Wainryb, Brehl, & Matwin, 2005]. Through narrative accounts of children's (7, 11, and 16 years) own transgressions, the researchers documented that instances of harm between friends were “unusual, unforeseeable, and circumstantial” [Recchia, Wainryb, & Pasupathi, 2013, p. 1459], while instances of harm to siblings were not uncommon. Children and adolescents described their own actions entailing harm to siblings as more ruthless than the harm caused to friends. Harm against friends was relationship oriented, whereas harm toward siblings was more explicitly offensive and property oriented. With age, the form of harm across relationships shifted from damage to property toward psychological insensitivity [Recchia et al., 2013]. It is significant, we believe, that in the body of research on children's narrative accounts of their own experiences of harming others (or being harmed by others), similar judgments were made as in responses to hypothetical situations about harm.

Acts of inflicting harm and helping others in need produce moral judgments about human welfare. However, as we discuss below, harm and helping are not simply two sides of the same coin. Narrative accounts of children and adolescents differ in the salience of the impact of helpful and harmful acts directed at peers [Recchia, Wainryb, Bourne, & Pasupathi, 2015]. Children at age 7 years were more likely to refer to the consequences of harm than of helping, and by age 16 referred to the consequences of helping and harmful actions equally. This indicates that the positive effects of helping are less salient to younger children, and that the negative effects of harm are easier to

identify [Recchia et al., 2015]. This research also found that adolescents were more likely than children to consider the costs of helping to the self. This latter finding is consistent with findings from studies of prosocial reasoning indicating that concerns for the costs of helping and expression of self-interest as a factor in weighing whether or not to help increase in adolescence [Eisenberg, Carlo, Murphy, & Court, 1995]. Instead of a linear pattern of moral development with age, judgments about whether or not to engage in helping show a nonlinear pattern with an apparent phase of judgments that includes concerns with self-interest in early adolescence [see also Weller & Lagatuta, 2013]. A similar quadratic U-shaped function in the priority given to self-interest rather than prosocial factors in decisions about whether to help appears again in early adulthood [Eisenberg, Guthrie, Cumberland, Murphy, Shepard, Zhou, et al., 2002].

Ways to Study the Development of Moral Judgments in Ontogenesis

The research we have considered thus far documents several features about moral judgments as associated with age. First, it has been well documented that starting early in life, individuals' judgments about welfare, justice, and rights differ in type from judgments about the conventional and personal domains. The research also indicates that there are similarities in moral decisions across ages, and that moral judgments are applied in different ways in different social situational contexts. Research also indicates that along with age-related continuities, there are age-related discontinuities in moral judgments and decisions. Although younger children's judgments focus on harm, older children also make judgments on the basis of harm (hence continuities) along with the increased considerations of fairness (perhaps suggesting discontinuities).

Previous research has shown that there is an interaction of moral judgments with the parameters of social contexts, such that decisions can be interpreted to involve coordination of moral and nonmoral social or personal considerations and goals, as well as between different moral considerations and goals. It is, therefore, important to consider both possible similarities and differences in moral judgments at different ages, and to consider the application of moral judgments in different types of situational contexts. Situational contexts can include considerations pertaining to the intentions of actors, the status of recipients of actions, the physical and emotional status of recipients, and the relationship between actors involved. In addition, it is important to take different types of actions (such as positive social actions like helping others and negative social actions such as hitting others) into account, as well as how the emergence of considerations like personal autonomy and individual rights influence decisions. Anything near a full design to address all these components is beyond the scope of one project, given the complexity of these interconnections. However, the research we detail here was designed to examine several of these salient features in moral decisions and used methods amenable to more detailed analyses of processes of coordination.

The Structure of the Research and Expectations

On the basis of our presumption that it is necessary to identify and separate components of social situations, we studied three general components. We included more than one type of action, different contexts, and introduced variations in the

relationships among the actors involved. First, we included situations related to three types of actions, hitting (*inflicting physical harm*), a form of theft involving what we term *indirect harm*, and *helping*. An act like a person inflicting physical harm on another (such as in “hitting”) is regarded as violating moral obligations pertaining to preventing harm and promoting welfare. Preventing harm is generally defined as involving necessary moral obligation applied universally. As noted above, there is an extensive body of research demonstrating that starting at a very young age individuals judge unprovoked hitting to be wrong and not contingent on existing rules, authority dictates, or common practice [for reviews, see Smetana et al., 2014; Turiel, 2002].

A second type of action, entailing what we refer to as indirect harm, involved taking the property of another. The depiction of this action was designed to include elements of obligation *and* individual choice. It involved situations in which an individual has to decide whether or not to return money to someone who had unknowingly dropped it. The features of *discretion* and indirect harm embedded in the situation were that the person deciding whether or not to return the money was not the cause for the money to be potentially lost. It has been found that taking someone else’s property is usually classified as wrong in ways similar to judgments about inflicting harm [Nucci, 2001; Turiel, 1983a]. It may be, however, that the act of keeping another’s property (by someone who can use the money) when the other is unaware that he or she has lost it (i.e., when a person has unknowingly dropped money) has a discretionary element in the thinking of children and adolescents¹.

The third type of action of helping another in distress is generally regarded as a “prosocial” action that might have features different from actions like hitting or theft [e.g., Eisenberg, Fabes, & Spinard, 2006; Kahn, 1992; Mussen & Eisenberg-Berg, 1977; Turiel, 2015b]. The act of helping another can be seen as involving discretionary judgments with an element of personal or individual choice and may be seen as going beyond obligation in that they might be valued from a moral point of view but not required [see Kahn, 1992; Williams, 2011]. In that regard, helping in many contexts may differ from inflicting physical harm, which from a philosophical-epistemological standpoint and on the basis of previous findings does not involve personal discretion.

¹ The situations involving whether or not to return the money were considered as different from the hitting situations. Although electing to keep the money that someone else unknowingly dropped could be considered stealing, there are aspects to this situation that differ from a direct and purposeful attempt to take another’s property. First, the situation presents itself by chance. The protagonist in these situations did not set out to take another person’s money and did not actively cause it to leave the other person’s possession. In the situations we employed, the money falls to the ground in a public space (a bus or a park), and not in an area such as a house owned by the person who loses the money. An exact parallel comparison between an issue of direct and indirect harm involving property would have been to compare whether to return the money with an instance of direct theft. However, findings from prior research had indicated that children and adolescents evaluate unprovoked hitting and direct stealing as wrong at the same rates and in similar ways [Nucci, 2001; Turiel, 1983a]. To confirm that this would be the case with the situations in the present study, we conducted a separate brief online written response survey with a sample of preteens and adolescents that included an unconflicted direct stealing version (i.e., deciding whether to take USD 20 from another student’s unattended backpack) of our indirect stealing situation. In the straightforward context, 97% of the sample ages 11–16 years stated that it would be wrong to take the money; 93% stated that one would not have a right to keep the money even if that was the individual’s choice. Thus, we feel confident that the outcomes for the decisions about whether or not to keep the money in the situations in the present study were due to the indirect and more complex nature of the potential for “stealing” depicted.

Research into judgments about helping and other prosocial actions has found greater variation by individuals, culture, and context than in decisions about unprovoked harm [Kahn, 1992; Miller & Brand, 2014; Mussen & Eisenberg-Berg, 1977]. However, it should be noted that there are situations in which helping another might be classified as involving moral obligations [Turiel, 2015b]. An example would be if someone could help another avoid physical harm without incurring any risks or costs to the self.

The second component included in the design was to depict each action within three different contexts. In one context, there were no competing goals for the actor (e.g., hitting for no reason). In a second context, the actions involved a conflict with goals of the actor (e.g., hitting in self-defense). The third context involved a conflict with the goals of a third person (e.g., hitting to protect another child).

The third component of the design was that within each type of act and context characteristics of the recipient of the act were varied as follows: recipient described as a generic child; or a vulnerable child (e.g., a child with emotional or physical disabilities); or another who is in an antagonistic relationship with the actor (e.g., one who had previously teased the actor).

The purpose of this design, with variations in types of actions, contexts, and person characteristics, was to include features found to be significant in previous research. One of our expectations stemmed from the large body of research showing that young children form judgments in the moral domain, which are maintained at later ages. We expected there would be no age differences in judgments about each of the three types of acts in the situations depicted as entailing no conflicting goals for the actor. We expected that in each age group most would judge hitting another, taking another's property, and the failure to help another to be wrong. We also expected similar judgments about each act with regard to a vulnerable child. A further expectation was that, at all ages, preventing harm and promoting welfare would be given as reasons or justifications for these judgments. However, we also expected that adolescents would additionally invoke reasons of fairness and equity for their judgments.

Generally, we expected that the situations within contexts of conflicts for self or others would result in greater variations in judgments, including age differences, than situations that did not involve conflicts. As an example, it was expected that hitting in self-defense or defense of another would be more likely to be judged as acceptable. As another example, it was expected that failing to help another would be more acceptable in situations of conflict entailing a loss to one's personal goal – especially with regard to an antagonistic child.

On the basis of previous research, we expected that by the mid-adolescent years there would be greater consideration of the role of personal choice and jurisdiction in the process of making decisions [as was found in the Perkins and Turiel, 2007, research on deception; see also Smetana, 2011]. We expected that such considerations would be reflected in justifications for decisions, as well as in the ways different moral and nonmoral considerations and goals are coordinated. The greater emphasis on personal jurisdiction in mid-adolescence might result in greater efforts to include personal jurisdiction and rights in decisions involving moral considerations as well. It may be, as suggested by the research on honesty and deception, and the research on prosocial reasoning [Eisenberg et al., 2002], that the process of coordinating personal and moral considerations is more unstable in mid-adolescence than in late adolescence when there is an increased understanding of the boundaries of the per-

sonal. More generally, we expected that in some situations there would be different types or levels of coordination between nonmoral and moral considerations, as well as between different moral considerations.

Methods

Participants

The study included 167 children and adolescents (82 males; 85 females) distributed across four age groups: mean ages 8–9 years (M 8.31; SD 0.46), 10–11 years (M 11.20; SD 0.53), 13–14 years (M 14.21; SD 0.53), and 16–17 years (M 16.67; SD 0.72). Each age group included 36 or more participants divided across genders as follows: 8-year-olds (23 males, 20 females); 11-year-olds (17 males, 24 females); 14-year-olds (19 males, 17 females); and 16-year-olds (23 males, 24 females). Unequal cell sizes existed because we did not exclude any student who was eligible to participate in the study (i.e., those students who received parental consent and who provided their assent). In order to obtain a diverse sample, we drew participants from schools in urban and suburban settings in two areas of the country: the upper Midwest and the San Francisco Bay Area of California. Approximately two-thirds of the sample (103 participants) were from the Midwest, and evenly divided between participants from a major city and the neighboring suburbs. Students from the major city were from low-income populations in public schools where all students were eligible for free or subsidized lunch. Students from the Illinois suburbs and the Bay Area were from middle- to upper-middle income communities in schools with few students eligible for subsidized lunch. This resulted in a total sample that mirrored the ethnic and racial diversity of major groups in the United States (56.3% European American, 16.6% Latino, 10.2% African American, 5.4% Asian American, and 11.5% mixed race). Our goal in this research was not to systematically examine the potential effects of race and ethnicity on the variables examined, but rather to ensure that the findings were not obtained solely with the dominant European American population. A set of preliminary analyses examining possible ethnicity effects on the major variables of the study yielded no significant outcomes. These preliminary analyses also did not yield systematic effects for gender. Thus, the analyses of findings did not include ethnicity, race, or gender.

Design, Procedures, and Assessments

Participants were administered a semi-structured interview regarding the three types of actions discussed in the section on the structure of the research: inflicting physical harm (hitting), indirect harm (stealing), and helping another in need.

As already noted, we also systematically varied specific contexts for each action by altering the type of conflict posed for the protagonist in the stories. The varying contexts included unconflicted situations, situations of conflict with needs of self, and conflicts with needs of another. In addition, we varied the characteristics of victims in relationship to the protagonist as a generic child, a vulnerable child, and an antagonistic child. The situations employed in the study are presented in Table 1.

The interviews took approximately one class period to complete and were conducted by trained graduate students. Interviewers were trained in techniques for conducting semi-structured developmental interviews [Turiel, 1983a]. The interviewers followed the interview protocol and asked follow-up questions to allow for participants to clarify or further explain their responses. The interviews were audio recorded and transcribed for coding.

Contexts. The interview included depictions of each act in a context that was straightforward and not in conflict with other considerations. In those contexts, the protagonist is presented with a decision about whether to engage in an action in the absence of any expressed personal need. In the unconflicted hitting situation, for example, the protagonist is described as hitting another

Table 1. Situation components: actions, contexts, relationships

Hitting

Unconflicted	Martin is in a bad mood; on his way to the park he sees a boy from his grade at school and considers punching him
Conflicted-self	Martin is at a neighborhood park when another boy begins pushing him and slapping his face; Martin is about the same age and same size as the boy who had pushed and slapped him; Martin is thinking of punching the boy to protect defend him/herself
Conflicted-other	Martin is in a neighborhood park when he sees a boy begin pushing another boy and slapping his face; Martin is about the same size as the boy doing the pushing and slapping; Martin is thinking of punching the boy who is doing the pushing and slapping to protect the boy who is being hurt

Indirect harm (stealing)

Unconflicted	Judy is in the playground when she sees a 10-dollar bill fall out of another kid's pocket; the other kid doesn't know that the 10-dollar bill has fallen out of her pocket; Judy is considering picking up the 10 dollars and keeping it for herself
Conflicted-self	Judy and her friends all come from families that do not have a lot of money; a band that is the favorite of Judy and her friends is going to give a concert near where they live; the band has never come to her city before and may never come there again; so, Judy and her friends get jobs baby-sitting and save up their money to go to the concert; Judy does her best but by the time she needs to buy the tickets she is 10 dollars short; Judy had really had her heart set on going to the concert; her friends don't have enough money to lend her any either; later that day, when she is on the playground, she sees a 10-dollar bill fall out of another girl's pocket; the other girl does not know that the 10-dollar bill has fallen out of her pocket; Judy is considering picking up the 10 dollars and keeping it for herself
Conflicted-other	Judy and her friends all come from families that do not have a lot of money; a band that is the favorite of Judy and her friends is going to give a concert near where they live; the band has never come to her city before, and may never come there again; so, Judy and her friends get jobs babysitting and save up their money to go to the concert; Judy's friend Veronica does her best but by the time she needs to buy the tickets she is 10 dollars short; Veronica had really had her heart set on going to the concert; her friends do not have enough money to lend her any either; later that day, when she is on the playground, Judy sees a 10-dollar bill fall out of another girl's pocket; the other girl does not know that the 10-dollar bill has fallen out of her pocket; if Judy keeps the money she can give it to her friend Veronica so that Veronica can go to the concert; Judy is considering picking up the 10 dollars so that she can give it to Veronica

Helping

Unconflicted	John is walking home when he sees a boy slip and fall and get hurt; the kid is in pain, is crying and cannot stand up; the boy tells John where his house is and asks John to get his parents so that they can take him to the doctor; John is considering whether to help the boy by getting his parents
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Table 1 (continued)

Conflicted-self	John is on his way to tryouts for his soccer team; it's the last day when final cuts will be made; he really wants to make the team and has a good chance if he does well on this last day; anyone who is late for the final tryout will be automatically cut – no excuses; on the way to the tryout he sees a kid slip and get hurt; the kid is in pain, he is crying, and cannot stand up; the boy tells John where his house is and asks John to get his parents so that they can take him to the doctor; but if John stops to help the kid, he will be late for the tryouts and be cut from the team; John is considering whether to stop and help the boy or keep going so that he can be on time for his tryouts
Conflicted-other	John is on his way to bring his little brother to the last day of soccer tryouts; his brother has his heart set on making the team and has a great chance to make it; however, John has to get his brother to the tryout on time, or his brother will be automatically cut – no excuses; on his way to get his brother to take him to the tryouts, John sees a kid slip and fall and get hurt; the kid is in pain, he is crying, and cannot stand up; the boy tells John where his house is and asks John to get his parents so that they can take him to the doctor; if John stops to help the kid, his brother will be late for the last day of tryouts and will be cut from the team; John is considering whether to help the kid or get his brother to the tryout on time

In addition to the types of action and context, the third component was relationship among the actors. For all situations, the recipient of actions was varied to include a child in general, a vulnerable child, and an antagonist in that order. The gender of story characters was changed to match that of the child being interviewed. For older subjects the context of the money being dropped was changed from a playground to a bus with no other passengers beyond the story characters and the driver.

child without provocation: a child who is in a bad mood punches a child of his own age while on the way to the park (see Table 1). In the conflicted-self situations, the protagonist weighs whether to engage in an action in the context of a personal need or desire. The example of the hitting situation of conflicted-self involves self-defense: a child is deciding whether to punch another who is pushing and hitting him. In the conflicted-other situation, the protagonist weighs whether to engage in an action in order to respond to the needs or desires of the target person in the situation. In the example of hitting involving conflicted-other, a child is deciding whether to punch another who is pushing and hitting a third child in order to protect that child.

Variations in Relationship. For each type of act and context, characteristics of the target of the protagonist's actions were varied as follows: (a) a generic/general other was described solely as another boy or girl (as in the example of the unconflicted hitting situation); (b) a vulnerable other (e.g., a child with a disability or much younger and, therefore, less able than others in the situation); and (c) an antagonistic other person in relation to the protagonist (e.g., a child who had previously harmed or teased the protagonist).

Assessment Questions

Following the presentation of each situation, participants were asked to respond to a set of questions. The first question was aimed at obtaining the participant's evaluation of the action: "Would it be all right or not all right for (the protagonist) to (do the act)?" This was followed by a question aimed at eliciting the reasons or justifications for the valuation: "Why? or Why not?".

They were then asked whether the protagonist would have a “right” to make the “nonmoral” choice (e.g., hit the other). “Suppose the protagonist decided to (do the act), would he/she have a right to do it if he/she wanted to?” This question was primarily designed to be an indicator of whether the participants maintained that the protagonist would be bound by a judgment that engaging in a given nonmoral choice would be wrong. In cases where participants judged that it would be right for the protagonist to engage in the action (e.g., hit someone in self-defense; not help someone in need), this question elicited judgments about whether that judgment stemmed from a view that the protagonist was not only right to engage in the act but also had a right to do so.

Ordering of the Situations. The three actions, three contexts, and three relationships meant that there were nine possible ways to order the presentation of issues. We arranged the situations into three interview formats with male and female versions so that the main characters matched the gender of the participant. Each interview format addressed each of the three issues in only one context, such that context was a between-subject variable. The context sequence was as follows: unconflicted, conflicted-self, and conflicted-other. The order of situations was counterbalanced so that a different one would begin the interview in the unconflicted context. The ordering of situations for interview Format 1 was: unconflicted helping, conflicted-self indirect stealing, conflicted-other hitting; for Format 2: unconflicted indirect stealing, conflicted-self hitting, conflicted-other helping; for Format 3: unconflicted hitting, conflicted-self helping, conflicted-other indirect stealing. Within each context, participants would first consider the situation for the general other, followed by the vulnerable other, and last the antagonist other. Each participant responded to only one interview format.

Thus, participants responded to the issue of helping in the unconflicted context in interview Format 1, helping in the conflicted-self context in interview Format 3, and helping in the conflicted-other context in Format 2. Participants responded to the issue of indirect stealing in the unconflicted context in interview Format 2, the conflicted-self context in interview Format 1, and the conflicted-other context in interview Format 3. The issue of direct harm in the unconflicted context appeared in Format 3; in the conflicted-self context it appeared in Format 2, and in the conflicted other context in Format 1. The interview protocol is available from the authors.

Coding and Reliability

Evaluations and Judgments of Right of the Individual. One part of the analyses focused upon responses to two questions in the interview: whether the act was considered right or wrong, and whether the actor would have a right to engage in the action, if that was the actor’s choice. Coding of these two judgments was accomplished by two trained raters, one serving as the primary coder and the other as the reliability coder. Reliabilities were estimated on 20% of the transcripts with equal numbers of male and female participants selected randomly within each age group. The interrater agreement for judgments of “right/wrong” was 94% and for “have a right” 90%. The agreement range within groups was from 87% (age 11 years) to 97% (age 8 years). The overall κ for judgments of right/wrong and “rights” combined was 0.81.

Justifications. Coding of justifications for the evaluations and judgments of having the right was based on a coding system adapted from prior research [Davidson et al., 1983; Nucci, 1981; Nucci & Smetana, 1996; Smetana, 1989, 2000; Turiel, 1983a]. Justifications were coded into one of 23 categories that were grouped within three basic domains: moral, conventional, and personal, and a fourth category pragmatics (considerations of potential reward/punishment, social approval/disapproval, and prudential considerations). These categories are summarized in Table 2. A more detailed discussion of these categories is presented below in our discussion of results for justifications.

Reliability of the coding of participant statements into these justification categories was estimated through comparison of scores provided by a trained graduate assistant reliability coder and a graduate assistant coder of 21% of the interviews randomly selected within each age group. Overall agreement between these raters was 90% (range: 88–92%) with an overall κ of 0.73.

Table 2. Categories for coding of justifications by domain

Moral	
Categorically wrong	Refers to subject's asserting that an act is wrong without additional justification
Empathy and caring	Appeals to the feelings of the individual being harmed, and to the helping and caring of others; subjects must show concern for the character's feelings, and may include elements of perspective taking or "feeling one's pain"
Equality	Appeals to the equal treatment of persons
Equity	Acknowledges that people may have different needs or capacities resulting in different treatment to accomplish a fair outcome
Reciprocity	Appeals to tit-for-tat justifications, or gaining a benefit from the other by engaging in the action; reciprocity occurs between equal status peers
Fairness	Appeals to the maintenance of fairness in the treatment of persons, with no elaboration of what constitutes fair treatment
Rights	Spontaneously using rights as a moral justification and not in reference to direct questions about rights
Ownership (affirm)	Appeals to simple ownership or lack of ownership as the basis for why stealing is right or wrong
Ownership (questioning)	Refers to the fact that the money is no longer in the possession of the original owner, and, therefore, ownership is indeterminate
Self-defense	Refers to the subject's right to defend him/herself in order to avoid harm to self
Welfare	Reference to harmful consequences to others, including physical or mental pain
Welfare (negation)	Subject determines that the circumstances of the situation do not cause harm
Moral self-worth	Appeals to the subject's concern with being a moral person
Social conventional	
Authority	Appeals to parental jurisdiction, parental authority, and government rules and laws
Social approval/disapproval	Reference to negative reactions of others toward actor, including social condemnation
Social coordination	Appeals to the need for social organization or for maintaining a system of shared expectations
Social tradition	Appeals to social norms and traditions; the way things have always been done
Personal	
Personal choice	Appeals to individual preferences or prerogatives, including getting what you want
Pragmatic	
Attaining reward/avoiding punishment	The act is evaluated based on the likelihood that the story character will be punished or rewarded for doing the act
Prudential	Refers to the maintenance of the actors own health, comfort, security, and well-being; refers only to direct consequences to the actor, which are not imposed by others

Coordination Levels. In addition to coding of individual judgments and justifications offered by participants, we also conducted a global qualitative analysis of the forms of reasoning provided in response to each of the situations. As discussed in greater detail in later sections, this global analysis revealed three general age-related patterns in participants' ways of coordinating different moral and nonmoral factors in their decisions. To reduce repetition, the descriptions of these three levels along with examples are presented below in our discussion of results for levels of coordination. Scoring of transcripts for these levels of coordination was conducted by two trained graduate assistants, one of whom was the main coder and the other a reliability coder. Reliabilities of coding of the coordination levels based on 26% of the randomly drawn transcripts resulted in 73% overall agreement (range 70–76%) and overall κ of 0.51.

Analysis Strategy

Data were analyzed using generalized linear mixed models with binomial error distribution and logit link function [Hox, 2010]. For this analysis, we employed R version 3.1.2. All generalized linear mixed models included random intercept for subjects, a fixed linear and quadratic effect of child age group, and fixed effects of situation, context, and relationship. Except when noted below, interactions between fixed effects were not significant and were not included in the final models. Hypotheses were tested using likelihood ratio tests and Wald tests (for individual regression coefficients).

For analyses of judgment data, two-way interactions between fixed effects were typically hypothesized. However, we wanted to avoid interpreting significant main effects even in the presence of the nonhypothesized interactions. To address the latter concern, and to maintain a principled approach to significance testing, two-way interaction terms were first included in the models to test for significant interactions. If interaction effects were not significant, the interaction terms were dropped from the models, and we proceeded to test for main effects. We note below when interactions were significant. In all other cases, interactions between fixed effects were not significant, and interaction terms were not included in the final model.

In the main statistical analysis of justifications, the dependent variable was whether a participant made use of a justification (coded as 1) or not (coded as 0). Only data from participants providing at least one justification to issues in a given situation were included in the analysis for that situation. In 3% of situations, participants provided no justification at all for their judgments about having a right to hit, steal, or not help. Because the use of any justification category was highly dependent on the use of other justifications (as evidenced by the fact that the majority of participants only provided justifications falling within a single category), the presence of each category was analyzed separately. The fixed effect predictors were justification category, age, age² (curvilinear function for age), moral issue, context, and relationship to the other child. We were primarily interested in predictors of each justification category (e.g., whether the use of moral justifications depended upon issue, context, relationship to other, or age of the participant). The models also included random intercepts for subjects to account for within-subject correlations. Whenever there was an interaction between predictors for at least one of the justification categories, separate models were fitted for each level of one of the predictors. For theoretical reasons, analyses were split (as necessary) first by issue, then by context, and then by relationship to other.

Judgments: Context, Relationship, and Age Effects

We begin our discussion of outcomes with the judgments that children and adolescents made about whether the proposed action would be right or wrong, and whether the protagonist in a given situation would have the right to engage in the action if that is what the protagonist had decided that he or she wanted to do. The purpose of the second question was to probe into whether the judgment of right and

wrong carries with it a corollary obligation about how the person should act. We expected that age effects in moral decisions would be more evident in responses to this second question than in judgments of right and wrong. In what follows, we present the details of our statistical analyses. Readers who are less interested in those details may follow the outcomes of our research by reading the summaries at the end of each section on judgments and justifications, along with the description of outcomes regarding levels of development.

Judgments of Acts as Right or Wrong

Preliminary analyses across all three types of moral actions indicated that the majority of children and adolescents judged the protagonist's actions (i.e., hitting, keeping the money, or not helping) to be wrong. Omnibus analyses also revealed a near-significant curvilinear relation between age and these evaluations, $\chi^2(1) = 3.56$, $p = 0.059$. Pooling across moral issues and situations, the 14-year-olds were somewhat less likely than children at other ages to judge actions as wrong. These main effects were, however, modified by complex interactions. Thus, we present the remainder of the findings regarding judgments of right and wrong separately for each moral issue.

Hitting

Context Effects. Based on previous work, we had expected that nearly all of the participants would judge unprovoked hitting of the general other to be wrong. This expectation was borne out as can be seen in Table 3. Within that context of unprovoked hitting, it was also found that participants judged hitting to be wrong for the vulnerable other and antagonist other. In comparison with judgments about unprovoked hitting, we expected that participants across ages would be more likely to judge hitting as all right in the contexts that described conflicts with the needs and desires of the self (conflicted-self) as well as in contexts that entailed potentially meeting the needs of another person (conflicted-other). The conflicted-self situations could be interpreted as involving self-defense, while the conflicted-other situations could be interpreted as involving hitting in order to protect another person from aggression. This expectation was also supported. Children and adolescents were more likely than in the unprovoked situations to accept hitting in response to being hit (the conflicted-self condition) and about hitting to protect another child (conflicted-other) situation, $\chi^2(2) = 23.24$, $p = 0.001$. Participants were more likely to accept hitting in self-defense than they were to accept hitting to protect another person [$\chi^2(1) = 4.62$, $p < 0.05$].

Relationship Effects. Whereas nearly all participants across contexts and relationships judged it wrong to engage in unprovoked hitting, there was a significant effect for relationship in judgments about hitting within the two contexts entailing conflicts, $d(2) = 8.04$, $p < 0.02$. Within the conflicted contexts, there was no significant difference in judgments about hitting the general other or the antagonist. However, participants were less likely to judge hitting of the vulnerable child (7%) as all right compared with either the antagonist (47%) or general other (37%).

Age Effects. As expected, there were no age effects for hitting in the unconflicted context. There was a significant curvilinear age effect, $d(1) = 4.75$, $p < 0.03$ in the

Table 3. Percentage of participants judging hitting, indirect stealing, and not helping to be wrong at each age (from 8 to 16 years) by context and relationship

Context/ relationship	Hitting					Indirect stealing					(Not) Helping				
	8 y	11 y	14 y	16 y	total	8 y	11 y	14 y	16 y	total	8 y	11 y	14 y	16 y	total
Unconflicted															
General other	100	100	100	100	100	100	100	77	100	94	100	100	92	87	95
Vulnerable	100	100	100	100	100	100	93	100	100	98	92	93	100	100	96
Antagonist	100	83	92	94	92	75	64	62	88	72	69	53	83	80	71
Conflicted-self															
General other	62	21	25	50	40	92	100	92	93	94	94	71	55	81	75
Vulnerable	100	100	92	88	95	92	100	100	93	96	94	93	73	94	88
Antagonist	69	36	42	38	46	92	67	75	79	78	81	71	45	88	71
Conflicted-other															
General other	85	67	50	67	67	92	100	73	87	88	100	92	77	100	92
Vulnerable	100	100	83	86	92	92	100	91	93	94	100	92	85	100	94
Antagonist	77	67	33	64	60	87	100	91	80	87	79	75	69	69	73

self-defense context. For the conflicted-other context, there was a near-significant curvilinear effect of age, $d(1) = 3.64$, $p = 0.056$. However, some of these age effects were attenuated by the lack of variation within judgments of hitting involving the vulnerable other child. With the data from the judgments in relation to the vulnerable child removed, there was a clear curvilinear age-related pattern in judgments of hitting as wrong, with the percentage of participants judging hitting as wrong being greater among the youngest (8 years: 73.5%) and oldest participants (16 years: 54.8%), and fewer among the 11-year-old (47.58%) and 14-year-old (37.5%) participants.

Indirect Stealing (Not Returning the Money)

Unlike the hitting situations, the situations involving whether or not to return the money were considered to include both moral and nonmoral considerations (e.g., including an element of personal discretion). Therefore, we were especially interested in ascertaining how variations in these situations would compare with variations in the hitting situations. As can be seen in Table 3, the majority of participants across ages judged that it would be wrong to not return the money to someone who had accidentally dropped it. For this action, there were no main effects for context or age. There was a significant effect for the characteristics of the other person, $\chi^2(3) = 80.85$, $p < 0.001$.

Fewer participants judged it to be wrong to keep the money rather than returning it to an antagonistic other than judged it to be wrong to keep the money dropped either by someone in general (Wald test: $\chi^2(1) = 15.03$, $p < 0.001$) or a vulnerable other whose disability contributed to dropping the money (Wald test: $\chi^2(1) = 14.19$, $p < 0.001$). However, judgments of whether it was wrong to keep the money did not differ for the general other and the person described as vulnerable.

Helping

Context and Relationship Effects. As a prosocial action, helping has a discretionary aspect and may be judged in some circumstances, but not all, to be less obligatory than either unprovoked harm or keeping money that another person accidentally dropped. As can be seen in Table 3, the majority of participants across ages judged that it would be wrong to not to help an injured child. There were no effects as a function of context. Participants were just as likely to judge that it would be wrong not to help an injured child in the situations posing a conflict of interest for self or other as in the ones that posed no conflict. As was the case with hitting and indirect stealing, there were significant differences in judgments that it is wrong not to help as a function of the characteristics of the other child ($\chi^2(2) = 78.19, p < 0.001$). Participants were less likely to judge it wrong to not help the antagonist than either a child in general ($\chi^2(1) = 10.01, p = 0.002$) or the vulnerable child ($\chi^2(1) = 10.32, p = 0.001$).

Age Effects. The age \times other interaction approached significance, $\chi^2(2) = 5.37, p = 0.068$. As with hitting and indirect stealing, when the judgments about helping the vulnerable child were removed, we observed the same curvilinear age-related pattern in judgments about whether it would be wrong not to help (8-year-olds: 87%, 11-year-olds: 77%, 14-year-olds: 70%, and 16-year-olds: 84%).

Summary of Judgments of Acts as Right or Wrong

The results indicate that moral judgments of right or wrong about actions entailing hitting, keeping the money, and helping with a person in general in unconflicted situations do not vary by action or participant age. Each of the actions was judged to be wrong by nearly all of the participants: hitting (100%), keeping the money (94%), and not helping an injured person (95%). Although we selected the actions to vary in terms of the presumed level of moral salience, there were no variations in judgments about these acts.

We did find that variations in judgments occurred with shifts in the types of conflict situation. This was primarily when the action was directed toward an antagonist. There was little effect of the presence of a conflict in the judgments made with regard to the vulnerable other. The age effects showed a curvilinear pattern, with the judgments of acts as wrong more prevalent among younger and older participants and with judgments of actions as all right more prevalent among early adolescents. These age effects were most evident in contexts that involved conflicts and that did not include the vulnerable child. Given that these age-related patterns were most evident in contexts entailing greater complexity in features of situations, we anticipated that the U-shaped pattern in age-related responses would be even more evident in response to judgments of whether the actor would have the right to engage in the action if that was the person's action choice. We turn to those findings.

Judgments of Whether the Actor Would Have a Right to Engage in the Action

As we stated, philosophers have proposed that understandings of acts as wrong can include judgments that moral evaluations should override other considerations, such as the person's preferences or desires [Frankena, 1973; McDowell, 1979; Seld-

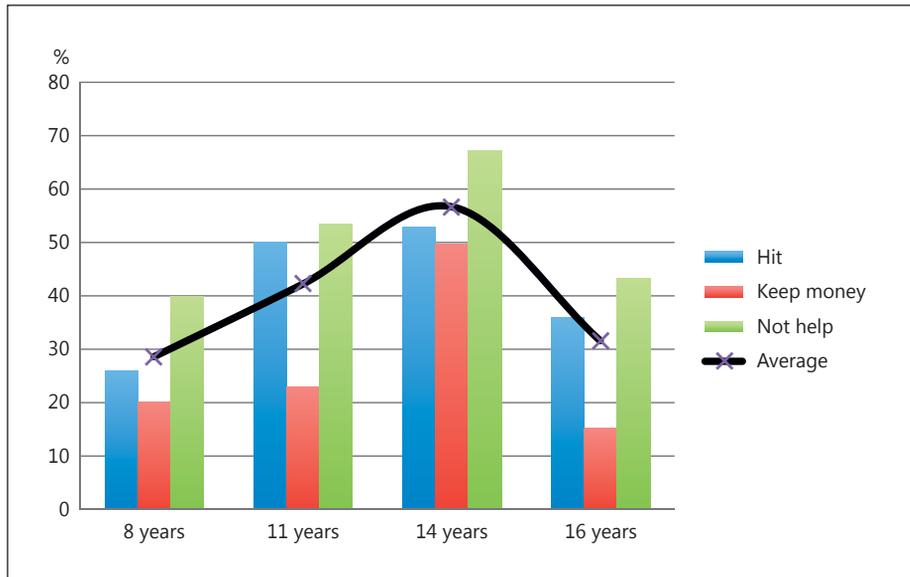


Fig. 1. Percentage of participants by age judging that the protagonist would have a right to hit, to keep the money, or to not help.

man, 2005]. This would appear to be a more complex criterion for judging the morality of an action, as it requires coordination of the moral evaluation of an act as right or wrong with the implications of that evaluation upon the actor's subsequent action choices. Therefore, we examined whether participants would be more likely to agree that an actor would have a right to engage in hitting, keeping the money, and not helping than judged these acts as wrong.

Initial analyses across issues determined that, as was the case with judgments about right and wrong, there was a curvilinear association between age and judgments that one would have a right to engage in the various actions. (The curvilinear age function is expressed as age^2 .) This trend reached statistical significance, $b_{age^2} = -0.10$, $z = -4.31$, $p < 0.001$. This general trend is illustrated by the curved line in Figure 1, pooling outcomes across situations. Moreover, this age-related trend in rights judgments was more clear-cut than observed with judgments of whether actions were right or wrong. Pooling across actions, contexts, and relationships, children at the youngest (8-year-old: 23%) and oldest age groups (16-year-old: 27%) were less likely overall than the 14-year-olds (48.1%) to indicate that the protagonist would have a right to engage in the actions.

There was also a significant overall main effect for the moral issue on the frequencies of judgments of a right to engage in the action, $d(2) = 40.76$, $p < 0.001$. Judgments of a right to engage in the action were least frequently provided for unprovoked hitting (8%), with more frequent judgments of a right to engage in the action for indirect stealing (22%), and most frequent judgments in support of not helping (66%). The observed main effects for issue were tempered, however, by significant two-way

Table 4. Percentage of participants judging that the protagonist would have a right to hit, steal, and not help at each age (from 8 to 16 years) by context and relationship

Context/ relationship	Hitting					Indirect stealing					(Not) Helping				
	8 y	11 y	14 y	16 y	total	8 y	11 y	14 y	16 y	total	8 y	11 y	14 y	16 y	total
Unconflicted															
General other	0	17	17	0	8	6	29	46	6	22	38	73	92	60	66
Vulnerable	7	17	25	0	12	12	14	38	6	18	46	33	73	53	52
Antagonist	21	25	33	0	20	25	36	77	6	36	54	67	83	73	69
Conflicted-self															
General other	44	93	83	69	72	15	17	45	13	22	50	92	85	56	71
Vulnerable	6	0	33	31	18	17	8	36	13	18	36	50	69	31	46
Antagonist	38	79	58	62	59	23	8	64	20	29	50	75	62	44	58
Conflicted-other															
General other	15	47	50	47	40	31	27	50	33	35	31	27	50	33	35
Vulnerable	15	13	33	36	24	38	27	42	13	30	38	27	42	13	30
Antagonist	38	40	75	43	49	15	40	50	29	34	15	40	50	29	34

interactions. The effect of moral issue was influenced both by the type of other person in the given situation, $d(4) = 14.13, p < 0.008$, and the conflicted/unconflicted context, $d(4) = 196.63, p < 0.001$. There was also a significant interaction between the curvilinear age effect, age² and relationship to the other, $d(2) = 6.43, p < 0.05$, and a significant interaction between context and other, $d(4) = 17.87, p < 0.001$. As with the analyses of the judgments of right and wrong, we investigated the interactions associated with judgments of the right to engage in the actions by conducting additional separate analyses for each moral issue.

Hitting

Situations that involve harm but as a means of preventing harm in the form of self-defense or protecting another are likely to produce acceptance of the right to do so. Consequently, we were especially interested in how participants would judge the right action in these contexts, as well as judgments regarding the situations that included vulnerable and antagonistic others.

Context and Relationship Effects. The percentages of participants at each age who judged that one would have a right to hit for each context and relationship are presented in Table 4. As was the case with judgments about wrongness, judgments about whether one would have a right to hit varied as a function of context, $\chi^2(2) = 37.13, p < 0.001$. Participants were less likely to say that the protagonist had a right to hit in the unconflicted context (13.3%) entailing unprovoked hitting than in the conflicted-self (49.7%) situations involving hitting in response to being hit, Wald test: $\chi^2(1) = 26.48, p < 0.001$, and the conflicted-other (37.6%) situation in which hitting was in an effort to intercede on behalf of someone else who was being hit, $\chi^2(1) = 14.91, p < 0.001$. The judgments of a right to hit for the conflicted-self and conflicted-other contexts did not differ from one another. This overall effect of context, however, was moderated by a 2-way interaction between context and the relationship with the other, $\chi^2(4) = 55.50, p < 0.001$. There was also a significant two-way interaction between

age² and relationship to the other, $\chi^2(2) = 13.49, p = 0.001$. To interpret these two-way interactions, we fitted separate logistic regression models for each type of other who was the focal target in the hitting situations.

Participants were more likely overall to say that a protagonist had a right to hit either the general other (40%) or the antagonist (42%) than to hit the vulnerable other child (17%). There was no context effect in judgments that one had the right to hit the vulnerable child. In contrast, participants were significantly more likely to judge one had a right to hit either the antagonist or the generic child in the two conflict situations than in the unconflicted unprovoked harm scenarios (all values of $p < 0.001$).

Age Effects. There was a significant overall curvilinear relation between age and judgments of a right to hit the child in general, $b = -0.12, z = -3.35, p < 0.001$, and a significant overall curvilinear relation between age and judgments of a right to hit the antagonist, $b = -0.07, z = -2.39, p < 0.02$. As can be seen in Figure 1, 8-year-old (26%) and 16-year-old (36%) participants were less likely than 11-year-olds (50%) and 14-year-olds (53%) to judge that there is a right to hit the general other or the antagonist. There was also an age-related pattern in judgments about whether one would have a right to hit the vulnerable child. However, this was a linear pattern in which participants were more likely with age to claim a right to hit the vulnerable child in contexts of self-defense or in order to protect another, $b = 0.17, z = 2.33, p < 0.05$.

Indirect Stealing (Not Returning the Money)

Context and Relationship Effects. The percentages of participants who judged that the protagonist would have a right to keep the money are also presented in Table 4. As noted, there was a greater tendency to judge that one would have a right to keep the money in the unconflicted situation (22%) than to judge that one would have a right to hit (8%). However, there were no effects for context in judgments about whether the protagonist had the right to keep the money. There was a significant effect for the relationship to the other child in the situations, $d(2) = 13.25, p = 0.001$, which held only for comparisons between the vulnerable child and the antagonist. Participants were more likely to say that the protagonist had a right to keep the money dropped by the antagonist (33%) than the vulnerable child (22%, Wald test: $\chi^2(1) = 10.56, p = 0.001$).

Age Effects. There was a significant curvilinear main effect for age, $d(1) = 6.01, p = 0.014$, with more 14-year-olds (49%) than participants at the younger (8-year-olds 20%; 11-year-olds 23%) and older (16-year-olds 15%) ages saying that the protagonist had a right to keep the money. These trends are illustrated in Figure 1. In essence, across relationships and contexts, there was roughly a chance probability that an early adolescent (14-year-old) in the study would judge that the protagonist in the story had a right to keep the money dropped by the other person in the situation.

Helping

The distribution of judgments of having a right not to help by age and relationship to the other across contexts is presented in Table 4. The acceptance of a right not to help in the unconflicted context (62%) was greater than for judgments of either a

right to hit (7%) or to keep the money (25%) in unconflicted situations. Thus, helping was viewed as a more discretionary obligation than either hitting another person without provocation or keeping another person's money.

Context and Relationship Effects. There was no difference between the judgments of a right to not help in the unconflicted (62.3%) and conflicted-self contexts (58.3%), and in both situations the judgments of a right not to help were greater than in situations with a conflict between helping the injured child or meeting the needs of a third party (conflicted-other) (33%). There was a significant main effect in the judgments of a right not to help as a function of the relationship between the protagonist and the other child in the situations, $d(2) = 21.74, p < 0.001$. Overall, participants were less likely to judge one had a right to not help the vulnerable child (48%) than either the child in general (67%) or the antagonist (63%).

Age Effects. There was a significant curvilinear age-related pattern in judgments that one had a right not to help, $d(1) = 7.47, p = 0.006$. This curvilinear trend can be seen in Figure 1, which shows that the 8-year-olds (46%) and 16-year-olds (53%) were less likely to make the judgment of a right not to help than were the 11-year-olds (64%) and 14-year-olds (78%). This trend was mitigated by an age \times relationship interaction, $\chi^2(2) = 9.12, p = 0.010$. The curvilinear age effect was significant for both the general other, $b = -0.14, z = -3.53, p < 0.001$, and the antagonist, $b = -0.06, z = -1.85, p = 0.054$. However, there was no age effect for the judgments of a right to not help the vulnerable child.

Summary of Judgments of a Right to Engage in the Action

We found that the children and adolescents in this study were more likely to judge that an actor would have a right to engage in hitting, keeping the money, and not helping than they were to judge these acts as wrong. These findings indicate that judgments as to whether one retained a right to engage in an action was a more stringent moral criterion than a judgment as to whether a given action choice was right or wrong. Moreover, the age-related U-shaped pattern was more evident for judgments of whether the actor would have the right to engage in the action than in judgments of whether acts were right or wrong. At the same time, we also found variations in judgments as a function of the action type, the presence or absence of conflict, and the relationship to the other child in the situations.

The large majority of participants across ages rejected the idea that one would have a right to engage in unprovoked hitting of a child in general or a vulnerable child (see Table 4). These same unconflicted contexts involving the child in general and the vulnerable child in the indirect stealing and helping situations produced progressively greater overall tendencies to judge there is a right to engage in the acts indicating, as we had expected, that each moral action choice evoked different applications of moral judgment.

Context effects were evident for situations of hitting in self-defense or hitting to protect another person. In these cases, the idea of a right to engage in the act of hitting may have taken on broader meaning than simply the freedom to make a non-moral action choice since self-defense can be seen as a moral choice. In the next section, we present analyses of reasons or justifications that participants provided to explain their judgments. Context was not a factor in judgments about indirect steal-

ing but was a factor for decisions about helping only in contexts entailing a conflicting obligation to another child. In those situations, participants were less likely to judge that the protagonist had a right to choose not to help the injured child.

As we saw with decisions about right and wrong, there was a greater tendency to accept the notion of a right to engage in the action choice when directed at the antagonist (especially in hitting situations) and less of a tendency to judge there is a right to hit, steal, or not help the vulnerable other child.

Justifications for Judgments: Age, Context, and Relationship Effects

Following each of the judgments discussed above, participants were asked to provide their reasons for their decisions. The justifications can be grouped into those that correspond with the moral, social conventional, and personal domains, as well as a fourth grouping referred to as pragmatic. The presentation of these results also includes specific categories of justifications used frequently within these broad groupings.

Justifications for Judgments of Acts as Right or Wrong

Across situations, moral justifications were the most common reasons provided for judgments of acts as right or wrong; they accounted for more than 90% of the total justifications in all age groups. These overall tendencies were, however, affected by significant three-way interactions among age², context, and issue for the use of conventional justifications, $d(4) = 12.45$, $p = 0.014$, and personal justifications, $d(4) = 10.26$, $p = 0.036$. For conventional justifications, there were significant three-way interactions between age², context, and relationship with other, $d(4) = 9.68$, $p = 0.046$ and between relationship with other, moral issue, and age² $d(4) = 31.20$, $p < 0.001$. There were no significant three-way interactions for moral justifications. To interpret these interactions, we analyzed data from each situation separately.

Hitting

As we expected, the large majority of justifications for acts of hitting were within the moral domain. There was very little use of justifications in the personal (less than 1% overall) or conventional domains (about 6%). Justifications about punishment or rewards in response to hitting were confined almost entirely to the 8-year-olds. On average, 12% of 8-year-olds referred to rewards or possible punishments in the context of hitting, with the highest rate (24%) in the context of unprovoked hitting of a vulnerable other child. Justifications pertaining to rewards or punishments were provided by less than 4% of participants overall for the other age groups. Since judgments about hitting were mainly based on justifications within the moral domain, the remaining focus of analyses is on relationships between context, relationship (to the other child), and age. Although the large majority of these justifications were within the moral domain, we were interested in ascertaining if there were differences in specific types of moral justifications regarding context, relationship, or age.

Table 5. Percentages of participants employing justifications for hitting, indirect stealing, and not helping as wrong and all right

Justification	Hitting		Indirect stealing		Not helping	
	wrong	all right	wrong	all right	wrong	all right
Affirm ownership	–	–	45	9	–	–
Categorical wrong	16	2	12	3	6	2
Empathy/caring	–	–	6	0	10	10
Fairness (equality)	–	–	9	7	9	2
Fairness (equity)	26	8	10	0	9	2
Moral self-worth	–	–	11	24	11	8
Self-defense	5	49	–	–	–	–
Simple fairness	11	2	5	3	–	–
Simple reciprocity	24	34	23	59	23	50
Welfare	44	37	34	28	77	40

Table 5 presents moral justifications provided for judgments of right or wrong with respect to all three issues. As can be seen in Table 5, there was overlap in the types of justifications across issues, while some justifications were employed with some but not all issues. Statistical analyses were conducted only with categories that were used by at least 5% of participants for a given issue. The totals sum to more than 100% because participants sometimes provided more than one justification. This occurred in 21% of the cases for the provision of justifications for judgments of whether acts were right or wrong, and 19% of the justifications for judgments of whether the actor would have a right to engage in the action.

As can be seen in Table 5, welfare was the most frequently used justification for judgments that hitting is not all right. Welfare was also used as a justification for judgments that hitting is all right in the case of protecting another or in self-defense. The other most frequently used justifications also within the moral categories were fairness (simple and equity) and reciprocity. Fairness justifications were used for judgments that hitting is wrong, but rarely for judgments that it is all right. Reciprocity was used for both types of judgments. The most frequently used justification for judgments accepting of hitting was self-defense (49%).

Welfare justifications were more common in the conflicted-other context (59%) in which hitting could be viewed as protecting another person from aggression than in the unconflicted (44%) and conflicted-self (27%) contexts, $d(2) = 26.06$, $p < 0.001$. Welfare justifications were used in conjunction with judgments across relationships, but were more frequent in situations involving the vulnerable other child (50% of participants) and general other (46%) than when the judgment referred to hitting the antagonistic child (31%), $d(2) = 15.81$, $p < 0.001$. There were no significant effects of age in participants' use of welfare in conjunction with judgments about hitting.

Justifications regarding reciprocity were also used for judgments about hitting and cut across ages. Reciprocity was used most frequently as a justification that it is all right to hit the antagonistic child (70%) and less frequently with regard to the child in general (10%) and rarely in the context of hitting the vulnerable child (2%), $d(2) = 226.54$, $p < 0.001$.

Simple fairness justifications in support of judgments of hitting as wrong were more common in the unconflicted context (24%) than in the conflicted-self (1%) and conflicted-other (1%) contexts, $d(2) = 51.75, p < 0.001$. There was a significant interaction between the curvilinear age function (age^2) and relationship to the other, $d(2) = 9.83, p = 0.007$, in the use of simple fairness justifications. With respect to the general other, simple fairness justifications followed a linear age-related pattern and were more common among 14-year-olds (24% of participants) and 16-year-olds (22%) than 11-year-olds (17%) and 8-year-olds (3%). In contrast, in regard to the vulnerable other, such justifications were more common among 16-year-olds (11%) than at younger ages (all below 5%).

In turn, the use of fairness equity justifications was significantly related to who the other person was in a given situation, $d(2) = 222.05, p < 0.001$. These justifications were almost solely provided in the context of judgments that it would be wrong to hit the vulnerable child (58%) and rarely used for judgments about hitting either the general other (1%) or the antagonistic child (1%). There was also a significant effect of context, $d(2) = 7.36, p = 0.025$. Fairness equity justifications were overall more common in the conflicted-self (self-defense condition: 27%) than in the unconflicted (unprovoked hitting: 16%) contexts. There were no significant effects of age on the use of fairness/equity justifications.

The use of self-defense justifications, mainly for judgments that hitting was all right (40%), depended significantly on the context, $d(2) = 46.91, p < 0.001$. The use of self-defense justifications varied by the relationship to the other, $d(2) = 41.21, p < 0.001$, being more common in conjunction with judgments about hitting the general other (25%) than the antagonistic other (13%) and vulnerable other (negligible, 0.05%). There were no significant effects of age in the use of self-defense justifications.

References to hitting as simply categorically wrong depended significantly on the relationship to the other person in the event, $d(2) = 20.88, p < 0.001$. These responses were more common when the evaluation of hitting referred to the antagonistic other (21%) than to either the general other (8%) or the vulnerable other (6%). There were no significant effects of context or age on the use of categorically wrong justifications.

Indirect Stealing (Not Returning the Money)

As was the case with hitting, judgments about whether indirect stealing is right or wrong were mainly based on moral justifications with few references to social conventional (2%) or personal justifications (5.2%). As can be seen in Table 5, a major consideration in judgments about keeping the money in the indirect stealing scenario focused upon the ownership status of the property. For those who judged keeping the money as wrong, the most frequently used category was affirm ownership (45%), followed by welfare (34%), with the two categories combined amounting to 79%. For ownership justifications, there was a significant effect of the relationship to the other, $d(2) = 29.50, p < 0.001$. Affirm ownership justifications were more common in the situations with the general other (58% of cases) than when the target person in the situation was antagonistic (35%) or vulnerable (33%). In contrast, the use of affirm ownership justifications in support of judgments that keeping the money would be wrong did not depend significantly on context or age.

The use of welfare justifications for why it is wrong to keep the money was greater for the judgments in relation to the general other (44%) and vulnerable child (41%) than to judgments about keeping the money dropped by an antagonist (19%), $d(2) = 30.19, p < 0.001$. There was a significant interaction between context and age², $d(2) = 16.19, p < 0.001$, for the use of welfare justifications. In the unconflicted context, references to welfare were more common among the 11-year-olds (41%) and 14-year-olds (43%) than among 8-year-olds (28%) and 16-year-olds (16%): $d(1) = 7.15, p = 0.007$. In the conflicted-other context, there was an opposite curvilinear age trend, $d(1) = 11.45, p = 0.006$, with references to welfare being more common among 8-year-olds (45%) and 16-year-olds (56%) than among 11-year-olds (32%) and 14-year-olds (13%). There was no curvilinear age effect in the *conflicted-self* condition, $d(1) = 0.09, p = 0.76$, but, in contrast, a linear effect of age, $d(1) = 8.20, p = 0.004$. The youngest participants were most likely to refer to welfare with a progressive decrease in usage of *welfare* justifications with age: 8- and 11-year-olds: 41%, 14-year-olds: 22%, and 16-year-olds: 24%.

Among other moral justifications for judgments that keeping the money was not all right, simple reciprocity was most used (23%). There was a main effect for the relationship to the other, $d(2) = 26.60, p < 0.001$, with use of simple reciprocity justifications more often (68%) used to justify judgments about keeping the money in relation to the antagonist than to keep the money of a child in general or a vulnerable child. As can be seen in Table 5, most (59%) reciprocity justifications were in support of the judgment that it would be all right to keep the money – most applied to the situation in which it was dropped by the antagonist. Thus, keeping the money appears to have been seen as a morally justified response to prior harm caused by the antagonist to the protagonist in the situation.

There was also a significant interaction between context and the curvilinear age function (age²) in the use of simple reciprocity, $d(2) = 8.23, p < 0.01$. In the unconflicted and conflicted-self context, the use of simple reciprocity increased somewhat from 8 (23%) to 11 years of age (27%), declined slightly in use at 14 years (19%), and then increased in frequency among 16-year-olds (27%). For the conflicted-other context, the usage of *simple reciprocity* was less with 8-year-olds (18%), peaked with the 11-year-olds (44%), and declined in use by 14-year-olds (27%) and 16-year-olds (16%).

Other moral justifications for judging it wrong to not return the money were moral self-worth, categorically wrong, and two types of fairness (for a total of 47%). Moral worth was also used with judgments that it was all right to keep the money. Given the infrequency of use of each justification, we do not discuss findings regarding contexts and relationships. We did find a significant age effect for the use of fairness equity judgments in relation to judgments about keeping the money, age², $d(1) = 3.87, p = 0.049$. The use of fairness equity justifications was least among 8-year-olds (3%) and used more frequently by 11-year-olds (11%), 14-year-olds (12%), and 16-year-olds (12%).

Helping

We expected that moral considerations would also comprise the majority of the justifications for judgments about helping. However, because of the less obligatory

nature of helping, we anticipated that there would also be justifications that focused upon considerations of personal choice. This set of expectations was largely borne out. Social conventional justifications or considerations of possible rewards or punishments comprised less than 5% of the overall justifications for judgments of whether it was wrong or all right to not help someone in need. By contrast, personal domain considerations comprised up to 40% of the reasons participants provided within particular helping contexts. For personal justifications, there was a significant interaction between the relationship to the other and context, $d(4) = 23.07, p < 0.001$. The tendency to use personal justifications was greatest in the conflicted-self context with a general other, in which nearly half (47%) of the total number of participants provided personal justifications in support of their judgments that it would be all right not to help. In contrast with the findings for the conflicted-self context, personal justifications comprised less than 10% of the justifications in the unconflicted and conflicted-other situations. Within the conflicted-self context, there was also a curvilinear effect for age in personal justifications that followed the observed curvilinear patterns for judgments of whether it would be all right not to help someone in need, with 8- and 16-year-olds less likely to use personal justifications than the 11- and 14-year-olds.

As can be seen in Table 5, the large majority of moral justifications were based on welfare considerations with 77% of the overall cases including welfare justifications in support of judgments about helping. Interestingly, welfare was also a consideration in judgments not to help. This reflected considerations that helping the child in need would mean ignoring one's own welfare (conflicted-self situation) or the needs of a friend or sibling (conflicted-other situations). The likelihood of using a welfare justification was also significantly affected by the relationship to the other, $d(2) = 47.41, p < 0.001$, with offering help to the antagonist generating fewer welfare justifications (57%) than either the general other (89%) or vulnerable child (73%). There was no significant effect of context or age on the distribution of welfare justifications.

The next most frequently used category for judgments that is wrong not to help was reciprocity (23%). However, reciprocity was also the most frequently used (50%) reason in support of judgments that it is all right not to help. It was nearly always in judgments of not helping the antagonist (77%) and rarely in the case of general other (2%) or vulnerable child (1%), $d(2) = 334.28, p < 0.001$. There were no significant effects of context or age on the distribution of reciprocity justifications. To a lesser extent than welfare and reciprocity, several other justification categories (empathy, self-worth, and two types of fairness) were used for judgments that it is wrong not to help, whereas empathy and moral self-worth were also used for judgments that it is all right not to help (see Table 5).

For moral self-worth, there was a significant effect of the relationship to the other child, $d(2) = 6.95, p = 0.031$. These justifications were more common in judgments *not* to help the antagonist (16%) than in cases involving the child in general (8%) or the vulnerable child (8%). References to moral self-worth justifications associated with judgments about whether or not to help increased with age, $d(1) = 9.27, p = 0.002$. There was no significant effect of context on this type of justification.

References to empathy/caring were employed by 10% of the participants overall for situations in support of judgments whether it would be all right or wrong not to help an injured child. Specifically, there was an effect of context on the justifications

in support of not helping on the grounds that helping would result in negative consequences for the self or other. The use of empathy/caring justifications also depended significantly on the relationship to the other child, $d(2) = 13.12, p = 0.001$. These justifications were more common in situations involving the vulnerable child (17%) than in situations involving a child in general (9%) or the antagonist (5%). Empathy/caring justifications were positively associated with age, $d(1) = 4.01, p = 0.045$.

The use of fairness-equality and fairness-equity justifications, used in judgments that it is wrong not to help, were limited to the vulnerable and antagonist other. No participants employed fairness-equality justifications in the context of judgments about the general other. There was a significant effect for relationship in the use of fairness-equality justifications, with a greater frequency occurring in judgments about the vulnerable child (18%) than the antagonist (7%), $d(2) = 47.23, p < 0.001$. There were no significant effects for age or context. Fairness-equity justifications were also more common in judgments made regarding the vulnerable other (24%) than both the general other (1%) and antagonistic other (1%). There was also a significant effect of age for fairness-equity justification, $d(1) = 5.46, p = 0.020$.

Summary of Justifications for Judgments of Acts as Right or Wrong

Conventional and Personal Justifications

The justifications that accompanied evaluations of the acts included in this study as right or wrong predominantly centered around moral considerations of fairness and welfare. There was very little use of appeals to law or societal norms across issues and contexts. There was also negligible use of personal domain considerations accompanying judgments of whether it would be wrong or all right to hit. Insofar as personal choice was used, it was more frequent in the context of judgments in the indirect stealing situations, with the highest frequency of personal justifications in reference to judgments in the conflicted-self contexts. There were no systematic age effects in the use of personal domain justifications for judgments of right or wrong with regard to indirect stealing. In contrast, and as we had anticipated, appeals to personal choice comprised a substantial portion of the justifications that accompanied judgments of whether it would be wrong or all right not to help an injured child – which was greatest in contexts that involved a conflict with perceived needs of the self and least prevalent (less than 10%) of the justifications in contexts entailing conflicts with the needs of others. Thus, the use of personal choice justifications was generally limited to situations where helping would have direct negative consequences for the self. Finally, there was a U-shaped age-related pattern in the tendencies to employ personal justifications in the helping situations with the highest rates of personal justifications provided by the 11- and 14-year-olds and the lowest rates at the oldest and youngest age groups.

Moral Justifications

There were no across-the-board age effects on moral justifications. The use of moral justifications varied as a function of the context and the relationship to the

other child depicted in the situation. In addition, the use of specific moral justifications varied with the act being evaluated. Affirming ownership was a justification used solely in the scenarios involving decisions of whether to return the dropped money. Similarly, self-defense justifications were used only in the context of hitting as a response to being hit. There were no age effects in the use of these justifications.

The most broadly used moral justification was welfare. Welfare justifications were employed by over a third of the participants for judgments about hitting and indirect stealing, and over 70% of participants when evaluating whether it would be wrong or all right not to help an injured child. Concerns about welfare were significantly lower across issues for moral judgments involving the antagonist. In situations entailing judgments about hitting, there was a significantly greater tendency to refer to welfare in support of hitting in order to protect the child being harmed in the conflicted-other situations. There were no age effects in the use of welfare justifications for either the hitting or helping situations. In the case of indirect stealing, age effects were related to context with curvilinear patterns occurring in the unconflicted and conflicted-other situations, and a linear pattern of a decrease in use of welfare justifications with age in the conflicted-self situations.

Reasons of fairness were evident across situations, with equity more common in contexts that involved the vulnerable other child. Age effects in the use of simple fairness and fairness equity tended to be linear with the lowest use of equity justifications among the 8-year-olds.

Reciprocity justifications also occurred across situations, but almost always in conjunction with judgments about the antagonist. There were no consistent age-related patterns in the tendencies of participants to employ reciprocity justifications.

Appeals to empathy and care occurred in conjunction with judgments about the indirect stealing and helping scenarios. In both cases, these justifications occurred with greater frequency in the context of judgments involving the vulnerable other child. Empathy/care justifications were positively associated with age, with the 8-year-olds less likely than adolescents to employ empathy/care justifications.

Appeals to moral self-worth were also limited to the indirect stealing and helping situations. The use of moral self-worth justifications occurred both in support of judgments that it would be wrong to steal or to not to help the child in need, and in support of judgments that it would be *right* to keep the money or not help when the other child was an antagonist. In the latter case, participants explained their moral choice to not help and to keep the money of the antagonist on the grounds that to do otherwise would be tantamount to a betrayal of their own sense of personal integrity. The use of moral self-worth justifications increased with age.

Justifications for Judgments That One Would Have a Right to Engage in the Act

As described above, the findings for judgments about whether the actor would have a right to engage in the action revealed a curvilinear age-related pattern in the tendency to judge the actor as having that right, with the 11- and 14-year-olds more likely than the younger children and older adolescents to state that the actor had a right. In addition, the findings indicated that those age-related patterns were more pronounced for judgments of the right to refrain from helping an injured child. Our

Table 6. Distribution in percentages of participants employing moral, personal, and conventional justifications for judgments of right to engage in the action by age

Age group	Justification			
	moral	personal	conventional	other
8-year-olds	71	20	8	3
11-year-olds	63	36	16	1
14-year-olds	65	34	15	3
16-year-olds	79	25	14	2

expectation then was that age-related patterns in justifications would reflect the relationship between morality and personal choice, and perceived complexity of moral situations. Table 6 shows this type of developmental pattern in the use of moral and personal domain justifications. On the whole, moral justifications were the most common in all age groups. It is also apparent, however, that the use of moral and personal domain justifications follow a curvilinear pattern. Moral justifications were highest for 8- and 16-year-olds, whereas the use of personal justifications followed an opposite pattern. When looked at by type of action, we found that participants were most likely to employ moral justifications when making judgments about hitting (80%), less likely in the context of judgments about indirect stealing (76%), and least likely when judging whether one would have a right not to help (43%). The opposite pattern was observed in the use of personal domain justifications when responding to questions of whether one would have a right to engage in the action: hitting (20%), indirect stealing (25%), or (not) helping (54%).

However, these patterns associated with age and type of moral issue were modified by other contextual variables. There was a significant three-way interaction between age², context, and situation, $d(2) = 8.01$, $p = 0.018$, for the use of personal justifications. In addition, there were significant three-way interactions between the relationship to the other, context, and age² in predicting the presence of moral justifications, $d(2) = 7.24$, $p = 0.03$, and conventional justifications, $d(2) = 8.703$, $p = 0.013$, as well as a three-way interaction between relationship to the other, context, and age² in predicting the use of personal justifications, $d(4) = 10.50$, $p = 0.033$. To investigate the sources of these interactions, we analyzed data from each situation separately.

Hitting

As noted above, moral and personal domain justifications accounted for most of the justifications associated with judgments of whether one would have a right to engage in hitting. Social conventional justifications were used in conjunction with judgments that one would not have a right to hit, primarily in the unconflicted context of unprovoked hitting. These conventional justifications were more likely to be used in association with judgments about hitting a child in general (18%) than either the an-

tagonist (13%) or vulnerable child (11%) $d(2) = 6.55, p = 0.038$. Justifications about rewards or punishments were confined primarily to 8-year-olds (11% overall), with the highest percentage in the unconflicted context of unprovoked hitting (17%).

Participants provided personal justifications for rights judgments in approximately 20% of the hitting situations. There was a significant overall curvilinear effect for age. The use of personal justifications was more common among 11- and 14-year-olds (17%) than among 8- and 16-year-olds (10%). This age-related pattern was most pronounced for the conflicted-self (self-defense) situations where 41% of the 11-year-olds and a third of the 14-year-olds used personal justifications for having or not having the right to hit a child in general in the conflicted-self situation. The overall U-shaped age-related trend was also more pronounced for judgments regarding a right to hit the antagonistic other than for the child in general and the vulnerable child, $d(2) = 6.99, p = 0.030$.

Moral Justifications. Moral justifications comprised the vast majority of reasons provided in support of judgments as to whether one would have a right to engage in hitting. Our initial analyses examining overall trends in the usage of moral justifications uncovered complex interactions among variables. This is because the hitting contexts significantly altered the ways in which the right to hit was evaluated. The use of moral justifications about the right to hit in the unconflicted context followed a linear trend with age in situations involving the antagonist other child (8 years: 54%, 11 years: 60%, 14 years: 75%, and 16 years: 80%). A curvilinear age-related pattern was observed in the usage of moral justifications in situations involving the general other (8 years: 83%, 11 years: 64%, 14 years: 67%, and 16 years: 94%) and vulnerable other (8 years: 82%, 10 years: 55%, 14 years: 82%, and 16 years: 94%).

The conflicted-self contexts all described situations where hitting was done in self-defense. Accordingly, nearly all participants across age groups provided moral justifications in support of rights judgments (range 82–100% of participants). An overall curvilinear relationship to other by age² interaction, $d(2) = 9.22, p = 0.01$, was largely the result of age-related differences in the use of moral justifications for the antagonist other. For situations involving the antagonistic other, moral justifications were more common among the 8-year-olds (100%) and 16-year-olds (92%) than among the 11-year-olds (82%) and 14-year-olds (67%). There were no significant interactions among variables for the use of moral justifications for rights judgments regarding hitting in the conflicted-other situations, with hitting presented as in the service of protecting another child.

We also analyzed the use of specific justifications in the moral domain for the different contexts. These percentages are presented in Table 7. Concern about welfare was the most frequently employed justification (total of 52%). The use of welfare justifications was significantly affected by context, $d(2) = 41.39, p < 0.001$. Welfare justifications were more common in the conflicted-other context (58%), in which hitting was aimed at protecting someone from being attacked, than in the unconflicted (33%) and conflicted-self (12%) contexts. In the unconflicted and conflicted-self contexts, welfare justifications were almost exclusively used in support of judgments that the protagonist would not have a right to hit. There was no significant effect for age in the use of welfare justifications.

Self-defense was almost exclusively used for judgments of the right to hit in the conflicted-self context, comprising nearly two-thirds (60%) of those justifications. The use of self-defense justifications was significantly related to the relationship to the other child, being more common in contexts involving the general other than the

Table 7. Percentages of participants employing moral justifications for having the right or not to hit, keep the money, or not help

Justification	Judgment					
	hitting		indirect stealing		not help	
	have right	not have right	have right	not have right	have right	not have right
Affirm ownership	–	–	8	58	–	–
Defining/questioning ownership	–	–	31	1	–	–
Categorical wrong	3	21	1	15	4	26
Fairness	2	17	8	6	–	–
Fairness (equity)	2	15	–	–	–	–
Moral self-worth	–	–	7	2	13	3
Self-defense	41	2	–	–	–	–
Simple reciprocity	23	9	29	3	63	6
Welfare	20	32	12	13	12	56

antagonist other or vulnerable child, $d(2) = 8.92$, $p = 0.012$. There was also a significant curvilinear effect for age² in the use of self-defense justifications, $d(1) = 6.14$, $p = 0.013$. Self-defense justifications were used by a smaller percentage of 8- and 16-year-old participants than 11- and 14-year-olds.

Simple reciprocity justifications were also used in judgments that one would have a right to hit, mainly in the conflicted-self context (31%). The effect for context was significant, $d(2) = 7.93$, $p = 0.019$ (conflicted-self: 27%, conflicted-other: 14%, unconflicted: 12%). There was also a significant effect for the relationship to the other, $d(2) = 69.80$, $p < 0.001$. These justifications were employed by a higher percentage of participants in situations involving the antagonistic other (40%) than for the child in general (16%) and vulnerable other (3%). There were no significant age effects in the use of simple reciprocity.

The other justifications for judging that the actor did not have a right to hit were that it was categorically wrong and the two types of fairness (equality and equity). Justifications for hitting as categorically wrong were more common among younger (8-year-olds: 20%) than older participants (16-year-olds: 9%), $d(1) = 4.62$, $p = 0.032$. There was also a significant effect for context on the use of categorically wrong justifications, $d(2) = 8.20$, $p = 0.017$. Categorically wrong was more prevalent as a justification in the unconflicted and conflicted-other contexts than in the conflicted-self situations. The relationship to the other child in the scenario was not significantly related to the use of categorically wrong justifications.

Simple fairness justifications were used most frequently in support of judgments that one would not have a right to hit in the unconflicted context, $d(2) = 39.19$, $p < 0.001$. Simple fairness justifications were also employed by a greater percentage of participants in support of judgments about the right to hit the general other (19%) than the vulnerable (13%) or antagonist child (8%), $d(2) = 9.70$, $p = 0.008$. There was also a significant linear effect of age with the use of simple fairness greatest among the oldest participants, $d(1) = 4.50$, $p = 0.034$. The use of fairness equity reasons was more common in contexts involving the vulnerable other (31% of participants) than the general other (2%) and antagonist other, $d(2) = 75.94$, $p < 0.001$.

Indirect Stealing (Not Returning the Money)

There were very few instances (less than 5%) in which participants used social conventional justifications or made reference to concerns about rewards or punishments as justifications for judgments about whether one would have a right to keep the money. As was the case with hitting, moral and personal domain justifications were the most frequent reasons associated with judgments of whether one would have a right to keep the money.

Participants provided personal justifications for right judgments in approximately 25% of the indirect stealing situations. There was an overall curvilinear age-related trend, with personal justifications highest among the 11- and 14-year-olds and lowest among the 8- and 16-year-olds. There was a significant age² by relationship interaction for personal justifications, $d(2) = 14.89, p = 0.002$. The overall curvilinear age-related trend was more pronounced in situations involving the antagonistic other child than in contexts involving the child in general or the vulnerable child.

Moral Justifications. As is the case with judgments of right and wrong, moral justifications comprised the majority of reasons used for judgments as to whether one would have a right to keep the money. Within this overall trend, however, there were significant age, context, and relationship effects in the use of specific moral justifications. Table 7 presents the percentages of participants who provided specific moral justifications in the indirect stealing situations. Not surprisingly, those who made the judgment that the actor does not have the right to keep the money based it most often (58%) on affirming the ownership of the child who dropped it. There was a significant effect of the relationship to the other in participants' use of this category, $d(2) = 17.59, p < 0.001$. Participants were more likely to use this justification in contexts involving the general other (64%), somewhat less with the vulnerable other, and least likely when the other child was the antagonist (41%). There were no other significant main effects or interactions in the use of affirm ownership.

As can be seen in Table 7, there was some use of the welfare justification for both types of judgments (12 and 13%), which revealed a curvilinear age-related pattern: age², $d(1) = 6.43, p = 0.011$. The youngest and oldest participants were more likely to refer to welfare reasons, with 14-year-olds least likely to use welfare. There were no other significant main effects or interactions for this justification category. The determination that one does not have a right to keep the money was also sometimes based on it being categorically wrong (15%). There were no significant main effects or interactions in the use of this justification.

Three other justification categories were used for the judgment that one would have a right to keep the money: moral self-worth, defining nonownership, and simple reciprocity. For nonownership, there was a significant curvilinear effect of age², $d(1) = 19.63, p < 0.001$. None of the 8-year-olds used this justification. Seven percent of the 11-year-olds, nearly a third (29%) of 14-year-olds, and only 11% of 16-year-olds provided nonownership justifications. Nonownership justifications comprised 63% of the justifications provided by 14-year-olds who judged that one would have a right to keep the money. There were no significant main effects of context, $d(2) = 1.22, p = 0.54$, or the relationship to the other, $d(2) = 2.46, p = 0.29$, in participants' use of this category. However, there was less of a tendency for 14-year-olds to employ this category in the context of judgments about whether one would have a right to keep the money dropped by a vulnerable child than for either the child in general or the antagonist.

In the use of simple reciprocity as a justification for the right to keep the money, there was a significant effect for the relationship to the other child, $d(2) = 60.63$, $p < 0.001$. References to simple reciprocity were employed almost exclusively in support of judgments that one would have a right to keep the money dropped by the antagonistic other child. There were no other significant main effects or interactions for use of this justification category.

Helping

Social conventional justifications for judgments about the right not to help were used infrequently but did reach the 5% threshold for statistical analysis. There was a significant curvilinear main effect of age² in the use of conventional justifications, $d(1) = 5.48$, $p = 0.019$. Conventional justifications were more common among 8- and 16-year-olds than among 11- and 14-year-olds. The use of personal justifications was more frequent in the helping situation (54%) than in either the stealing (25%) or the hitting (16%) situations. This is consistent with the discretionary nature of helping. However, there was not a significant curvilinear age effect for personal justifications about whether one would have a right not to help. There was, however, a significant effect for relationship to the other child, $d(2) = 12.90$, $p = 0.002$. Personal justifications were more common in contexts involving the vulnerable child (63%) and child in general (58%) than in situations involving the antagonist.

Moral Justifications. For moral justifications, there were no main effects of context, relationship to the other, or age. Table 7 presents the percentages of participants providing specific moral justifications as to whether one would have a right not to help. Welfare justifications were the most frequent for judgments about whether one would or would not have a right to help the child in need. All of the welfare justifications supporting judgments that one would have a right not to help came from the older participants. Welfare justifications comprised 9% of the justifications in support of such judgments by 14-year-olds, and 21% of the justifications for judgments that one would have a right to not help provided by 16-year-olds. To a greater extent, however, welfare justifications were employed in support of judgments that one should provide help to the injured child. These welfare justifications depended significantly on the relationship to the other, $d(2) = 19.89$, $p < 0.001$. Welfare justifications were provided more frequently when the child in the situation was the general other (66%) or vulnerable other (62%) than when the situation involved the antagonistic other (25%). The use of welfare justifications was also significantly affected by context, $d(1) = 4.93$, $p = 0.026$, being more common in the conflicted-self context (56%) than in the unconflicted context (37%). In addition, 26% of the participants stated that it was categorically wrong to not help the child in need. There were no significant main effects or interactions in the use of categorically wrong justifications.

Simple reciprocity was the most frequent reason for judgments regarding the right to not help the child in need. As one might expect, the use of this justification was significantly affected by the relationship to the other child in the situation, $d(2) = 56.10$, $p < 0.001$. Reciprocity justifications were almost exclusively used for judgments that one would have a right to not help the antagonistic other child. Justifications of moral self-worth were also used to some extent (13%) for the right

not to help. They were significantly more likely to be provided in reasoning about the right not to help the antagonist than either the vulnerable child or a child in general.

Summary of Justifications for Judgments of the Right to Engage in the Action

As we had anticipated, the justifications that supported judgments of a right to engage in the actions focused upon personal choice in conflict with moral obligations and reflected the ambiguity associated with a given context or situation. The use of personal justifications followed a U-shaped age-related pattern with use of personal justifications highest among 11- and 14-year-olds and lower among the 8- and 16-year-olds. Personal choice justifications were higher in the helping and indirect stealing situations than in the situations involving hitting. As expected, personal choice justifications were most frequent in the context of judgments about the right not to help. This is consistent with the discretionary nature of helping. Judgments that one would not have a right to avoid helping were accompanied by justifications that focused upon welfare and reciprocity.

Judgments of the right to keep the money in the indirect stealing situations were associated with justifications that focused upon the ambiguity of the status of the money as belonging to the original owner. This perceived ambiguity mitigated the perceived moral implications of keeping the money for 11- and 14-year-olds. This same set of justifications among 16-year-old participants was coordinated with moral implications of the loss of the money by the person who dropped it. The older 16-year-old and younger 8-year-old participants were more likely to provide justifications affirming the ownership of the money by the person who dropped it.

Judgments of the right to hit were most common in the self-defense context. These judgments were supported by right justifications that focused upon self-defense. Across situations, judgments of a right to keep the money, not to help, or to hit were most frequent in situations involving the antagonist. The judgments were supported by justifications focusing upon simple reciprocity and personal choice.

Developmental Levels of Coordination

Up to this point, we have presented analyses of the specific justifications associated with the judgments of participants within each age group. That analysis indicated that there are age-related differences in the use of moral and personal justifications, as well as correspondences between justifications and the contexts and issues evaluated. However, the analysis of justifications does not account for another aspect of how individuals come to decisions in social situational contexts. We are referring to ways that different considerations are weighed and balanced, involving processes of coordination [Turiel, 2008b]. For example, in reasoning about the indirect stealing situations, some participants referred to questions about whether the dropped money was still the property of the person who had dropped the money. In other cases, participants offered reasons affirming continued ownership of the money. Others brought in both considerations of possible loss of ownership and continued ownership. Understand-

Table 8. Descriptions of levels of coordination with examples of excerpts from participant responses

Level 1: Straightforward One-Dimensional Decisions

The first level describes moral judgments in which evaluation of the right or wrong of an action is based on the most salient moral elements of harm or welfare presented in the situation and not other features; the decisions made using this pattern appear nonwavering and unambiguous; individuals may recognize or mention other elements, or can recognize other elements if they are brought to the person's attention, but these are not integrated within the person's reasoning, they are merely noted

Issue indirect stealing

8-year-old female

Would it be wrong or all right for (protagonist) to keep the money instead of giving it back to the other girl?

No, because it's someone else's 10-dollar bill, she shouldn't keep it because it's not hers

8-year-old male

Would it be wrong or all right for (protagonist) to keep the money instead of giving it back to the other boy?

He's stealing, and you don't want to, it's not good to steal

Suppose he decides to keep the money; does he have the right to keep the money if he wants to?

No, because it's someone else's 10-dollar bill

Level 2: Multidimensional Uncoordinated Decisions

The second level, referred to as multidimensional uncoordinated, is characterized by attention to different features of a situation, and a recognition of ambiguity, but without resolution or evidence of coordinating the moral and nonmoral concerns in a systematic way; this process is manifested by inconsistency and ambivalence that sometimes results in a reading of moral ambiguity as allowing for selection of an action that fits the needs and desires of the actor; at this level, judgments about whether an act is right or wrong are not coordinated with judgments about whether one would have a right to engage in a given action; thus, it is frequently maintained that one would have a right to engage in an action even though the act could be considered wrong

Issue indirect stealing

13-year-old female

Would it be wrong or all right for (protagonist) to keep the money instead of giving it back to the other girl?

... he's not doing anything wrong. He's not necessarily doing something wrong, but the right thing to do would be to give it back, but he's not necessarily, he doesn't necessarily have any wrongdoing

13-year-old male

Suppose he decides to keep the money. Does he have the right to keep the money if he wants to?

He's got every right to keep the 10 dollars, like I said, because it's in nowhere land. And it's his, he found it. It's not in the kid's house or anything... However wrong it seems for him to keep the money, he has the right to; it is the same thing as finding 10 dollars on the bus with nobody else around; lost money is up for grabs; he has the right to keep it because that person dropped it, and it's a free country

Issue hitting – conflict other

14-year-old female

How should she decide what to do?

Probably like, man, I should have done something to help this girl, like you know, confused because she knows she did the right thing by not using violence, but then she thinks that maybe her punch would help this other girl, and isn't that okay too? I mean, she is confused no matter what she does

Issue helping – conflict self

14-year-old male

Would it be all right or not all right for John to keep walking so he could get to the soccer tryout on time without helping the kid in this situation?

I guess it would still be all right, it would be nicer if he just helped the kid

Would he have a right not to help in this situation so he can get to the tryout on time?

Ah, yeah, cause it's really, it's not his fault that the kid fell or anything

So, would it be right or wrong for him to do it?

It wouldn't be a bad thing that he didn't do it, but it wouldn't be wrong that he didn't do it, I mean, it wouldn't be wrong that he didn't do it, but it wouldn't be a good thing that he didn't do it

Table 8 (continued)

Can you explain that to me?
It's a good thing, if he did do it, it'd be a good thing cause like he helped out the kid, but if he just went to the soccer thing, it wouldn't be horrible, because like, I don't know, I guess
So how should he decide what's the right thing to do here?
It's kind of a tough situation, just like
How should he decide it, though?
I'm not sure
Okay, well what things do you think he's going to have to balance out here?
Making the team and helping out the kid and what to do before
And is there any way for him to decide what's the right thing to do here?
Not really, it's just, there's no really right way to do it

Level 3: Multidimensional Coordinated Decisions

At the third level, labeled as multidimensional *coordinated*, there is evidence of consideration and weighing of multiple (moral and nonmoral) aspects or considerations with a resolution; individuals who engage in a *coordinated* process demonstrate an awareness of moral ambiguity, and the arguments that can be made for acting in self-interest in such situations; however, they engage in reasoning that leads to resolution of the elements that generate that moral ambiguity with the integration of nonmoral concerns in a consistent and systematic way

Issue indirect stealing

17-year-old female

Would it be wrong or all right for (protagonist) to keep the money instead of giving it back to the other girl?
Well, in reality, would it be all right or not all right? You should always give the money back. But, I can understand the thought process for not giving the money back. Well in reality, if something, I don't know how to say that, if someone loses money, it's theirs and if you know that, she should give it back. But, if you just saw 10 dollars on the street and you have no idea who it belongs to, keep it, but if you know who it belongs to, it's your duty to give it back. But I can understand the thought process

Issue helping – conflict self

16-year-old female

Would it be all right or not all right to keep walking so that Maria can go to the tryout on time?
I think it would be not all right for her to walk home because she would be consciously deciding that her own situation is more valuable than the situation of another person and I think if you see someone in pain you should help them especially if they ask for it
What about her soccer tryouts?
I think if she doesn't help the little girl that person then she would be consciously making an effort not to help someone else in pain and that would be selfish because she would be choosing something intangible over something that is actually affecting someone; she probably would feel very torn because she would know that I guess the right thing to do would be to help the little girl, but she also really wants to go to her soccer thing because it's something really important to her
Would Maria have a right not to help in this situation?
I think she has a right to not help because that is her choice but I think that she should help because like I mean I don't know, she has the right to do whatever she wants but I think that the better decision would be better to help her even though that would be very difficult
Can you say more about how someone has a right that isn't necessary the right thing to do?
Well, I guess, maybe it's not a right, I don't think, I think it's partially justified, but I don't think it's fully justified because so I guess, she has the ability to not help, but I don't think she has the justified right to not help the girl, maybe it's not the right, it's her choice, she has the ability to go to the soccer tryouts, but I think she's more right to help the little girl

16-year-old male

Would it be alright or not alright for John to keep walking so that he can get to the soccer tryout on time?
I think it would be a good thing for him to stop and help the kid because you know, he has to get his priorities straight; and, it'll be a tough decision for him to make because one (decision) benefits him, and the other benefits someone else and it won't be natural to go for the benefit of someone else but he should stop and help the kid

Table 8 (continued)

<p><i>Would John have a right not to help in this situation so that he can get to his tryout on time?</i></p> <p>He does have a right not to help him because he doesn't have to help him; it's morally the right thing to help someone else over helping yourself but it's definitely as a person a bonus and an extra quality to be moral like that and help someone else; but he definitely has the right to go and do what he wants to do and what will benefit him because you don't have a right or obligation to help anyone else because there's no reason that you have to; it's a very nice thing to do but you don't have to do it</p> <p><i>How should he decide what the right thing to do is in this situation?</i></p> <p>He should probably think about what will happen in each case which will be he'll get cut versus the kid will be stranded and possibly having no help and he should weigh those options and say "You know, I could play soccer next year or sometime else but you know this kid really needs my help;" so he should weigh the negative benefits; in this case, I would say that helping should take priority</p>
--

ing how different considerations about ownership were dealt with, and whether or how they were connected with other aspects of a person's reasoning, are *not* part of the coding of justifications. Similar issues surrounding the reasoning associated with judgments across situations resulted in the creation of coding systems (described in the chapter on Methods) of coordination in participants' responses.

We identified three patterns or levels of coordination, which are listed in Table 8 along with illustrative examples of responses for each level. We use of the term "levels" with reference to these patterns of coordination advisedly. The levels represent degrees of complexity and comprehensiveness in the coordination of elements in the reasoning of participants. Our expectation was that these levels would be associated with increased age. We did not, however, view these levels as consistent with criteria posed in previous analyses of developmental "stages" [e.g., Kohlberg, 1969] involving individuals employing the same form of moral reasoning independent of the particular elements contained in a given situation. Instead, we expected that the complexity of the situation would affect the types of processes brought to bear in evaluations of a given situation. For example, based on many studies [see Smetana et al., 2014], we did not expect complex coordination to be used in evaluations of the prototypical situation of unprovoked harm of a child in general. In the thinking of participants that situation is not perceived as involving competing or conflicting considerations. As another example, we expected that particular features of a situation, such as whether it involved a vulnerable child, would highlight the salience of the moral components of a given situation, and thus result in reasoning about one feature with regard to how one should act.

Therefore, whether a decision involves processes of coordination will depend on the situational context that will in some respects not be related to age and in other respects may be age related. Again, we expected that in a situation involving a straightforward or prototypical moral transgression (e.g., hitting another without provocation), mainly one element would be taken into account in the judgments of participants of different ages (e.g., it is wrong for reasons of harm and welfare). Similarly, we expected that unprovoked hitting of a vulnerable other would involve use of mainly one element. By contrast, we expected that the situations involving hitting an antagonistic other and those involving provocations in the conflicted-self and conflicted-other (i.e., hitting in self-defense or to protect another) might involve considerations of different elements in coming to a decision. We expected that in most of the situations involving the issues of helping and indirect stealing there might be deci-

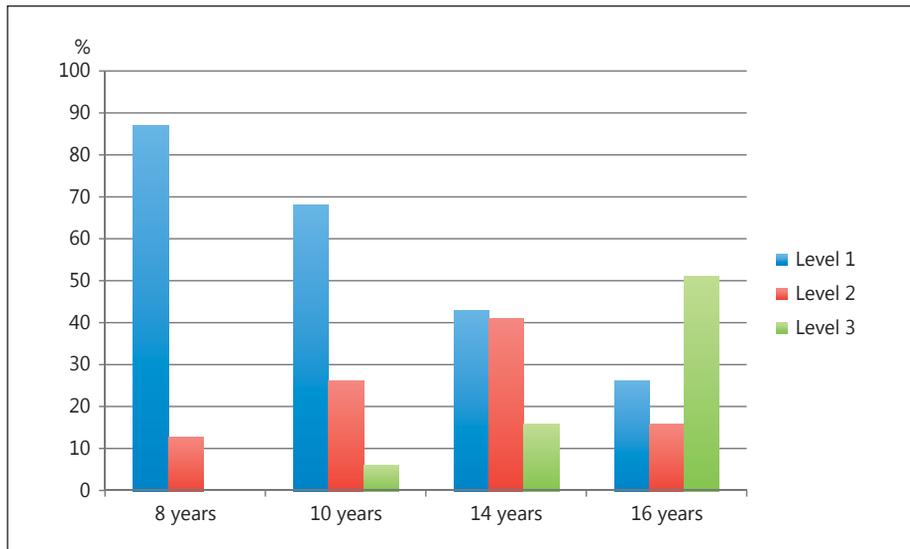


Fig. 2. Percentage of participants at each age providing Level 1 (straightforward), Level 2 (uncoordinated), or Level 3 (coordinated) reasoning overall. *Note:* This does not include responses for unconflicted (unprovoked) hitting.

sions involving coordination. As already discussed, prosocial behaviors, such as in our helping situations, are not straightforward in that they include discretionary choices with personal considerations (as already seen in the justification categories associated with judgments about helping). In turn, decisions about indirect stealing also appear to include an element of personal discretion associated with the ambiguity and differing interpretations of ownership of the money as discussed above (see Footnote 1). In sum, we expected age differences in levels of coordination about the situations involving more than one component.

Association between Coordination Levels and Age

In this section, we present the analysis of the relationship between level of reasoning and ages of participants. A model examining only main effects determined that there was no main effect for a situation on the form of coordination employed, $\chi^2(2) = 5.64, p > 0.05$. In contrast, there was an overall linear main effect for age on coordination, $b = 0.46, z = 11.89, p < 0.001$. The youngest children were most likely to make straightforward, one-dimensional decisions, with multidimensional uncoordinated and eventually multidimensional coordinated decisions more likely with increasing age. This overall age-related pattern is presented in Figure 2. Figure 2 does not include data from the unconflicted context (unprovoked hitting), for which, as expected, there were no age effects. The overall trends in levels of coordination were affected by three-way interactions among age, situation, and context, $\chi^2(4) = 16.62$,

$p = 0.002$, and among situation, context, and the relationship to the other, $\chi^2(8) = 23.36$, $p = 0.003$. We investigated the sources of these interactions by fitting models separately to each situation.

Hitting

Unconflicted Context (Unprovoked Hitting). As we anticipated, Level 1 one-dimensional decisions were made by all participants (100%) across ages with regard to unprovoked hitting of the generic child. This was also the case at 8, 11, and 14 years of age for hitting the vulnerable child. The majority of the oldest participants also used Level 1 coordination in evaluating unprovoked hitting of a vulnerable child, with 12% of the 16-year-olds using Level 3. No participant used Level 2 coordination in these contexts. We saw evidence of more age-related variability in levels of coordination when the question of unprovoked hitting involved the antagonist other.

The youngest children primarily used Level 1 coordination. Level 2 appeared at age 14 years, and Level 3 was most prevalent in the oldest (16-year-old) participants. This would indicate that the older participants took more features into account than younger ones in the situation of unprovoked hitting involving an antagonist.

Conflicted Contexts. The two contexts involving conflicts of self or other with respect to decisions about hitting generated the expected linear age-related trend for levels of coordination. This pattern held across each of the relationships between the protagonist and the other person in the given situation: general other child, $b = 0.35$, $z = 5.19$, $p < 0.001$; vulnerable child, $b = 0.46$, $z = 5.80$, $p < 0.001$, and antagonist, $b = 0.42$, $z = 7.04$, $p < 0.001$. As one might expect, coordination about the conflicted-self (self-defense) context tended to elicit more Level 2 coordination at earlier ages than the conflicted-other context (hitting to protect someone else from aggression). This was most clear cut for the situations involving the general other child, $p < 0.001$.

Indirect Stealing (Not Returning the Money)

Age-related effects were observed in levels of coordination across each of the situations involving decisions about whether or not to return the money to the person who dropped it. The overall age-related pattern in levels of coordination about the indirect stealing situations is presented in Figure 3. As was the case with hitting, however, the indirect stealing situations generated significant two-way interactions for age \times context, $\chi^2(2) = 7.07$, $p < 0.03$, and age \times relationship to the other, $\chi^2(3) = 9.43$, $p < 0.03$. To address these interactions, we explored the impact of context and relationship and context variables separately.

Context Effects. There was a significant main effect for age on coordination levels about indirect stealing across each context with 16-year-olds more likely to use higher levels in the conflicted-self and conflicted-other situations than in the unconflicted context. This suggests that in the absence of the added complexity of a conflict involving either a personal need for the money or in considering whether to keep the money to help a friend, the issue of returning money dropped by another was straightforward for the majority of the older adolescents.

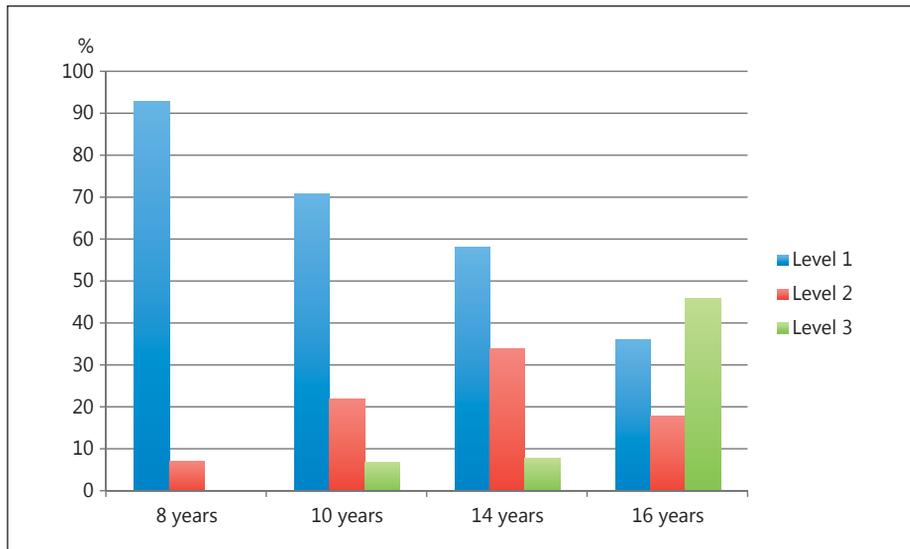


Fig. 3. Percentage of participants at each age providing Level 1 (straightforward), Level 2 (uncoordinated), or Level 3 (coordinated) reasoning for indirect stealing.

Relationship Effects. The general overall age-related pattern of levels of coordination was found in each relationship between the protagonist and the other child in the indirect stealing situations: child in general: $b = 0.49$, $z = 6.11$, $p < 0.001$; vulnerable child: $b = 0.28$, $z = 3.96$, $p < 0.001$; and antagonist: $b = 0.31$, $z = 5.81$, $p < 0.001$. The interaction effect stemmed from variations in the distributions of proportions of participants at each level as a function of the relationship to the other child. Participants tended to use less complex forms of coordination when making decisions about whether to keep the money dropped by the vulnerable other child. This was most noticeable for the two oldest age groups. By contrast, decisions about whether to return the money to the antagonist generated higher levels among the participants between 8- and 14 years-olds. Thus, the situation with the antagonist would appear to hold more ambiguity than whether to keep the money dropped by a vulnerable child for participants above the age of 8 years.

Helping

The overall age-related pattern in levels of coordination in response to the helping situations is presented in Figure 4. As was the case with the indirect stealing situations, this expected overall pattern was qualified by significant interactions between age and relationship to the other child, $\chi^2(2) = 9.43$, $p = 0.009$, and between context and relationship to the other child, $\chi^2(4) = 28.30$, $p < 0.001$. We interpret these interactions by first looking at the interactions between age and context, and then relationship.

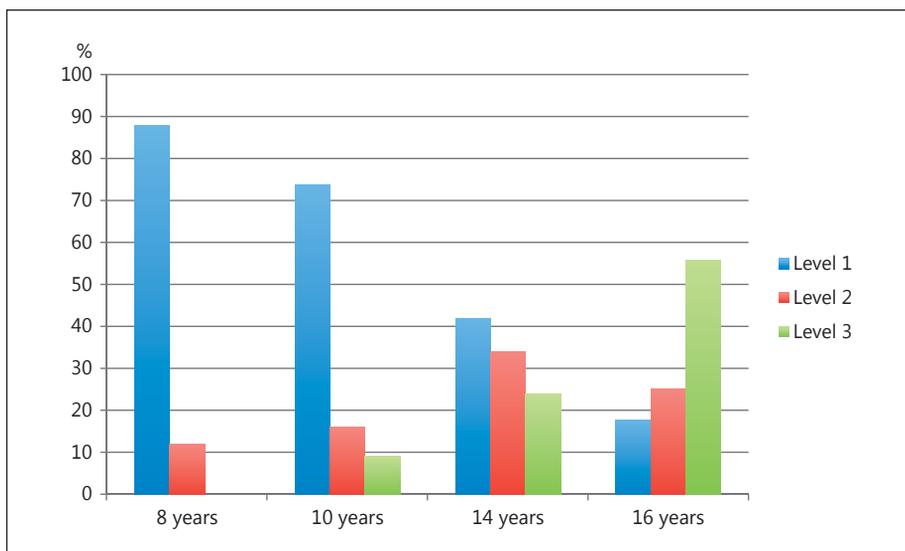


Fig. 4. Percentage of participants at each age providing Level 1 (straightforward), Level 2 (uncoordinated), or Level 3 (coordinated) reasoning for helping.

Context Effects. As expected (and as with hitting and indirect stealing), decisions about whether or not to help tended to involve less complex coordination in the unconflicted contexts than in the two conflicted situations. For example, the proportion of 16-year-olds displaying Level 3 coordination when judging helping in the unconflicted context occurred less frequently (27%) than when they evaluated whether to help in the conflicted situations (52 and 65%, respectively). However, this general trend regarding context was affected by the relationship to the other child. Decisions about whether or not to help the antagonist were associated with higher levels in the unconflicted situations than did decisions about either the child in general or the vulnerable child. The first level was associated across ages with a majority of judgments about helping the child in general and the vulnerable child in the unconflicted context. This also held for the 16-year-olds, with 63% using Level 1 reasoning to evaluate helping of a child in general or a vulnerable child in the unconflicted situation. Only among the older participants (aged 14 and 16 years) did decisions about helping involve levels higher than Level 1.

Relationship Effects. The levels of coordination associated with judgments about helping were significantly and positively related to age for each of the relationships between the protagonist and the other child (helping the child in general, $b = 0.51$, $z = 6.97$, $p < 0.001$; helping the vulnerable child, $b = 0.45$, $z = 6.09$, $p < 0.001$; and helping the antagonist, $b = 0.38$, $z = 6.84$, $p < 0.001$). The interaction between age and relationship to the other child was largely accounted for by the differences in coordination used in judgments about helping the antagonist. Decisions about helping the antagonist tended to elicit higher levels of coordination than decisions about whether to help the vulnerable child or a child in general. For the younger participants, this was reflected in an increase in Level 2 coordination.

Relationship between Levels of Coordination and Judgments of Acts

Another set of analyses examined whether levels of coordination were related to judgments of right or wrong, and of whether a protagonist had a right to engage in the action. Level of coordination significantly predicted whether or not participants would judge that the protagonist's action is all right, $\chi^2(2) = 98.602$, $p < 0.001$. This held even when controlling for age, situation, context, and relationship to the other child, as well as two-way interactions between these. There was also no interaction between level of coordination and the linear or curvilinear age term, $\chi^2(2) = 1.54$, $p = 0.464$, and $\chi^2(2) = 1.52$, $p = 0.458$, respectively. Thus, levels predicted judgments of the acts independent of age. In sum, 96% of participants who showed Level 1 coordination and 90% of those who showed Level 3 coordination judged that the protagonist's action was wrong. In contrast, only 54% of Level 2 participants judged that the protagonist's action was wrong.

Level of coordination also predicted whether or not participants judged that the protagonist had a right to do the described action, $\chi^2(2) = 443.33$, $p < 0.001$. Again we controlled for age, situation, context, and the relationship to the other child, as well as two-way interactions between these. There was no interaction between levels of coordination and the linear or curvilinear age term, respectively. As with judgments about right and wrong, levels of coordination predicted judgments of actions independent of age. In summary, 13% of Level 1 participants judged that the protagonist had a right. In contrast, 36% of participants who showed Level 3 coordination and 70% of participants at Level 2 judged that the protagonists had a right to engage in the action. There was an interaction between situation and level of coordination in predicting right judgments, $\chi^2(4) = 18.64$, $p < 0.001$. This was because participants that displayed Level 3 coordination were more likely to judge that the protagonist had a right to refrain from helping an injured child but did *not* have a right to keep the money dropped by another child.

Patterns of Justifications Associated with Levels of Coordination

In previous sections, we presented the justifications associated with judgments as a function of age, as well as contexts and relationships. As we noted, the coordination levels were intended to describe decision-making that could have involved a balancing of different justifications in situations perceived as nonstraightforward. We now consider the distribution of justifications associated with the levels of coordination in order to ascertain whether particular sets of justifications are involved in coming to decisions. It should be recalled that the analyses of levels of coordination were based on responses at a broader level than specific justifications in the body of responses to a given situation within a context and relationship. Here, we present justifications for judgments of right and wrong as well as whether one would have a right to engage in the action. We consider only those justifications that were provided by at least 5% of the participants for any given issue.

Hitting

Unconflicted Context (Unprovoked Hitting). As discussed in the section on the association of levels and age, most participants used one-dimensional coordination in their judgments about unprovoked hitting in the unconflicted situations with the general other and the vulnerable child. This finding is in line with our expectation that judgments about prototypical moral transgressions would be perceived as such, and judgments would be based on moral reasons – particularly welfare and fairness. This indeed turned out to be the case. Welfare and fairness were the most frequently used justification categories in the unprovoked hitting situation. Insofar as other justifications were used regarding unprovoked hitting, they included personal choice and reciprocity in the situation involving the antagonist. It appears that to some extent, unprovoked hitting of an antagonist was seen as involving provocation. This interpretation is supported by the finding that the use of the reciprocity justification was associated with coordination levels for situations involving the antagonist $d(2) = 33.00, p < 0.001$. In particular, the reciprocity justification was more common at Level 2 (50%) than at either Level 1 straightforward reasoning (7%) or Level 3 (17%), $d(2) = 7.82, p < 0.01$.

Conflicted-Self (Self-Defense). In contrast with unprovoked hitting, the situations presented in the conflicted-self context are multidimensional in that they could be perceived as entailing two competing considerations: inflicting harm on one person in order to prevent harm to oneself. Consequently, the issue of self-defense is part of these situations. The expected references to self-defense were greater among Level 2 and Level 3 participants than among those at Level 1, $d(2) = 43.40, p < 0.001$. This was both with reference to whether it would be right or wrong for the protagonist to hit the aggressor, and whether one would have a right to hit the aggressor.

With regard to judgments that the protagonist would be wrong to hit in conflicted-self situations, the most frequent justifications were welfare and fairness (with some use of categorically wrong). However, children at Level 1 mainly focused on the single dimension of the protagonist inflicting harm on the child being hit. By contrast, participants at Levels 2 and 3 used welfare and fairness justifications, suggesting that they also took into account the welfare and fairness for the person under attack (including that the protagonist would have a right to protect him- or herself).

The feature that distinguishes Level 2 from Level 3 or Level 1 is that those classified as Level 2 were more likely to use the reciprocity category, $d(2) = 8.72, p < 0.01$. Participants employed reciprocity both to justify their judgment of hitting as right or wrong and with respect to having the right to hit in self-defense. This justification category was most common in the situations portraying the antagonist. For Level 2 participants, hitting was viewed as a form of fair retaliation against an aggressor. This justification for hitting the antagonist was seldom used by participants at either Level 1 or Level 3.

Conflicted-Other (Hitting to Protect Another from Attack). In this situation, the protagonist has to decide whether to hit in order to stop someone from harming another child. A salient feature of the observed pattern of these justifications was the use of the welfare category by participants at all levels of coordination. However, welfare reasons were used differently by those at Level 1 from those at Levels 2 and 3. For those at Level 1, concerns about welfare were with regard to the potential harm to the aggressor who would be hit by the protagonist. By contrast, for participants at Levels

2 and 3, the concerns for welfare were more likely to also include concerns for the welfare of the other child under attack. In addition, Level 3 participants were more likely to judge that the protagonist would have a right to hit in order to protect the child under attack and *provided* welfare justifications for that judgment.

Participants at Level 2 also used reciprocity justifications more than either Level 1 or 3 participants, $d(2) = 6.39$, $p < 0.05$, and mostly in conjunction with judgments about hitting the antagonist. Participants employing Level 2 coordination took into account the past actions of the antagonist child to support hitting the aggressor.

The use of fairness-equity justifications did not differ by coordination levels (though slightly lower for Levels 2 and 3) and referred generally to considerations about the vulnerable child. These justifications were in support of judgments that the protagonist should *not* hit the aggressor child if the aggressor was a vulnerable other (e.g., a young child or an older child with known problems with emotional control). Level 3 participants were somewhat more likely overall to support the use of hitting in order to stop the vulnerable child from hurting someone else.

Personal choice justifications were employed by participants in support of judgments about whether one would have a right to hit. These were used with greater frequencies by participants employing Level 1 and 2 than Level 3 coordination, $d(2) = 13.65$, $p < 0.001$.

Indirect Stealing (Keeping the Money)

We expected that the situations involving indirect stealing would entail coordination of different considerations because of the potential interpretation of ambiguity regarding the ownership of the dropped money. With regard to indirect stealing, considerations about property or ownership, as well as whether keeping the money is harmful to another, should be part of the thinking of those at Levels 2 and 3 – but not those at Level 1. A number of justification categories, including personal choice, were used by participants at each of the three levels. However, some patterns relevant to each type of coordination stand out. First, the most frequent justifications used by those at Level 1 were affirmation of ownership and the related welfare category (for judgments of right and wrong and the right to keep the money). There was little use of personal choice at Level 1 for judgments of right and wrong. In some respects, the pattern of justifications used by participants at Level 3 was similar to Level 1. For example, those at Level 3 also emphasized ownership in responses to both questions (some also took into account the issue of defining ownership in response to whether the actor has a right to keep the money). The analysis examining the usage of ownership affirmation justifications confirmed a significant effect by reasoning level, $d(2) = 20.83$, $p < 0.001$. As represented in the coding of levels, however, those at Level 3 gave priority to ownership over other consideration, whereas those at Level 1 only attended to one consideration.

The other pattern that stands out is that there are some differences in Level 2 justifications from those at Levels 1 and 3. Particularly for judgments of whether one has a right to keep the dropped money, there was greater use of the following categories: defining ownership, reciprocity, negation of harm, and personal choice. These patterns reflect the Level 2 coordination that attempts to take into account various considerations without clear-cut priorities or consistent resolution of competing

considerations. At Level 2, personal choice is more prominent than at the other levels, as is the questioning of ownership (as reflected in the defining ownership category) – as most evident in judgments as to whether one has a right to keep the lost money, with a significant effect for level, $d(2) = 17.703, p < 0.001$. This questioning of the continued ownership of the dropped money was associated with a corresponding justification that keeping the money would not cause harm since it was essentially no longer the property of the person who had dropped it, $d(2) = 9.61, p < 0.01$. For those at Level 2, these justifications were also associated with personal choice justifications for keeping the money now that it was no longer clearly within the possession of the person who had dropped it, $d(2) = 18.01, p < 0.001$.

Helping

The elements involved in processes of coordination that we expected in the helping situations are different from those in the indirect stealing situations. In particular, situations calling for a prosocial act like helping present considerations of potential conflicts between obligations and personal choices. We have already seen in the analyses of justification categories above that personal choice and reciprocity were used with some frequency for the helping situations.

One pattern that stands out in these findings is the degree of correspondences between justifications used by Level 1 and Level 3 participants in decisions as to whether the acts are right or wrong. Specifically, at both levels, there was greater use of the welfare and fairness justification categories than at Level 2, $d(2) = 7.17, p < 0.05$. In turn, there was greater use of the personal choice and reciprocity categories among those at Level 2 than those at Levels 1 or 3, $d(2) = 14.58, p < 0.05$. The differences between Levels 1 and 3 lie not in the justification categories but in how different considerations are weighed in arriving at decisions. Those at Level 2 showed greatest use of both personal choice and reciprocity but were less clear as to priorities than those at Level 3; the greater use of reciprocity at Level 2 than Levels 1 and 3 was mainly due to their use in judgments about helping the antagonist, $d(2) = 296.42, p < 0.001$.

The patterns of justifications in response to the question of whether one has a right not to help an injured child paralleled the pattern for judgments of right or wrong – but with one interesting difference. At all three coordination levels, there was recognition of the element of personal choice. The differences between Level 2 and Levels 3 and 1 appear in the greater use of reciprocity in the former and greater use of welfare in the latter.

Discussion

In discussing the outcomes of this research, we consider broad trends in the findings, with an emphasis on continuities and discontinuities in development. In that regard, three considerations guided our research. One was that children form cohesive judgments about what we refer to as prototypical moral issues. By prototypical we mean issues like intentionally hitting another without compelling competing reasons, taking someone else's property, and helping another in distress when there is no cost to the one helping. These three types of acts were included in this research.

As detailed above, many previous studies have shown that by a young age children form judgments about avoiding harm, as well as promoting welfare and fairness that are not contingent on rules, directives from authorities, or common practices [Smetana et al., 2014; Turiel, 2015a]. Children reason about morality, and with respect to these contingencies there are not differences among children and adolescents. We, therefore, expected that the children and adolescents participating in this research would judge the prototypical forms of the three acts as wrong, with reasoning about welfare and fairness. To put it in other terms, we expected to find *continuities* in development, with similarities across ages in evaluations and associated reasons about the acts.

Our presumption, also based on previous research findings, was that children and adolescents do not apply their moral judgments in fixed ways independent of the components of social situations. In that regard, a second set of considerations guiding the research was that social situations are not always prototypical in the ways we defined it, and that children and adolescents would take into account contextual features in coming to decisions. We, therefore, expected that features of situations such as what might be perceived as legitimate goals of the self or others, as well as characteristics of the individuals involved, would be taken into account in decisions. We examined judgments in such situational contexts because previous studies have shown that children and adolescents form judgments in parallel with moral judgments in the conventional [Geiger & Turiel, 1983; Midgette et al., 2016; Turiel, 1983a] and personal [Nucci, 2001] domains. This is to say that moral judgments are not applied in isolation from other considerations important to people. Social situations are often sufficiently complex so that they pose conflicts between different moral considerations (such as between honesty or trust and persons' welfare, as discussed in the introduction) or between moral and nonmoral goals.

The third consideration guiding the research was that contexts that include different moral components, as well as components in other domains, would produce reasoning involving processes of coordination. A number of previous studies outlined in the introduction have indicated that decision-making does involve weighing and balancing of different goals. It is in processes of coordination, with associated justifications, that we expected to find age-related differences (*discontinuities*). We expected to identify age-related shifts or *levels* that would capture the general features of discontinuities. This was an aspect of the present study that went beyond previous research that has focused on the relation of development and contextualized applications of moral judgments. We did not anticipate that such shifts or levels of coordination would entail broad structural features of moral reasoning that could be defined as "stages" [Kohlberg, 1969] irrespective of context.

Continuities in Judgments of Right and Wrong

We did, indeed, find that children make moral judgments about welfare and rights to property regarding the prototypical versions of the acts. The large majority of participants judged as wrong each of the acts of hitting, indirect stealing, and not helping in the unconflicted contexts of intentional acts. We also found that such judgments were applied to situations involving vulnerable children. These findings are clear-cut for hitting since all participants in each age group judged hitting to be wrong

in the unconflicted contexts for the general other and for the situations with the vulnerable child. Even in the case of the antagonistic other, large majorities judged it wrong to hit another in the absence of direct provocation. Therefore, hitting was not seen as an appropriate form of revenge in the absence of direct provocation even when the other child had previously teased the protagonist [see also Recchia et al., 2015]. These findings strongly affirm that from childhood to adolescence individuals believe and understand that causing pain and harm is wrong – as evidenced also by the finding that in all those conditions the reasons provided for the judgments were based on concerns with welfare (there was a tendency for older children to also use fairness justifications).

In the context of the judgments about the prototypical acts, we expected a greater element of discretionary thinking regarding aspects of the indirect stealing situation (because of the possible perception of ambiguity of the original owner's claim to the lost property) and of the helping situation (because of the personal discretionary aspects of prosocial actions) [Kahn, 1992; Turiel, 2015b; Williams, 2011]. It seems that for each issue in the unconflicted context thinking about discretionary aspects appears with regard to the antagonistic others. This is consistent with prior findings that children and adolescents are more accepting of harmful actions directed at an antagonist [Posada & Wainryb, 2008]. Majorities at each age group did judge it wrong to keep the money and not help in cases of the antagonist, but fewer judged it wrong than in the cases of the general other or the vulnerable child (overall in the ranges of about 70 vs. 94 to 98%; see Table 3). Moreover, the decrease in numbers judging it wrong to take the money from the antagonist or not help the antagonistic child was more marked for the youngest age groups than for the oldest. In some situations, the judgment that it is not wrong to keep the money in the antagonistic relationship was based on reciprocity in the sense that it is a justified response to prior harm inflicted by that person.

Contexts and Judgments of Right and Wrong

The research findings also confirm the expectations that contexts matter, that in certain situations individuals attempt to coordinate different considerations, and that there are age-related differences in the ways different considerations are taken into account. These features were most evident in judgments and reasons regarding the act of hitting. More participants at each age thought that hitting in self-defense (conflicted-self) was acceptable and necessary than in the unconflicted contexts. This is consistent with prior work indicating that even young children accept engagement in harm if it is directed at deterring aggression or in self-defense [Jambon & Smetana, 2013]. Moreover, in the present study, there was a greater tendency for the age groups in the middle (11- and 14-year-olds) to judge self-defense acceptable than for the youngest and oldest groups. However, the large majority of participants at each age judged self-defense as wrong in the case of a vulnerable child who is aggressing. Thus, participants discriminated between hitting on the part of certain children (general and antagonistic) and ones with disabilities, and accordingly judged, in a flexible way, that the same considerations do not apply in all cases.

Judgments in situations that might require hitting someone to protect another largely paralleled, with some differences, judgments about self-defense. In this case,

too, the large majority in each age group judged it wrong to do so when the aggressor was a vulnerable child. Perhaps not surprisingly, fewer at each age judged it acceptable to protect another by hitting than those judging self-defense as acceptable (note that such a difference did not hold for the vulnerable child).

We proposed that in some contexts and for some relationships, but not all, the acts of indirect stealing and not helping would yield differences from other contexts. The expectations that some might perceive ambiguities in the status of ownership of the property and that a prosocial act like helping has a personal discretionary aspect were borne out in findings that more of the 11- and 14-year-olds than the younger and older ones judged it acceptable to keep the money and not help. The age-related U-shaped pattern in judgments of right and wrong was more evident in these more ambiguous contexts than observed in cases of hitting. With regard to indirect stealing, such variations were found mainly in reference to the antagonistic other in both unconflicted and conflicted-self contexts. To a small extent, judgments that keeping the money was acceptable were based on justifications in the personal domain. Reciprocity was a reason given to a greater extent for judgments that it was acceptable to keep the money. As noted above, it seems that children in the study saw keeping the money from the antagonistic child as a justifiable response to the previous harm inflicted on the actor.

With regard to helping, more judged it alright not to help in each of the three contexts when the one needing help was a child who had previously been antagonistic than for the general other or the vulnerable child. More of the participants also judged it alright not to help when there was a conflict with the goals of the actor (conflicted-self, general other) such that the goals would be thwarted if he/she stopped to help. A substantial number of participants did view helping in these contexts to involve the discretionary element of personal choice, as evidenced by the use of justifications in the personal domain.

Continuities and Discontinuities in Judgments of a Right to Act

The study included an assessment that has not been part of previous research on the development of moral judgments. For each situation, participants were asked whether the actor would have a right to engage in the acts of hitting, keeping the money, or not helping. The purpose of this question was to ascertain if and how judgments of right and wrong were related to understandings of the role of individuals' prerogatives. Judgments as to whether one has a right to engage in the acts are of a different order from judgments of the acts as right or wrong. Judgments about the right to an act requires greater attention to a person's roles and prerogatives in relation to moral judgments. Thus, such judgments of whether one would have a right to engage in an action are an indicator of the extent to which moral judgments are viewed as binding on one's actions [Seldman, 2005]. In general and across types of actions, the U-shaped age-related pattern in which 11- to 14-year-olds differed from younger and older participants was more pronounced in the case of evaluations of a right to engage in the action than was observed in their judgments of right and wrong. We say more about emergence of the observed U-shaped growth pattern below in the discussion of levels of development. Responses to this question, however, also yielded information regarding the role of context and relationships in judgments.

First, judgments as to whether the actor had a right to hit in the unconflicted contexts were consistent with judgments as to whether it was right or wrong to hit. The large majority of participants judged that the actor did not have such a right in any of the unconflicted contexts. Similar findings were obtained with regard to the vulnerable child in the conflicted-self and conflicted-other situations. Thus, in these unambiguous situations, hitting is judged as wrong and the actor's rights are irrelevant mainly because of reasons of welfare. Correspondingly, most judged that the actor had a right to engage in the act of hitting in situations of self-defense. It appears that some of the youngest participants had more difficulty drawing a connection between the judgment that it would be right to hit in self-defense and whether the actor had a right to do so. Among the 8-year-olds, fewer judged that the actor had a right to engage in the action than judged it right to hit in self-defense (and fewer than those in the three older groups). The pattern of findings for conflicted-other was similar, but fewer judged that the actor had a right to act to protect another than to act in self-defense.

The question of whether an actor had a right to engage in the acts produced greater discrepancies with judgments that the acts were wrong in the indirect stealing and helping situations. Two features stand out in those findings. One is that participants (a) saw some ambiguity in whether the money still belonged to the person who dropped it (as evidenced by the justifications provided), and (b) the right not to help was based on considerations of personal choice. The second feature is that discrepancies between the two types of judgments were more pronounced among the 11- and 14-year-olds than the 8- and 16-year olds. It appears that U-shaped age-related patterns reflected in judgments as to whether one has a right to engage in the acts were due to greater use by the 11- and 14-year-olds of justifications in the personal domain than either the 8- or 16-year-olds for indirect stealing and helping.

Levels of Coordination

The findings we have considered thus far could be taken to mean that the moral reasoning of the youngest and oldest participants were similar, and different from those in early and mid-adolescence. The findings could also be taken to mean that during early or mid-adolescence, there is regression from a progressive developmental path of moral judgments. Indeed, such interpretations of adolescence as entailing regression to earlier hedonistic or instrumental moral reasoning have been made [e.g., Eisenberg, Cumberland, Guthrie, Murphy, & Shepard, 2005; Kohlberg & Kramer, 1969]. We note, however, that such U-shaped age-related patterns in decision-making and problem solving are often found and indicative of periods of developmental transition rather than regression [Friend, 2004; Gershkoff, & Thelen, 2004; Hartelman, van der Maas, & Molenaar, 1998; Stavy, 2012; Strauss & Stavy, 1982; Wewrker, Hall, & Fais, 2004]. Consistent with these views, the findings of our studies yield an interpretation of developmental progression [see also Turiel, 1974, 1977, for a discussion of the topic of regression in explanations of development]. In the present study, we found that in the adolescent years there is an increased awareness that there can be ambiguity in some situations (i.e., with regard to some situations of indirect stealing) and of the role of individual discretion and choice in some decisions (especially with regard to prosocial actions with discretionary elements). The adolescents

who tended to judge indirect stealing and not helping as acceptable took this ambiguity into account, which the youngest participants did not. The adolescents were not unconcerned with issues of welfare and reciprocity in their decisions, but were unclear in their thinking as to how to coordinate competing considerations and sometimes gave priority to personal choices. The oldest participants were cognizant of the ambiguities and the place of personal discretion but coordinated those considerations with moral considerations, generally giving priority to moral goals.

This interpretation of the results is directly related to findings on the levels of coordination based on a global coding of participants' responses. Our analysis revealed three clear patterns distributed across the four age groups. The analyses of the relationship between levels of decision-making and judgments of right and wrong, rather than decision-making and age, revealed patterns of decision-making associated with development that were even more clear-cut. At Levels 1 and 3, the predominant judgments were that the acts (not helping, keeping the money, or hitting) in the conflicted contexts were wrong, whereas at Level 2 judgments of these acts as right or wrong were made on a chance basis. The analyses of the reasoning at these levels, however, demonstrated that although the participants at Levels 1 and 3 made similar evaluations, the processes of coordination were different. As noted above, the three levels represent degrees of complexity and comprehensiveness in the coordination of the elements of the situations associated with increasing age.

Our interpretation of this U-shaped pattern is concordant with constructivist [e.g., Friend, 2004; Stavy, 2012; Strauss & Stavy, 1982; Wewrker et al., 2004; Witherington, 2011] rather than mechanistic [Gershkoff & Thelen, 2004] views of U-shaped patterns of developmental change. Similar to observations made by Stavy [2012] and Strauss and Stavy [1982], we account for the obtained U-shape pattern as a shift from the application of reasons of harm and welfare to increasingly differentiated and inclusive coordination of competing elements within contexts. We illustrate this with reference to the examples of responses contained in Table 8. At Level 1, there is lack of differentiation between prototypical forms of acts such as stealing (i.e., directly taking something that belongs to another person) and nonprototypical (i.e., keeping money someone has dropped) or contextualized (e.g., hitting in self-defense) forms of acts. For example, Level 1 responses to questions about whether keeping the money would be right or wrong focused only on the fact that property that belonged to one person is now in the hands of someone else without the permission of the original owner. As illustrated in the statement of the 8-year-old girl in Table 8, the contexts involving whether or not to return the money are to be resolved by global application of the basic construct defining theft: "No, because it's someone else's USD 10 bill, she shouldn't keep it because it's not hers." These responses did not reflect a lack of capacity to say more. When probed by the interviewers, these Level 1 children evidenced awareness of the details of the situation, but made no use of the information about the money being dropped rather than taken directly from the other person. It is important to stress that these younger children, coded at Level 1, and as reflected in the example of the 8-year-old girl, were not engaging in thinking that took into consideration the perhaps subtle differences between directly taking money from another and keeping money dropped. It is not that they were asserting that ultimately it does not matter which it is because whether it is dropped or one steals directly, it is still the other person's money.

Children and adolescents at both Level 2 and Level 3 took into account differences between keeping money and stealing, but in different ways from each other.

Moreover, they also attended to the additional features of the conflict situations that placed the actions of harm and helping in nonprototypical contexts. The differentiations made by Level 2 children between the prototypical act of stealing, for example, and not returning the money that was dropped help to account for why there would be an even chance that lost money would be returned by an adolescent at Level 2. As expressed by the Level 2, 13-year-old male (see Table 8), the dropped money is “in nowhere land” ... “lost money is up for grabs.” The connection between keeping the money and stealing is not completely lost, however, as noted by the 13-year-old female (Table 8) who notes that “the right thing to do would be to give it back, but he’s not necessarily, he doesn’t necessarily have any wrongdoing.” When the additional element of considerations of personal choice is added to the equation, the decision about whether to keep the money becomes far from straightforward for the children at Level 2.

The differentiations between prototypical and contextualized situations made without coordinating these new elements result in expressions of uncertainty over the right course of action. This is illustrated in Table 8 with respect to each of the three actions. For example, with respect to whether or not to hit someone to defend another child who is being harmed, a 14-year-old girl offered the following (Table 8): “... (she is) confused because she knows she did the right thing by not using violence, but then she thinks that maybe her punch would help this other girl, and isn’t that okay too? I mean, she is confused no matter what she does!” In the case of helping a child who is injured rather than going to a mandatory soccer tryout, a 14-year-old male concluded in response to the interviewer’s question (Table 8) “*And is there any way for him to decide what’s the right thing to do here?*” Not really, it’s just, there’s no really right way to do it.”

With Level 3, the differentiation expressed at Level 2 between prototypical and contextualized actions is maintained. However, these elements are now coordinated in ways that the adolescent employs to resolve the moral conflict between concerns over self-interest and the needs of others, and ambiguities in the meaning of actions (such as whether keeping dropped money is theft). This is illustrated in the statement of the 17-year-old female acknowledging the arguments that could be offered for not returning the dropped money (Table 8) “I can understand the thought process for not giving the money back.” She went on to clarify the differences between keeping money that one finds on the ground from the situation on the bus, “if someone loses money, it’s theirs and if you know that, she should give it back. But, if you just saw 10 dollars on the street and you have no idea who it belongs to, keep it, but if you know who it belongs to, it’s your duty to give it back.” (Note the differences between the process of thinking used by this adolescent in arriving at her conclusion and the way the 8-year-old quoted above arrived at a similar conclusion.) Similarly, the responses of Level 3 adolescents involve an acknowledgement of the discretionary elements of helping that were supported in decisions not to help at Level 2 along with a distinction made between a “right” not to help and a personal choice that they viewed as morally wrong. This is illustrated in the following responses of a 16-year-old female: “Well, I guess, maybe it’s not a right, I don’t think, I think it’s partially justified, but I don’t think it’s fully justified because, so I guess, she has the ability to not help, but I don’t think she has the justified right to not help the girl, maybe it’s not the right, it’s her choice, she has the ability to go to the soccer tryouts, but I think she’s more right to help the little girl.”

In sum, the levels of coordination represent age-related changes in processes of decision-making in moral situations. At Level 2 (Multidimensional Uncoordinated Decisions), the adolescents, unlike younger children, do recognize features of situations having to do with ambiguities yielding a role for individual discretion or discretionary aspects of prosocial actions. For those responses coded at Level 2, accounting for more than one element of the situation is an advance over Level 1 coordination but less advanced than Level 3 (Multidimensional Coordinated Decisions). Unlike Level 3 processes of coordination, at Level 2 the different considerations are not resolved in a systematic way. The shortcomings in Level 2 coordination processes are reflected in inconsistencies and ambivalence. By contrast, Level 3 includes recognition of the different elements of situations but with decisions that are not ambivalent and that resolve conflicts in a consistent and systematic way by clearly giving priority to one set of considerations.

These levels of coordination do not apply, however, to all moral situations in participants' judgments and decisions. As reported in myriad studies [see Smetana et al., 2014], judgments and decisions at all ages regarding prototypical situations (e.g., intentionally hitting the general or vulnerable other) did not involve processes of coordinating different considerations. Decisions were mainly based on moral considerations of welfare and/or fairness. Other situations, as detailed above, did involve perception of different considerations on the part of the older participants and, therefore, a process of coordination. It is in this regard that the judgments of the mid-level adolescents do not reflect regression but cognizance of and concern with elements of the situation not in the awareness of the younger, Level 1 children.

Finally, these levels should not be seen as overarching levels of moral judgment. By including various contexts and actors in the depictions of situations presented to participants, the findings of this research, we believe, clearly demonstrate that a search for general, consistent, homogeneous age-related ways of making moral judgments is not fruitful. This is because individuals think in flexible ways about moral decisions and take many factors into account. The research presented here shows that in certain situations younger children make judgments that do not seem to differ from those of older individuals. Children develop reasoning about welfare and fairness that continues into later ages. Those same forms of reasoning are applied in situations that include multiple considerations and goals, but are applied in different ways by younger and older individuals. However, the overall findings of the research show that children and adolescents engage a great deal of reasoning about social situations in ways that involve a number of systematic discriminations. An understanding of moral development and moral/social decisions requires understanding of judgments and reasoning based on welfare, justice, and rights, as well as how those forms of reasoning are applied in multifaceted situations.

Final Thoughts

The research we have reported marks a step in describing the course of moral development because the findings point toward a direction for research that would focus upon the coexistence of continuities and discontinuities in moral reasoning with age, and the identification and exploration of periods of developmental transition in the contextualized application of moral judgment. A recent educational study

[Nucci, Creane, & Powers, 2015] with middle school students provided evidence that the shifts in coordination described in the present research occurred over the period of one school year. In that study, the indirect stealing scenario from the present study was employed to measure the influences of an educational intervention. The researchers reported that both the Control and Experimental groups showed gains in level of moral coordination over the course of the year, with the Experimental group showing significantly greater change than the control group [Nucci et al., 2015]. This is an indication that the age-related patterns described in the present study follow the expected movement over time. However, the findings reported in the study by Nucci et al. [2015] refer to overall group means rather than shifts within individuals followed longitudinally.

In addition, the present study employed only three issues as contexts. This was necessary because of the complexity and duration of the interview. What stands out in the current set of findings is the role of ambiguity in uncovering developmental changes in moral thinking. Future work is needed using a broader array of issues such as the indirect stealing situation used in the present research to examine how moral understandings of harm, welfare, and fairness are extended in ambiguous contexts. Moreover, the study examined only a 10-year period from age 7 to 17 years. This was done in order to be able to use the same issues across age groups. However, we are well aware that additional shifts in moral reasoning might be found at both younger and older ages. For example, Weller and Lagattuta [2013] obtained findings about helping in 8-year-olds and early adolescents consistent with our research, but they also identified a similar acceptance of not helping at 5 years of age as we did in early adolescence.

Finally, this study points to the utility of including questions addressing the rights of individuals to act in ways that are contrary to their judgments of an act as wrong. This has not been previously studied as an aspect of research on moral judgments. Further work is needed to further explicate how such judgments are related not only to issues of development but also to the relations between moral judgment and action.

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