PARENTAL AND PEER INFLUENCES ON ADOLESCENT HELPING

by

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AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

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ABSTRACT

When adolescents are the subjects of developmental research into prosocial behaviors, the evidence suggests that both peers and parents are contributors to adolescents' helping behavior. However, these two predictors are rarely studied concurrently. The present study explored the relative influence of parents and peers on (1) different types of adolescent helping (i.e., planned and spontaneous) and (2) different targets of spontaneous helping (i.e., friends, non-friends, and strangers) in 51 early (mean age = 12.54 years, 24 boys and 27 girls) and 57 middle (mean age = 16.82 years, 25 boys and 32 girls) adolescents. Adolescents and their parents completed parallel forms asking them to describe their planned helping as well as a questionnaire assessing past and anticipated future spontaneous helping of friends, strangers, and (for adolescents only) non-friends. Adolescents also reported their perception of their friendship group's norm of helping as well as their level of identification with their friendship group. There was no clear age-related helping pattern, though a sex difference (females were generally more helpful than males) and an effect of target (friends were helped more than non-friends, who were in turn helped more than strangers) found in the adolescents was paralleled in the adults. Fathers' planned helping was generally more strongly related to their adolescents' planned helping than was mothers' planned helping, though both mothers' and fathers' spontaneous helping of friends and family (though not of strangers) was strongly associated with their adolescents' spontaneous helping. In contrast to parental variables' relationship with both adolescent planned and spontaneous helping, peer variables were more consistently related to spontaneous than planned helping. Implications of the present findings, and proposed directions for future research, are discussed.

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When adolescents are the subjects of developmental research into prosocial behaviors, the evidence suggests that both peers and parents are contributors to adolescents' helping behavior. However, these two predictors are rarely studied concurrently. The present study explored the relative influence of parents and peers on (1) different types of adolescent helping (i.e., planned and spontaneous) and (2) different targets of spontaneous helping (i.e., friends, non-friends, and strangers) in 51 early (mean age = 12.54 years, 24 boys and 27 girls) and 57 middle (mean age = 16.82 years, 25 boys and 32 girls) adolescents. Adolescents and their parents completed parallel forms asking them to describe their planned helping as well as a questionnaire assessing past and anticipated future spontaneous helping of friends, strangers, and (for adolescents only) non-friends. Adolescents also reported their perception of their friendship group's norm of helping as well as their level of identification with their friendship group. There was no clear age-related helping pattern, though a sex difference (females were generally more helpful than males) and an effect of target (friends were helped more than non-friends, who were in turn helped more than strangers) found in the adolescents was paralleled in the adults. Fathers' planned helping was generally more strongly related to their adolescents' planned helping than was mothers' planned helping, though both mothers' and fathers' spontaneous helping of friends and family (though not of strangers) was strongly associated with their adolescents' spontaneous helping. In contrast to parental variables' relationship with both adolescent planned and spontaneous helping, peer variables were more consistently related to spontaneous than planned helping. Implications of the present findings, and proposed directions for future research, are discussed.

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INTRODUCTION

Research on prosocial behavior, or voluntary behavior that is intended to benefit another, began proliferating in the 1970s (see review by Eisenberg & Fabes, 1998). In the intervening three decades, researchers have examined many of the processes involved in the development of the tendency to act prosocially toward others, particularly with respect to helping behaviors. There are, however, several notable gaps in this literature.

One such gap involves the ages of participants that have been studied. Although there is considerable research involving children (e.g., Eisenberg et al., 1994; Krevans & Gibbs, 1996) and adults (e.g., Bartel & Barnett, 2001; Batson & Coke, 1981; Batson et al., 1981), relatively few studies of prosocial behavior in adolescents have been conducted. Indeed, in a discussion of Fabes and Eisenberg's (1996, cited in Fabes, Carlo, Kupanoff, & Laible, 1999) meta-analysis of age-related differences in prosocial behavior, Fabes et al. noted that adolescents represented only about 20% of the participants in studies of prosocial behavior.

The dearth of studies involving adolescents is unfortunate because in studying adolescents, we can examine prosocial influences and processes that are typically not present in children. Chase-Lansdale, Wakschlag, and Brooks-Gunn (1995), for example, argued that it is adolescence that "represents the period of development when the childhood versions of peer relationships, prosocial behavior, and empathy are transformed into those that will more permanently identify the youth and young adult as an individual who does or does not engage in caring behaviors" (p. 524). Thus, when we choose to focus on adolescent participants in our studies, we gain an opportunity to examine an important time in the development of prosocial behaviors.

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Another gap in the literature involves the type of help that is studied. Several

investigations of helping in children (Eisenberg & Fabes, 1998; Radke-Yarrow, Zahn-Waxler, &

Chapman, 1983; Roberts & Strayer, 1996; Strayer, 1981) and adults (Barnett, Vitaglione, Bartel,

& Sanborn, 2000; Bartel & Barnett, 2000; Bartel & Barnett, 2001; Carlo & Randall, 2002; Eagly

& Crowley, 1986; Smithson, Amato & Pearce, 1983) have found that there are different types of

helping. For example, individuals may help either in spontaneous (e.g., giving someone

directions, Smithson et al., 1983[1]) or planned (e.g., volunteering one's time in a soup kitchen

serving meals to homeless people) ways. In addition, studies of adult helping behavior have

examined the influence of various characteristics of the potential target of helping on the

individual's decision to help (Eagly & Crowley, 1986; Emswiller, Deaux, & Willits, 1971;

Karabenick, Lerner, & Beecher, 1973). These independent lines of research have found that (1)

for certain types of helping, some individuals are more likely to help than are others (Barnett,

Vitaglione, Bartel, & Sanborn, 2000; Bartel & Barnett, 2000; Bartel & Barnett, 2001; Carlo &

Randall, 2002; Eagly & Crowley, 1986) and (2) in some studies, adults have been more likely to

help certain targets (e.g., those similar to themselves) than other targets (Emswiller et al., 1971;

Karabenick et al., 1973).

Unfortunately, researchers examining adolescent prosocial behaviors rarely acknowledge

either the particular type or target of helping under investigation. When the type or target is

specified, typically only one type of helping (and only one type of target) is studied at a time.

This is unfortunate for several reasons. First, the relationship between various individual

difference measures and helping behaviors may be influenced by the type and target of helping

being studied. To understand more fully the nature of prosocial behavior, researchers should

acknowledge and systematically examine these characteristics in their studies. Second, it is

possible that the antecedents of helping are different for different types and targets of helping, reinforcing the need to identify the category of helping behavior being studied. Third, during adolescence, the importance of one's peer group – as well as the salience of one's group memberships – increases drastically (Hartup, 1979; Williamson, 1977). Thus, one would expect that the influence of ingroup and outgroup relationships on prosocial behavior (a "target characteristic" which has been found to influence helping in adults; Emswiller et al., 1971; Karabenick et al., 1973; Platow et al., 1999) would become increasingly important during adolescence. Regretfully, studies examining the influence of peers on adolescent helping are underrepresented in the literature, and, consequently, our understanding of the antecedents of prosocial behavior during this period of development is necessarily limited.

Another gap in the helping literature is researchers' tendency to focus on only a single antecedent at a time. The importance of parental characteristics in raising a prosocial child is well documented (see Eisenberg & Fabes, 1998, for a review), and, more recently, researchers have implicated peers in prosocial development as well (e.g., Carlo, Fabes, Laible, & Kupanoff, 1999). However, parental and peer influences of adolescent prosocial behavior are rarely studied concurrently. Further, the effects of parental and peer influences on different *types* and potential *targets* of prosocial behaviors are unknown.

The present study attempted to address these gaps by exploring the relative influence of parents and peers on early and middle adolescents' tendencies to engage in different types of helping with different targets of helping. The literature review that follows will first explore the influence of different helping "types" and "targets" on the decision to help. Next, the influence of parents and peers on adolescent helping will be discussed. Finally, the review is followed by

a description of a study that examined the relationship between several parent- and peer-related variables and adolescents' likelihood of helping different individuals in different ways.

The Influence of Different Types and Targets of Helping on the Decision to Help

Types of Helping: Spontaneous and Planned

After conducting a multidimensional scaling analysis of dozens of examples of helping, Pearce and Amato (1980) found that people perceive helping to be multifaceted. Based on participants' ratings, Pearce and Amato were able to extract several dimensions of help, one of which was the spontaneous-planned dimension. Spontaneous helping is helping that occurs "with little prior warning, in casual and informal settings" (Smithson et al., 1983, p. 33). Another definition of spontaneous helping was offered by Amato (1990) who explained that it is "helping that [is] provided immediately, with little or no prior thought" (p. 33). Amato (1985) noted that spontaneous helping has three characteristics: (1) it is unanticipated by the participant, (2) there is little time to react, and (3) it often involves strangers in unfamiliar settings (although friends and acquaintances may also be recipients of spontaneous help).

Spontaneous help can be contrasted with planned help, or help that is "planned ahead of time by the helper, has less immediacy, and occurs in more formal, structured settings" (Smithson et al., 1983, p. 33). Amato notes, "planned forms of helping…are intentionally chosen by the individual *before* entering the stimulus situation" (1985, p. 234, italics in original). The main distinction between planned and spontaneous helping, then, is that planned helping is "thought about and anticipated for a period of time before acting" (Amato, 1990, p. 33) whereas spontaneous helping is not.

Although it has been over two decades since Amato and his colleagues (Amato, 1985; Pearce & Amato, 1980; Smithson et al., 1983) argued that researchers of helping behavior should

acknowledge that there are different types of helping, studies of prosocial behavior rarely do so. For example, a dependent variable in a particular study may be listed as "volunteering to answer phones for the Red Cross," but its classification as an example of "planned helping" is typically not acknowledged. Given that there are differences between individuals who are likely to engage in planned helping and those who are likely to engage in spontaneous helping (Bartel & Barnett, 2001), identifying the class of behavior being studied would seem critical to obtaining a more complete understanding of the processes involved in individuals' decisions to help or not help.

Individual investigations of adolescent prosocial development have also failed to examine planned and spontaneous helping concurrently. Because there are individual differences in the tendency to engage in particular types of helping behavior (e.g., Bartel & Barnett, 2001), researchers need to explore the antecedents of these types of helping to understand why the individual differences exist. Unfortunately, as mentioned earlier, for the rare studies in which the two types of helping are studied together, the helping types are not clearly specified. For example, in a study involving participants in late adolescence, Rushton, Chrisjohn, and Fekken (1981) validated a "Self-Report Altruism Scale" (SRAS) that includes several examples of both planned helping (e.g., "I have donated blood," p. 297) and spontaneous helping (e.g., "I have offered to help a handicapped or elderly stranger across a street," p. 297). However, Rushton et al. made no distinctions between these types of helping in their scale or in its scoring. It is tempting to assume that individuals who engaged in the spontaneous helping behaviors included on the SRAS also engaged in the planned helping behaviors. First, the internal reliabilities (coefficient alphas) ranged from .78 to .87 across the six samples in the Rushton et al. (1981) study who completed the SRAS, suggesting high internal consistency. Second, the overall

relationship among the various measures of helping included in the study (self-report, peer ratings, signing one's organ donor card, and paper and pencil measures) suggests, according to Rushton et al., that there is an altruistic personality. However, because no distinction was made between the types of helping on the questionnaire, it is impossible to make comparisons between participants' responses to planned and spontaneous helping items. Thus, it is impossible to determine whether Rushton et al.'s participants who were likely to engage in one type of helping were also likely to engage in the other.

Indeed, other studies have found differences between individuals who are likely to help in planned ways and those likely to help in spontaneous ways. For example, Bartel and Barnett (2001) administered to late adolescent participants several personality and individual difference measures along with a helping questionnaire that included several examples of planned and spontaneous types of helping. Participants rated the likelihood that they would engage in each act of helping in the future if given the opportunity. Whereas males expressed no difference in preference between helping in planned and spontaneous ways, females rated themselves as more likely to engage in planned than spontaneous help. In a series of regressions in which the personality and individual difference measures were used as predictors of the helping types, Bartel and Barnett found that there were different correlates for spontaneous and planned helping. For example, a cognitive measure of empathy (perspective taking) was significantly related to spontaneous, but not planned, helping; and sex of participant was significantly related to planned, but not spontaneous helping. Bartel and Barnett's findings, then, give further credence to Smithson et al.'s (1983) suggestion that researchers should conduct studies in which the tendency to engage in different types of help is systematically explored.

In sum, there are two flaws common to much of the research on adolescent prosocial behavior. First, researchers typically do not acknowledge the type of helping (planned or spontaneous) they are studying. Second, researchers rarely compare individual tendencies to engage in planned helping to individual tendencies to engage in spontaneous helping. Although these problems are common to most helping research, they are particularly relevant to studies involving young adolescents, an age group for which no systematic studies of the influence of helping type on the tendency to help have been conducted. As discussed earlier, there are individual differences among late adolescents and adults who engage in different types of helping. Perhaps, then, the antecedents of the propensity to engage in particular types of helping differ as well. To address this issue, it is important for researchers to consider the type of help when studying prosocial behavior in adolescents so that the relationships among the antecedents of helping and types of helping can be better understood.

The Target of Spontaneous Helping[2]

In addition to the type of help, another factor that influences whether one individual will help another involves characteristics of the potential recipient of help. In a meta-analysis of 35 studies of (spontaneous) helping, Eagly and Crowley (1986) found, for example, that male helpers were more likely to help female than male victims. The similarity of the potential helper to the victim is also an important influence on whether we decide to help. For example, when experimenters dressed in either conservative or "counterculture" clothing, they were more likely to be successful in their request for money to make a phone call if they were asking similarly-dressed than differently-dressed participants (Emswiller et al., 1971). In a related study, Karabenick et al. (1973) found that participants were more willing to help a campaign worker

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who "accidentally" dropped campaign leaflets for their favored candidate (Nixon or McGovern) than for the other candidate.

In addition to similarity in perceived group membership (i.e., counterculture or not, similar or different political affiliation), other characteristics of the target may influence whether and how we help. A study of Japanese adolescents by Yokotsuka (1989) found that participants differentiate among helping of strangers, friends, and family members. In the study, Yokotsuka asked participants to rate the likelihood that they would engage in 20 specific acts of helping. After factor analyzing the participants' responses, Yokotsuka found evidence for five factors. The factors were helping family members (e.g., serving tea), social service and donations (e.g., donating money to charity), and helping friends in three different ways: "behavioral situations" (e.g., taking care of a sick friend), "learning situations" (e.g., letting an absent friend borrow one's notes), and "psychological situations" (e.g., listening to a friend's problem and giving advice).

Yokotsuka's (1989) finding notwithstanding, Amato (1990) has suggested that (1) the helping of family/friends is an important classification of prosocial behavior that typically has been neglected, and (2) direct comparisons among the helping of family, friends, and strangers in individual investigations are rare. While arguing that most studies of spontaneous helping behavior involve helping of strangers, Amato (1990) found that helping of family and friends is actually a more frequent occurrence. Thus, in order to better understand the processes involved in an individual's decision to help, researchers should include in their designs targets of spontaneous helping who are known to the potential helper (e.g., friends and acquaintances) as well as targets who are unknown (i.e., strangers).

Eberly and Montemayor's (1999) suggestion to study prosocial behavior from a "relational perspective" is consistent with Amato's (1990) position. In their longitudinal examination of adolescents' helpfulness toward parents, Eberly and Montemayor found somewhat different patterns for the helping of mothers and fathers. Whereas helpfulness toward mothers remained constant throughout early and middle adolescence, helpfulness toward fathers increased. A major drawback of their study, however, is that helpfulness was defined as doing chores around the house. Thus, helpfulness toward fathers included tasks such as mowing the lawn, and helpfulness toward mothers was represented by chores such as washing the dishes. Although mowing the lawn and washing dishes are undoubtedly perceived by parents as welcome assistance from their adolescents, it is possible that the adolescent participants in this study perceived their own acts of "helping" as required (e.g., to earn an allowance) rather than as truly voluntary. Another drawback is that none of the helping studied by Eberly and Montemayor was spontaneous. Because of this, it is unknown whether participants would show the same pattern of spontaneous helping toward their same- and opposite-sex parents as they did for helping that was planned ahead of time.[3] Finally, the behavior studied by Eberly and Montemayor was both age - and sex-linked. Whereas both younger and older children would be capable of washing dishes (i.e., helping mothers), only older children would be capable of mowing the lawn (i.e., helping fathers). Further, both of these tasks involve stereotypically sex-linked behaviors. Nonetheless, the point that the relationship between the helper and the potential help recipient should be considered is well taken.

In the studies that have been reviewed thus far, one theme is that a perceived similarity to the target typically increases the likelihood of helping the target. Second, help is more likely to be given to those with whom one has a relationship (e.g., family members) than to those with

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whom one has no relationship (e.g., strangers). Given that individuals identified as members of

one's group share the characteristics of both similarity and familiarity, one would expect that

help would be especially likely to be given to those who are perceived to be members of one's

group.

Of relevance to the notion that we should be particularly likely to help a member of our

group is the concept of ingroup bias, or "the tendency to favor one's own group" (Myers, 1990,

p. 346). Although this concept is usually discussed in the context of prejudice, one might expect

that ingroup bias – and, in particular, the extent to which one sees oneself as a member of a

particular group – would also influence one's prosocial behavior toward group members and

non-members. Although Staub (1992) was not directly addressing ingroup bias, he discussed the

tendency for children to be socialized to help members of their ingroup (i.e., their immediate

family) along with a concurrent "specific indoctrination against out-groups" (p. 394). Because

of this indoctrination, Staub argues, we are likely to act prosocially toward a narrow range of

people, that is, those to whom we feel similar and connected. Indeed, several researchers have

proposed that empathy, which may be a precursor of helping (Batson & Coke, 1981), is

generated largely as a function of one's similarity to the person in need (e.g., Barnett, Tetreault,

& Masbad, 1987; Feshbach & Roe, 1968; Krebs, 1975).[4] Consistent with Staub's argument,

Oliner and Oliner (1988) found that rescuers of Jews in Nazi Germany reported feeling more

similar to the Jews and made more Jewish friends than did non-rescuers. A more direct test of

the ingroup bias for prosocial behaviors was conducted by Platow et al. (1999). Using

(Australian rules) football fans as participants, Platow et al. found that individuals were more

likely to donate money to a Salvation Army worker wearing the same team's paraphernalia than

to a Salvation Army worker with an opposition or neutral identification. Thus, Platow et al. found that ingroup bias does indeed influence helping behaviors.

In sum, studies that have been conducted primarily with adult samples suggest that "helping" should not be characterized as a homogeneous class of behaviors. Instead, both the type of help and the target of help influence helping behavior. For example, whereas some individuals may prefer to help spontaneously, other individuals may prefer to help in planned ways. Further, awareness of the differences among individuals who prefer helping in different ways may enable researchers to better understand, and possibly to better predict, individual helping propensities. With respect to the target of helping, it seems clear that individuals are especially likely to help when the potential recipient is a family member. When the target of helping is not a family member, similarity to and familiarity with the recipient appear to increase the likelihood that help will be offered spontaneously. It is expected that type of help and characteristics of the potential recipient are important determinants of adolescent helping as well. However, the requisite research has not yet been conducted to test this prediction.

Parents' Influence on Children's Helping

Staub (1992), in reviewing the literature of parental socialization practices, noted that there are several characteristics of parenting that are important contributors to prosocial behavior in children. Among these are parental warmth and affection, inductive discipline, and "natural socialization, the parents guiding the child to engage in behavior that benefits others" (p. 395). In a study that supported Staub's claim, Janssens and Dekovic (1997) found that parental support combined with an authoritative parenting style were related to 6-11-year-old children's peer- and teacher-rated prosocial behavior. Further, the pattern found by Janssens and Dekovic for children was similar to the pattern for early adolescents. In a study of sixth- and seventh-grade

students, Krevans and Gibbs (1996) found that parents' use of inductive (but not power assertive) discipline was related to several measures of adolescents' prosocial behavior. The measures of helpfulness included teacher ratings, peer nominations, and donation to UNICEF of some of the money earned for participating in the experiment.

The influence of parents on their children's prosocial behavior has been documented in many areas. Of particular interest to the present study, however, is the importance of what Staub (1992) called "natural socialization" (i.e., social learning) and the role of modeling. Bandura (1969, 1974; Bandura, Ross, & Ross, 1963a, 1963b; Bandura & Walters, 1963) in particular was an early and influential proponent of social learning theory. In his version of this theory, the main concept is imitation. Bandura proposed that adult-role behavior is acquired by children observing adult models and imitating them: "While playing with toys that simulate imitation of adults, children frequently reproduce not only the appropriate adult-role behavior patterns but also characteristic or idiosyncratic parental patterns of response, including attitudes, mannerisms, gestures, and even voice inflections, which the parents have certainly never attempted directly to teach" (Bandura & Walters, 1963, p. 48). Imitation of adults, then, presumably occurs for all components of what it is to be an adult. In line with Bandura's theory, Staub (1992) noted that parents' modeling of helping is an important means of transmitting prosocial behavior to their children.

Although studies examining the importance of modeling for prosocial behavior have not made an explicit distinction between parents' influence on their adolescents' planned and spontaneous helping, there is some relevant research in these areas.

Planned Helping

The influence of parents on sons' and daughters' planned helping has generally been studied in the form of retrospective accounts by adult volunteers of their upbringing. For example, Oliner and Oliner (1988), in their examination of characteristics of rescuers of Jews in Nazi-occupied Europe, found that rescuers' parents had influenced the rescuers in several ways including encouraging their (relatively favorable) attitudes toward Jews. In addition, parents of rescuers tended to "model caring behavior and communicate caring values" (p. 249) and "generosity, without concern for external rewards" (p. 250). Likewise, London's (1970) participants, who had also been rescuers of Jews in Nazi Europe, reported that their parents had been moral individuals who acted in accordance with their principles regardless of the cost of doing so.

Another retrospective study involved individuals who had participated in the American civil rights movement in the 1960s (Rosenhan, 1970). In this study, participants were divided into two categories based on their level of commitment. "Fully committed" individuals had left their prior lives behind to become fully active in the civil rights movement, and "partially committed" activists participated in one or two "freedom rides" but did not significantly alter their lives. Rosenhan found that fully committed participants were more likely than partially committed participants to have parents who had themselves participated in planned prosocial activities, particularly socially conscious movements.

One problem with the studies by London (1970), Oliner and Oliner (1988), and Rosenhan (1970) is that they are all involve retrospective accounts by adult helpers (and non-helpers, in the case of Oliner and Oliner) of the behavior of their parents. The retrospective nature of the studies is problematic for several reasons. First, participants' ratings of their parents' behavior

were made during adulthood rather than in adolescence (i.e., retrospectively). Because the accuracy of long-term memories is sometimes suspect (see Ashcraft, 1994, for a discussion of long-term memory errors), asking adults about their parents' behavior from several decades earlier would likely result in less accurate reports than asking adolescents about their parents' current behavior or, indeed, assessing the parents' behavior directly or through a survey. A second problem with retrospective studies involves individuals' tendency to recall information that is consistent with their schemas (Holtgraves, Srull, & Socall, 1989). Because all participants were volunteers, it is possible that their self-construals as "helpers" would cause them to disproportionately recall self-schema-consistent behaviors of their parents. That is, they may have been more likely to recall their parents' helpful behaviors than situations in which their parents were less helpful because of their own "helpful" self-schema. Third, focusing only on adult helping behavior precludes knowing when the internalization of the models' behavior begins to affect the actor's own behavior. The studies discussed above demonstrate that individuals whose parents engaged in planned helping are themselves more likely to engage in planned helping than individuals without such models. However, because London (1970), Rosenhan (1970), and Oliner and Oliner (1988) used only adult participants, determining when the helpers began to imitate their parents' behavior cannot be determined. Indeed, participants could have begun to imitate their parents' helping during childhood, during adolescence, or not until adulthood.

Although retrospective reports are inherently problematic, the importance of one's parents modeling planned helping for their children's tendency to engage in planned helping is also supported by two non-retrospective studies. Stukas, Switzer, Dew, Goycoolea, and Simmons (1999) examined the influence of parental modeling of helping others on adolescents'

attitudes following participation in a mandatory service learning exercise. Adolescents whose parents modeled helping behavior rated themselves as more likely to help in the future than adolescents with unhelpful parents. Further, there was a sex difference such that girls with a parental helping model had more altruistic self-images than did girls without a model, but there was no difference for boys. This study addressed two of the weakness of retrospective accounts of parental behavior that were discussed earlier. First, participants' ratings of their parents' behavior were made during adolescence rather than in adulthood (i.e., they were not made retrospectively). Therefore, it appears that parental modeling of helping affects offspring's prosocial thinking at least as early as adolescence. Second, because all participants were required to do service it is unlikely that any differences among participants were due to memory biases or self-construals as "helpers." Of course, a major weakness of studying the potential parental correlates of mandatory helping in adolescents is that the helping is, by definition, involuntary.

A study conducted by Clary and Miller (1986) addressed the involuntary helping issue by questioning only prospective volunteers. Further, Clary and Miller partially addressed the "helper self-schema" issue by assessing parental modeling of helping *before* the offspring began volunteering. Thus, the behavior of a group of volunteers was predicted based on how their parents had socialized them as children. The study involved prospective volunteers at a crisis center. Clary and Miller divided their participants into "autonomous altruists" (those who had warm relationships with altruistic parents) and "normative altruists" (those who had relatively cooler relationships with parents who did not model altruism). Volunteers completed training in groups, and the cohesiveness of these teams was assessed. Clary and Miller found that for groups in which group cohesiveness was high, there was no difference between autonomous and

normative altruists in the completion of the six-month commitment. However, for volunteer teams in which there was relatively little group cohesiveness, autonomous altruists were more likely than normative altruists to complete the six-month commitment at the center. Thus, participants who had parents who had modeled altruism for them when they were younger were especially likely to persevere when the helping environment was relatively unenjoyable due to the lack of the group cohesiveness. A major weakness of this study, of course, is that there were two criteria used to differentiate the two types of altruists – parental modeling and parental warmth – and these criteria were confounded with one another. Nonetheless, Clary and Miller's findings converge with other research findings in support of the importance of parental modeling of planned helping for children's tendency to help in planned ways.

In sum, there have been several studies involving adults who engage in planned helping providing retrospective accounts of their youth and, in particular, their parents' behavior (London, 1970; Oliner & Oliner, 1988; Rosenhan, 1970). These studies suggest that having parents who model planned helping increases the likelihood of the child's engaging in planned helping upon reaching adulthood. Another study (Clary & Miller, 1986) found that adults whose parents had modeled planned helping for them as children were likely to persevere at a volunteer position when the environment was relatively undesirable, whereas adults whose parents were not altruistic were less likely to remain in the volunteer program under these conditions. Similarly, when adolescents were required to provide community service (planned helping) as a school requirement, those who had parents who modeled planned helping reported being especially likely to volunteer to help in the future and, for girls only, reported having a heightened altruistic self-image (Stukas et al., 1999). When this evidence is taken together, it suggests that parental modeling of planned helping is an important antecedent of their offspring's

planned helping. Unfortunately, as mentioned earlier, very little evidence exists concerning the extent to which parental modeling of planned helping is a predictor of *adolescent* planned helping.

<center>*Spontaneous Helping*</center>

If little is known about parental modeling of planned helping, almost nothing is known about the influence of parental modeling of spontaneous helping on adolescents' tendency to help spontaneously. Although a considerable body of literature on spontaneous helping in young children exists, the experiments tend to focus on situational contexts rather than parental characteristics *per se*. Indeed, few studies involving *parental* modeling of spontaneous prosocial behavior have been conducted. Instead, the model is typically a stranger. For example, in several experiments in which an adult model demonstrated the donation of "valuable" tokens to a "needy" child who could not participate in the study, Rushton (1975, 1976, 1982) himself (or another adult confederate) modeled spontaneous helping for the child participants in the experimental group. Participants in the control group typically saw an unhelpful model. Generally, when an adult model engaged in a charitable act, preschoolers through elementary school age children were found to be more likely to follow suit than if they had not seen the model (Midlarsky & Bryan, 1972; Rosenhan & White, 1967; Rushton, 1975, 1976, 1982). The imitation occurred (1) when the model was not in the room (Rushton, 1975), (2) when the adult's modeling and the child's helping opportunity were in different contexts (Midlarsky & Bryan, 1972), and (3) up to 6 months after the training session (Rushton, 1976). Unfortunately, as mentioned earlier, research of this nature was conducted almost exclusively using participants in early- and middle-childhood. Consequently, it is unknown whether the same pattern of results

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would be found in adolescents. Likewise, whether *parental* modeling of spontaneous behavior is also imitated by adolescents (or, indeed, younger children) is unknown.

Another weakness of research that has examined models' influence on spontaneous helping is that it has ignored the potential target of the help (e.g., friends, non-friends, and strangers). As discussed earlier, characteristics of the target are salient to potential (adult) helpers, and these characteristics often influence one's decision to help. Because the tendency to help particular targets is modeled by parents, we would expect their offspring to adopt similar patterns of differential helping of various targets. Of course, parents may have relatively less impact on adolescents' spontaneous helping of some targets (e.g., friends and acquaintances) because of the presumed relevance of one's peer group identification in adolescents' decision to assist members of these groups. It is to this issue, peers' influence on adolescents' helping, that this review now turns.

Peers' Influence on Helping

Until relatively recently, it was taken as a given that parenting had a significant socializing effect on children (Harris, 1995). However, while some researchers have suggested that nonshared environmental influences (e.g., peers) have considerable influence on development (Iervolino et al., 2002), at least one other author has called into question whether parenting has *any* significant influence on development (Harris, 1995, 1998, 2000, 2002). Harris's Group Socialization Theory (1995) contends that parents do not directly socialize their offspring. Instead, she contends that the children are socialized indirectly by adults in the parents' peer group. Those adults' behaviors are imitated within the children's peer group only to the extent that those behaviors are acceptable to the child's peers. Because of strong pressures to form group memberships, children are presumed by Harris to be more strongly influenced by

behaviors of those with whom they are seeking relationships (i.e., peers) than by parents. Thus, children take on the norms and behaviors of peers. If Harris is correct, then we should see that fitting in with the peer group's expectations for helping would be a considerably more important predictor of adolescents' helping than whether their parents are helpful.

Rather than focusing on helping behaviors, much of the research into peers' influence on adolescent behavior has focused on antisocial or risk-taking behaviors (Barry & Wentzel, 2006). The research that has examined the influence of peers on prosocial behavior has often centered on how a child's level of popularity (Attili, Vermigli, & Schneider, 1997; Bonn & Kruger, 1996; Dekovic & Janssens, 1992; Eisenberg, Cameron, Pasternack, & Tryon, 1988) or peer acceptance (Schonert-Reichl, 1999; Wentzel & Caldwell, 1997; Wentzel & McNamara, 1999) are related to his or her moral reasoning or tendency to be prosocial. Unfortunately, much of the literature that has investigated popularity has focused on participants in early and middle childhood. Further, assessments of prosocial behavior typically use either (1) paper-and-pencil self ratings (often consisting of only one or two items) or (2) peer or teacher ratings of general helpfulness or the tendency to be considerate of others. These measures of helping (self, peer, teacher) typically assess participants' tendency to help spontaneously rather than their tendency to provide planned help. Thus, spontaneous prosocial behavior is overrepresented in studies examining peers' influence on adolescent helping.

Beyond popularity, we might expect other aspects of peer relationships to be important determinants of adolescent prosocial behavior. First, throughout middle childhood and adolescence, peers are an increasingly important source of information. Hartup (1979) suggested that "children may not conceive of separate normative worlds until early adolescence, because child associates are not used extensively as normative models before that time" (p. 947).

Consequently, beginning in later childhood and continuing through adolescence, there is a shift in focus from parents to friends (Williamson, 1977). Given this shift, we would expect that an older adolescent with friends who regularly model helping behavior would be more helpful than an adolescent without helpful friends. A second reason to suspect that peers would be an important influence on adolescents' prosocial behavior is that peer influence has been well documented in other areas including the adolescents' general level of antisocial behavior (Berndt, 1979; Ma, Shek, Cheung, & Lee, 1996) as well as particular antisocial behaviors such as using alcohol, drugs, or tobacco (Kagan, 1991; Spoth, Yoo, Kahn, & Redmond, 1996; Wills, McNamara, Vaccaro, & Hirky, 1997). In these studies, having friends who engage in antisocial behavior has been reported to be a significant correlate of adolescents' own antisocial behavior. By extension, peer modeling may also influence adolescents' tendency to engage in prosocial behavior. Although the behaviors may be different, the processes and motivations involved in imitating the antisocial and prosocial behaviors of one's agemates during adolescence are likely to be similar and powerful.

Several explanations have been offered for why peers' behavior becomes an increasingly important source of information and influence during adolescence. Spoth et al. (1996) suggested that both social learning and the strength of the peer group norms contribute to increased conformity to peers in this age group. In support of the social learning hypothesis, Kagan (1991) found that the modeling of drug use by friends was implicated in adolescent drug use, and Wills et al. (1997) replicated Kagan's results for tobacco and alcohol use. Although prosocial and antisocial norms are a less frequently studied means of proscribing behavior than is social learning, Oliner and Oliner (1995) indicated, nonetheless, that norms are important for directing behavior. These authors noted that "norms set expectations for behavior…. If norms are general

enough and well learned, people can potentially use them to derive many rules for behavior in specific circumstances" (p. 57). Thus, beyond merely providing a source to imitate, observing one's friends' prosocial behavior may create expectations for prosocial behavior in oneself. Consistent with this theory, Barry and Wentzel (2006) found that, when their middle-adolescent participants reported that they were happy being with their friends, a friend's prosocial behavior was related to participants' own "prosocial goal pursuit" (based on a scale that measured participants' intentions to act prosocially). Prosocial goals, in turn, were related to participants' own prosocial behavior. When both friends' prosocial behavior and prosocial goal pursuit were examined concurrently as predictors of participants' prosocial behavior, only prosocial goal pursuit was a significant predictor. Thus, Barry and Wentzel concluded that the relationship between friends' prosocial behavior and individuals' prosocial behavior is mediated – rather than merely moderated – by individuals' prosocial goal pursuits.

Whatever the cause, there is considerable evidence to support the importance of peers' influence on adolescents' prosocial behavior. In a study examining prosocial conformity, Berndt (1979) gave third- through twelfth-grade participants several pairs of hypothetical scenarios. Participants were asked to imagine that they wanted to perform one prosocial act (e.g., visiting a sick child) but their peers wanted them to perform a different prosocial act (e.g., helping a sibling with his/her homework). Either act would be performed without any peers present. Participants selected the act in which they would be more likely to engage, and they rated the certainty of performing the act. Their choices were coded on a 6-point scale from "fairly certain not to conform" to "fairly certain to conform." In study one, Berndt found that participants' tendency to select the behavior that matched their peers' preference rather than their own preference (i.e., "prosocial conformity") peaked between sixth and ninth grade. However, this result was not

replicated in study two in which no age-related changes in prosocial conformity to peers were found. Because mean responses for each of the four grades sampled (third, sixth, ninth, and eleventh/twelfth) were between 3 and 3.5 (on the 6-point scale) in both study 1 and study 2, participants of all ages did not express overwhelming conformity or individuality.

Another study that examined prosocial conformity was conducted by Kusá (1996). Middle adolescent participants (all aged 17 years) were asked how they would respond to 10 prosocial dilemmas in which the peer group's expectations conflicted with their own self-interest. Participants responded on a Likert-type scale from 1 (would not conform) to 6 (would conform). The mean rating of approximately 4.5 suggests that participants would be somewhat more likely to conform to the group than to act in their own self-interest. Kusá's participants were also asked to imagine a situation in which their friends wanted them to donate money (to a fund for people who had lost their homes in a fire) but that the participant had saved up money to buy something for himself or herself. Thus, unlike Berndt's participants, Kusá's participants were faced with a decision to act prosocially in accordance with their friends' wishes or, instead, to act in their own self-interest. Over 90% of Kusá's participants agreed they would donate their money to the charitable fund. When asked to explain their rationale, though, only 14% admitted that they were going along with their friends because of conformity. Most participants claimed they would donate the money because of genuine altruism (28.6%, e.g., "I like to help others"), social norms (28.6%, e.g., "People should help one another"), or reciprocity (21.4%, e.g., "One never knows what to expect; maybe I will need a help [sic] from others in the future").

Certainly, the relatively low percentage of adolescents listing conformity as an explanation for their expected donation may be due to the stigma of conformity as a blind following of one's peers. Nonetheless, there is little doubt that peers exert a powerful influence

on adolescents' behavior. Although conformity may be one factor involved in this influence, additional factors are likely involved. One study of adolescents in Hong Kong (Ma et al., 1996), for example, found two types of peer influence on adolescents' helping behavior. Ma et al.'s participants indicated (1) the extent to which they had engaged in 65 prosocial acts over the previous year, (2) the extent to which the participant's best friend had engaged in the same behaviors (peer's prosocial behavior), and (3) the extent to which the participants' best friend was likely to encourage the participant to perform each prosocial act (peer influence). Both peer's prosocial behavior and peer influence correlated significantly with the prosocial behavior index, suggesting that young friends not only imitate each others' helping behavior, but also that helping exhortations from peers, should they exist, might be particularly effective in encouraging adolescents to engage in prosocial activities.

Beyond merely influencing a general tendency to be prosocial, peers may be especially important for affecting adolescents' propensity for spontaneously helping particular targets. In particular, we might expect that helpfulness toward friends would be more common than helpfulness toward non-friends. The finding that children treat friends and non-friends differently is well established (see Hartup, 1996, and Newcomb & Bagwell, 1996, for reviews). For example, a meta-analysis of over 80 studies revealed consistent differences in children's and adolescents' behaviors toward friends and non-friends (Newcomb & Bagwell, 1995). Compared to their exchanges with non-friends/acquaintances, when interacting with friends, children and adolescents tend to have more positive emotional exchanges, improved task performance (possibly due to improved focus on the task), better conflict resolution, and exchanges that are more equal. Typically, though, these studies have not examined the impact of interacting with a

friend versus a non-friend on helping behavior per se, focusing instead on creativity, problem solving, communication style, and conflict.

Nonetheless, there has been some research on the influence of friendship on prosocial behavior. In a study involving children, Berndt (1981) assessed both behavioral intentions to be prosocial as well as actual behavior. The children, who were in kindergarten, second, or fourth grade, were first paired with either a friend or an acquaintance (based on a prior sociometric rating). Participants were asked whether they would share an object of value (e.g., a new bicycle or a toy) with their partner. Girls paired with friends were more likely to report sharing than girls paired with acquaintances, but there was no difference for boys. In a second session, each set of partners was given one crayon and a picture to color. They were told that the person coloring more of the picture would receive two nickels while the person who colored less would receive one. Thus, sharing the crayon with one's partner cost the participant a "valuable" resource. For girls, there was no difference in sharing with friends and sharing with acquaintances. Boys, however, shared the crayon *less* with friends than with acquaintances. Thus, although girls reported that they expected to be more prosocial toward friends, in practice, they treated friends and acquaintances similarly. In contrast, whereas boys expected to treat friends and acquaintances similarly, they were more prosocial toward acquaintances than friends. Berndt explained these findings by suggesting that boys are more competitive with friends than with non-friends, perhaps because the competition is seen as an expected – and accepted – component of boys' friendships. Further, Berndt explained that girls tend to have fewer, but closer, friendships. Thus, acting competitively with a friend could potentially be experienced as more costly to a girl than to a boy who had many, but less intimate, friends.

In another study, this one involving middle adolescents, Estrada (1995) asked participants (mean age of 15.8 years) how they would respond to four hypothetical situations in which a friend or acquaintance was the victim of a perceived injustice. Whereas 84% of the participants reported integrative goals for a friend (which "reflected a concern for maintaining and promoting the well-being of the victim," p. 185), only 40% did so for an acquaintance. Further, "8% of subjects reported a lack of concern for the plight of their friends, whereas 50% did so for acquaintances" (p. 187). Finally, and of particular importance for the present study, considerably more participants said they would help a friend (60%) than an acquaintance (15%). Estrada's finding that participants intended to help friends more than acquaintances is consistent with the research discussed earlier regarding ingroup and outgroup helping (Platow et al., 1999). If friends are considered to be in one's ingroup (and acquaintances not), we would expect friends to be given help at a higher rate than acquaintances.

In sum, peers are an increasingly important source of information and influence for adolescent behavior. Peers' influence extends not only to antisocial tendencies, as is typically studied in the literature, but to prosocial behaviors as well. The influence peers exert is both direct and indirect, occurring through both direct exhortations and the construction of norms for group members' behavior. Finally, although there is little research in the area, it appears that peers are also important in the decision of whom an adolescent is willing to help, particularly with respect to the target's status as a friend or a non-friend.

THE PRESENT STUDY

Statement of the Problem

Although studies examining prosocial development in children and prosocial behaviors in adults are common (e.g., Batson et al., 1981; Eisenberg et al., 1994), far fewer studies of

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adolescents' prosocial behavior have been conducted (see Fabes et al., 1999). When adolescents

are the subject of "developmental" research, one of two antecedents of prosocial behavior is

typically explored: parental or peer influences (Berndt, 1979; Krevans & Gibbs, 1996; Ma et al.,

1996). When the evidence from these two, essentially distinct, literatures is taken into

consideration, it seems apparent that both peers and parents are contributors to adolescents'

helping behavior. The notion that there are multiple determinants of behavior is consistent with

bioecological theory (Bronfenbrenner, 1979, 1989; Bronfenbrenner & Morris, 1998) as well as

with research in other areas of adolescent behavior. For example, Spoth et al. (1996) examined

the influence of peers and parents on alcohol refusal skills in adolescents. Both peer "prosocial"

norms (which were actually negatively keyed responses to questions about friends' antisocial

behavior) and attachment to parents were important predictors of self-reported strategies for

refusing an alcoholic beverage offered by a friend. Nonetheless, parental and peer influences on

adolescent prosocial behavior are rarely studied concurrently in a single investigation.

Two experiments in which parental and peer characteristics were studied together were

conducted by Wentzel and McNamara (1999) and Randall, Carlo, and Crockett (1999). Wentzel

and McNamara, who examined family cohesion and peer acceptance as potential predictors of

adolescent prosocial behavior, used a peer-nominated index of prosocial behavior as their

dependent measure. They found a positive relationship between peer acceptance and prosocial

behavior, but they found no relationship between family cohesion and prosocial behavior.

Randall et al. explored the influence of family support and positive peer relationships on

adolescent helping. They used an index of self-reported prosocial behavior (e.g., volunteering,

raising money, and doing favors for others) as their dependent measure. In contrast to Wentzel

and McNamara, Randall et al. found a complicated pattern in which (1) positive peer

relationships were correlated with prosocial behaviors in female but not in male participants, and (2) family support was correlated with prosocial behaviors in male but not in female participants. It is difficult to directly compare the results of these two studies because they operationalized their variables differently (i.e., family *cohesion* vs. family *support* and peer *acceptance* vs. positive peer *relationships*). Further, the variables considered in these studies are, perhaps, less likely candidates as causal mechanisms of adolescent helping than those described previously in this review (i.e., parental modeling and peer norms). Thus, although these studies represent initial attempts to understand the multiple mechanisms that influence adolescent prosocial behavior, considerably more research needs to be conducted in which parental and peer influences are studied concurrently. In addition, knowing that peers become increasingly important sources of information and influence beginning in late childhood and early adolescence (Hartup, 1979) – and, indeed, if Harris (1995, 1998) is correct, that parents may be largely irrelevant socializing forces – it is important to examine parental and peer influences on adolescent behavior at different stages of adolescence.

Another flaw in the literature involving adolescent prosocial behaviors is the lack of studies examining antecedents of different types of helping. As discussed earlier, studies of adults' helping have found that there are different types of helping and that individual differences among potential helpers are associated with the tendency to help in different ways (e.g., Bartel & Barnett, 2001; Carlo & Randall, 2002). Further, studies of both adult and late adolescent helping have indicated that characteristics of the helper are important factors in the decision of whether to help (Amato, 1990; Emswiller et al., 1971; Karabenick et al., 1973). The tendency for adolescents to engage in helping of particular types and of particular targets is likely influenced by both parents and friends, but the nature of this socialization process is uncertain due to the

lack of research in this area. For example, in contrast to the relatively common research

regarding parents' modeling of planned helping on adolescents' prosocial behavior (London,

1970; Oliner & Oliner, 1988; Rosenhan, 1970; Stukas et al., 1999), there is a paucity of studies

investigating the influence of parental modeling of spontaneous helping. In addition, because

parental modeling of planned and spontaneous helping behaviors have not been studied

concurrently, it is unknown whether parental modeling of these two types of behaviors are

equally influential determinants of adolescents' own helping in planned and spontaneous ways.

Further, it is unknown whether parental modeling of spontaneous helping influences children's

helping of all potential recipients (including friends, non-friends, and strangers) or only

particular ones. Similarly, whether peers' influence of adolescent helping extends to various

types and targets of helping, or only particular (e.g., peer-related) ones, is unknown. Thus, the

purpose of the present study was to explore the relative influence of parents and peers on (1)

different types of adolescent helping (i.e., planned and spontaneous) and (2) different targets of

spontaneous helping (i.e., friends, non-friends, and strangers) in both early and middle

adolescents.

<div align="center">Hypotheses</div>

Five main hypotheses were investigated in the present study.

H_1: Parents' modeling of planned helping was expected to be a significant predictor of

adolescents' planned helping.

H_2: Parents' modeling of spontaneous helping of strangers was expected to be a

significant predictor of adolescents' spontaneous helping of strangers.

As discussed earlier, research suggests that parental modeling of planned helping is an

important antecedent of their offspring's planned helping as adolescents (Clary & Miller, 1986;

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Stukas et al., 1999) and, later, as adults (London, 1970; Oliner & Oliner, 1988; Rosenhan, 1970).

Thus, it was expected that parents who engaged in relatively high levels of planned helping will have adolescent children who also engage in relatively high levels of planned helping. Unfortunately, the effect of having a parent who is helpful in spontaneous ways on adolescents' spontaneous helping has not been studied and, therefore, is unknown. Nonetheless, research involving younger children that used strangers as models (e.g., Midlarsky & Bryan, 1972; Rosenhan & White, 1967; Rushton, 1975, 1976, 1982) found that when strangers modeled spontaneous helping (of another stranger), participants were themselves more likely to spontaneously help a stranger in another setting at a later date. Thus, parental modeling of spontaneous helping of strangers was expected to be related to their offspring's own spontaneous helping of strangers.

Regardless of one's socialization at home, the importance of peers as influences on adolescents' behavior is well known (Hartup, 1979; Williamson, 1977). Peers are particularly important with respect to behaviors toward those perceived as being in or out of one's group (Hartup, 1996; Kusá, 1996; Newcomb & Bagwell, 1996). In addition, peers' influence on adolescent antisocial and, to a lesser extent, prosocial behavior has been demonstrated in prior research (Estrada, 1995; Kusá, 1996; Ma et al., 1996). Thus, whereas parents were expected to have relatively more influence over adolescents' helping of strangers, peers were expected to have relatively more influenece over adolescents' spontaneous helping of peers who are perceived to be in or out of one's group, that is, friends or non-friends.

> *H₃: The extent to which adolescents' friendship groups are cohesive was predicted to affect (spontaneous) helping of friends and non-friends such that cohesiveness would be positively related to helping friends but inversely related to helping non-friends.*

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This hypothesis was based on the assumption that, as the group becomes more cohesive, the self-identification as a group member (one of "us" vs. one of "them") increases. This self-identification should result in relatively more ingroup bias and be reflected in a decreased tendency to help outsiders (Oliner & Oliner, 1988; Platow et al., 1999; Staub, 1992).

H$_4$: Group norms of helping were expected to be positively associated with spontaneous helping of friends, but they were also expected to moderate the relationship between cohesiveness and helping of friends.

As discussed earlier, norms tell individuals what behavior is expected of them in specific situations (Oliner & Oliner, 1995). If an individual perceives that there is a clear norm of helping among his or her friends, that individual should be more likely to provide spontaneous help to his or her friends. However, group helping norms were also expected to interact with cohesiveness because even for highly cohesive groups, a weak norm of helping should attenuate the individual's propensity for helping a friend.

H$_5$: The relative influence of parents and peers on adolescent planned and spontaneous helping was expected to differ as a function of the adolescent's age. Specifically, parents were expected to have relatively more influence on the younger age group, whereas peers were expected to have relatively more influence on the older age group.

Although direct comparisons between the influence of parents and peers on early versus middle adolescents have not been made, there is considerable evidence to support a shift in focus toward peers during middle adolescence. Whereas children generally use peers less extensively for models than do adolescents (Hartup, 1979), relying instead on parents and other sources of information, a shift toward peers as important sources of information continues throughout adolescence (Williamson, 1977). Indeed, for middle adolescents, there is evidence of the

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important role of peers as a source of information about the "correct" (prosocial) behavior in which one should engage (Kusá, 1996).

METHOD

Participants

Adolescent participants were recruited primarily from local school districts in south central Pennsylvania. After obtaining permission from the district's superintendent (and, where necessary, the school board), middle and high school principals were contacted and asked to distribute letters describing the study to teachers who would then send them home with the students. Students who obtained permission from their parent or guardian returned the permission slip to their teachers. Approximately 550 of these letters were distributed to seventh grade teachers at three middle schools (in three different districts), and approximately 125 letters were distributed to one high school teacher of psychology and sociology. Students in the latter teacher's classes were in 10th through 12th grade. In addition to students in neighboring school districts, early adolescent participants were also recruited from a Boys and Girls Club summer program. Approximately 30 of these students were of the appropriate age, and letters were sent home to each of their parents.

A total of 196 adolescents and 162 adults participated in this study. Of the adolescent participants, 108 had at least one parent or guardian participate, and half of these (54) had two parents or guardians participate. The average age of the younger adolescent group was 12.54 years, and the average age of the older adolescent group was 16.82 years. Mothers of younger adolescents averaged 41.04 years, and mothers of older adolescents averaged 41.74 years. Fathers of younger adolescents averaged 45.33 years, and fathers of older adolescents averaged 43.09 years.

See Table 1 for the number of adolescent participants by age group, sex, and number of participating parents. Table 2 presents the number of adolescent participants with at least one parent participating by age group, sex, grade, and race, and Table 3 presents the number of mothers and fathers of younger and older adolescents by relationship to adolescent, martial status, race, and highest level of education.

Materials

Each adolescent and his or her parent(s) completed a parallel, though slightly different, packet of questionnaires.

Adolescent Measures

Demographics

Demographic information was collected from the adolescent participants on an Adolescent Demographic Sheet (see Appendix A). On it, participants indicated their name (for the purpose of matching their responses with their parents), sex, age, grade in school, race, and number of siblings.

Planned Helping Measure

The planned helping measure (see Appendix B) is a minor variation of a measure used in a previous study by Bartel and Barnett (2000). It allows participants to list all of the planned helping opportunities in which he or she has participated, as well as the average amount of time spent per volunteering session and the number of times volunteered. Participants were told that any planned helping they listed on the measure should have been (1) associated with a structured organization (e.g., United Way, Red Cross, church), and (2) performed without the expectation of a reward or because it was required by others (e.g., a school requirement or court-ordered public service).[5]

Spontaneous Helping Measure

The adolescent spontaneous helping measure (see Appendix C) assesses both past helping as well as participants' anticipated future likelihood of engaging in various helping acts with three groups of agemates: friends, non-friends, and strangers. In the instructions to the adolescent participants, friends were described as "peers who are close to you and with whom you spend most of your time. They are people you know, like, and trust." Non-friends were described as "peers you do not consider friends but who are also not strangers. You may have positive, neutral, or even negative feelings about them. This category includes peers you know who are not considered friends." Finally, strangers were described as "everyone your age whom you have never seen before." The spontaneous helping measure presents a list of helping behaviors (e.g., pick up something that a friend/non-friend/stranger has dropped) and asks participants first to circle "yes" or "no" to indicate whether they have ever helped someone in that target class in the way described. Next, participants were asked to rate on a 7-point, Likert-type scale the likelihood that they would indeed help in that situation. Helping scenarios were written such that interchanging the potential target of the help (i.e., friend, non-friend, and peer-stranger) in each scenario would be possible. The potential recipient of a particular act of helping was counterbalanced across all participants such that, for any given act of helping, one-third of the participants made a rating for a friend, one-third for a non-friend, and one-third for a stranger.

Group Cohesiveness

Before completing the group cohesiveness measure (see Appendix D), each adolescent participant was asked to think about his or her group of friends. Following Kiesner, Cadinu, Poulin, and Bucci (2002), the adolescent participants were told that the group must have the

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characteristics of (1) including at least two additional members and (2) spending time together as a group.[6] Participants made several ratings that describe the quality of the group's cohesiveness (e.g., "To what extent do the individuals in your group of friends feel that it is important to belong to this group?"; subscale adapted from Kiesner & Notari, 2002, cited in Kiesner et al, 2002). In addition, participants were asked about the extent to which their group rejects outgroup members (e.g., "The friends in my group make a point not to have too much social contact with people who aren't in our group of friends."), restricts access to outgroup members (e.g., "If someone we don't know very well wants to do something with my group of friends, we usually don't let them."), and considers itself distinct from other groups (e.g., "I feel that the people in my group of friends are different from other kids my age."). The latter three subscales were created for use in the present study. The Kiesner and Notari group cohesiveness scale items were presented consecutively as the first part of a combined group identification measure, and items from the remaining three subscales were mixed together to form the second part of the combined measure.

Norm of Helping Within Group

Adolescent participants were asked to rate the extent to which there is a norm of helping among their friends. This measure (developed for the present study; see Appendix E) assesses participants' beliefs about their friends' feelings regarding the importance of helping one another. To disguise the purpose of this questionnaire, the phrases assessing the helping norm (e.g., "Being there for each other if someone has a problem") were embedded in a series of other phrases that are unrelated to helping (e.g., "Playing sports with one another").

Parent Measures

Demographics

Parents first completed a demographic information sheet (see Appendix F) on which they indicated their child's name (parents were assured that the information would be used only to match their responses to their child's), relationship to the child, sex, age, marital status, race, and highest level of education attained.

Planned helping

Adult participants completed the same planned helping measure that their children completed (see Appendix B, described earlier).

Spontaneous helping

The spontaneous helping measure that parents completed (see Appendix G) includes helping acts that are identical to those included on the spontaneous helping measure completed by adolescent participants.[7] However, instead of focusing on friends, non-friends, and strangers, the targets of the helping for the parent participants were friends and family (in one category) and strangers.[8] As with the measure completed by the adolescent participants, the measure of parental spontaneous helping assessed whether the respondent has engaged, and would be likely to engage, in several hypothetical acts of spontaneous help toward particular targets.

Procedure

Adolescent Procedure

A male experimenter conducted all sessions with the adolescent participants in their regular classrooms or, in the case of participants from the Boys and Girls Club, at the school where the summer camp was conducted. Because adolescent participants are minors, informed consent was obtained in advance from their parent or guardian. A letter was sent to parents (see

Appendix H) containing (1) a description of the proposed study, and (2) instructions for providing consent for their adolescent and themselves (and, if possible, the adolescent's other parent/step-parent/guardian).

Adolescent participants completed a packet of questionnaires consisting of the measures described earlier in the Adolescent Measures section. The order of the questionnaires was as follows: norm of helping within group, planned helping measure, spontaneous helping measure, group cohesiveness measure. Instructions were read aloud to participants, and they completed one measure at a time. Following the completion of the measures, participants were given a set of questionnaires for their parent(s) to complete and were asked to return the sealed packet(s) within one week.

Parent Procedure

Parent participants completed the questionnaires at home. Their packet contained the measures described earlier in the Parent Measures section as well as instructions for how to complete the measures. Parents were asked to complete the demographics questionnaire first, the planned helping measure second, and the spontaneous helping measure last. After each parent participant completed and sealed his or her packet of measures in an envelope, the packet was returned to school (via the adolescent participant) where it was collected by the experimenter.[9]

RESULTS

Parent Helping

Planned Helping

Parent participants' number of planned helping activities, dichotomous planned helping (i.e., whether they engaged in planned helping or not), and total number of hours engaged in

planned volunteering are listed by sex of parent in Table 4. The total number of hours

volunteered was determined by the formula *Total Hours* $= \sum^{n} (p \times q)$ where p is the number of

times the participant volunteered at a particular activity, q is the average amount of time spent

per volunteering session at that activity, and n is the total number of planned helping activities

for a particular participant.

Separate independent samples t-tests were conducted on the number of activities,

dichotomous planned helping, and the total number of hours of planned helping between male

and female parents. Mothers engaged in more planned helping activities than did fathers, t (131)

= 3.74, $p < .001$. For dichotomous planned helping, Levene's test of equality of variances was

significant ($p < .001$), indicating that the variances of mothers and fathers dichotomous helping

were not equal. Thus, the t-value and degrees of freedom associated with this test are for

unequal variances. A higher proportion of mothers had engaged in planned helping than had

fathers, t (78) = 3.16, $p < .01$. Finally, although mothers engaged in nearly 100 more total hours

of planned helping than did fathers, because of the large variance on this variable, the means

were not significantly different, t (130) = .92, *ns*.

<div align="center">*Spontaneous Helping*</div>

Parent participants' "have you ever helped…" and "would you ever help…" responses

for friends/family and strangers are listed, by sex of parent and helping target, in Table 5. There

were four "yes" or "no" responses to the "have you" question for each target (i.e., friend/family

or stranger). Each participant was assigned a value of 0%, 25%, 50%, 75%, or 100% depending

in whether he or she had helped in 0, 1, 2, 3 or all 4 of the examples presented. The average of

the percentage of "yes" responses is presented in Table 5. Responses to the "would you"

question are mean responses by sex of parent and helping target.

A 2 (sex: male or female) $\times$ 2 (target: friend or stranger) analysis of variance was

conducted on parent participants' actual spontaneous help (i.e., "have you ever helped…?")

responses. The target of the help was a within subjects variable. The main effect for target was

significant, F (1, 160) = 148.50, $p < .001$, partial η^2 = .48. More participants reported having

helped friends (89.0%) than strangers (62.3%). The main effect for sex, F (1, 160) = 3.17, ns,

partial η^2 = .02, and the sex $\times$ target interaction, F (1, 160) = 1.96, ns, partial η^2 = .01, were not

significant.

In addition, a 2 (sex: male or female) $\times$ 2 (target: friend or stranger) analysis of variance

was conducted on parent participants' anticipated likelihood of providing spontaneous help (i.e.,

"would you ever help…?"). The target of the help was again a within subjects variable. The

main effect for target was significant, F (1, 157) = 147.39, $p < .001$, partial η^2 = .48. Participants

anticipated being more willing to help a friend (M = 6.53) than a stranger (M = 5.46). The main

effect for sex, F (1, 157) = .52, ns, partial η^2 = .00, and the sex $\times$ target interaction, F (1, 157) =

.32, ns, partial η^2 = .00, were not significant.

<div align="center">Adolescent Helping</div>

<div align="center">*Planned Helping*</div>

Adolescent participants' number of planned helping activities, dichotomous planned

helping, and total number of hours engaged in planned helping are listed, by age group and sex,

in Table 4. The total number of hours volunteered was calculated for adolescents using the same

formula as that used for parents.

A 2 (age group: younger or older) × 2 (sex: male or female) between subjects ANOVA was conducted on the total number of planned activities in which adolescent participants had engaged. The main effect for sex was significant, $F(1, 191) = 23.23$, $p < .001$, partial $\eta^2 = .11$. Females ($M = 3.09$) engaged in more planned helping activities than did males ($M = 1.77$). The main effect for age group, $F(1, 191) = .98$, ns, partial $\eta^2 = .01$, and the age × sex interaction, $F(1, 191) = .02$, ns, partial $\eta^2 = .00$, were not significant.

A 2 (age group: younger or older) × 2 (sex: male or female) between subjects ANOVA was conducted on participants' dichotomous planned helping, that is, whether or not they had ever volunteered. The main effect for sex was significant, $F(1, 191) = 19.64$, $p < .001$, partial $\eta^2 = .09$. A higher proportion of females (91.1%) than males (66.8%) had engaged in planned helping activities. The main effect for age group, $F(1, 191) = 3.03$, ns, partial $\eta^2 = .02$, and the age × sex interaction, $F(1, 191) = .18$, ns, partial $\eta^2 = .00$, were not significant.

A 2 (age group: younger or older) × 2 (sex: male or female) between-subjects ANOVA was conducted on the total hours of planned helping for adolescent participants. Although neither the age, $F(1, 191) = 2.48$, ns, partial $\eta^2 = .01$, nor the sex, $F(1, 191) = .01$, ns, partial $\eta^2 = .00$, main effects were significant, there was a significant age × sex interaction, $F(1, 191) = 4.20$, $p < .05$, partial $\eta^2 = .02$. A Fisher's LSD *post hoc* test indicated that older boys had engaged in more hours of planned helping than younger boys, whereas older and younger girls did not differ in the total number of hours of planned helping in which they had engaged (see Table 4).

Spontaneous Helping

Adolescent participants' "have you ever helped…" and "would you ever help…" responses for friends, non-friends, and strangers are listed, by age group, sex of adolescent, and helping target, in Table 5. Adolescents responded "yes" or "no" to having helped in three ways each of three targets (i.e., friends, non-friends, and strangers). Each participant was assigned a value of 0%, 33%, 67%, or 100% depending in whether he or she had helped in 0, 1, 2, or all 3 of the examples presented. Values presented in Table 5 are the average of these percentages. Responses to the "would you" question are mean responses by age group, sex of adolescent, and helping target.

A mixed 2 (age group: younger or older) $\times$ 2 (sex: male or female) $\times$ 3 (target: friend, non-friend, or stranger) analysis of variance was conducted on adolescent participants' actual spontaneous help (i.e., "have you ever helped…?") responses. The target of help was a within subjects variable. The sex, $F (1, 190) = 16.09$, $p < .001$, partial $\eta^2 = .08$, and target, $F (2, 380) = 122.28$, $p < .001$, partial $\eta^2 = .39$, main effects were both significant. More females (66.8%) than males (55.4%) reported having helped spontaneously. A Fisher's LSD *post hoc* test revealed that more participants reported having spontaneously helped friends ($M = 84.9\%$) than non-friends ($M = 57.2\%$), and more participants had helped non-friends than strangers ($M = 42.6\%$). The main effect for age was not significant, $F (1, 190) = .08$, *ns*, partial $\eta^2 = .00$. Further, the age $\times$ sex, $F (1, 190) = .52$, *ns*, partial $\eta^2 = .00$; target $\times$ age, $F (2, 380) = .04$, *ns*, partial $\eta^2 = .00$; and target $\times$ sex, $F (2, 380) = .37$, *ns*, partial $\eta^2 = .00$, two-way interactions, and the age $\times$ sex $\times$ target three-way interaction, $F (2, 380) = 1.01$, *ns*, partial $\eta^2 = .01$, were all non-significant.

A mixed 2 (age group: younger or older) $\times$ 2 (sex: male or female) $\times$ 3 (target: friend, non-friend, or stranger) analysis of variance was also conducted on adolescent participants'

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anticipated likelihood of providing spontaneous help (i.e., "would you ever help…?"). The

target of help was a within-subjects variable. The age, $F (1, 190) = 4.90, p < .001$, partial $\eta^2 =$

.03; sex, $F (1, 190) = 24.98, p < .001$, partial $\eta^2 = .12$; and target, $F (2, 380) = 210.21, p < .001$,

partial $\eta^2 = .51$, main effects were all significant. The older participants ($M = 5.18$) reported

being more likely to help than the younger participants ($M = 4.86$), and females ($M = 5.38$)

reported a greater willingness to help spontaneously than did males ($M = 4.66$). A Fisher's LSD

post hoc test revealed that participants reported a greater willingness to help friends ($M = 6.21$)

than non-friends ($M = 4.70$) as well as a greater willingness to help non-friends than strangers (M

= 4.20). The age $\times$ sex, $F (1, 190) = 3.52$, *ns*; target $\times$ age, $F (2, 380) = .32$, *ns*; and target $\times$

sex, $F (2, 380) = .11$, *ns*, two-way interactions, and the age $\times$ sex $\times$ target three-way interaction,

$F (2, 380) = 2.02$, *ns*, were all non-significant.

<div align="center">Relationships between Parents' and Adolescents' Helping</div>

To determine whether there was a relationship between parents' planned helping and

their children's planned helping, correlations between parents' and children's total number of

planned helping activities, dichotomous helping, and total number of hours of planned helping

were calculated. These correlations are presented in Table 6. Mothers' planned helping was not

significantly related to either boys' or girls' planned helping. In contrast, the total number of

fathers' planned helping activities was positively correlated with boys' total number of planned

helping activities, and fathers' dichotomous helping was positively correlated with both boys'

and girls' total number of activities and dichotomous helping.

Correlations between parents' and adolescents' helping were also examined by the age of

adolescent. For the younger age group only, adolescents' dichotomous planned helping was

negatively correlated with one parent-related variable, fathers' total hours of planned helping

<div align="center">41</div>

(see Table 7). Further, there were several parent-related variables that were significantly correlated with planned helping in the older age group. Mothers' and fathers' dichotomous helping were significantly correlated with both the number of activities in which the older adolescents had engaged and adolescents' dichotomous helping. In addition, the number of planned helping activities in which fathers had engaged was positively correlated with older adolescents' dichotomous helping.

To examine the relationship between parents' spontaneous helping and their children's spontaneous helping, correlations among ratings regarding the spontaneous helping of friends/family and strangers (for parents) and friends, non-friends, and strangers (for children) were calculated. Table 8 presents the correlations for actual spontaneous helping (have you helped…?), and Table 9 presents the correlations for anticipated spontaneous helping (would you help…?). Generally, parents' actual spontaneous helping was not significantly related to their children's, though mothers' spontaneous helping of friends was positively correlated with their sons' spontaneous helping of friends. Similarly, parents' anticipated spontaneous helping was generally unrelated to their children's anticipated spontaneous helping, though fathers' helping of friends was positively correlated with their daughters' spontaneous helping of friends, non-friends, and strangers.

The relationship between parents' and children's helping was also examined by children's age group. Table 10 presents, by adolescent age group, correlations between adolescents' actual spontaneous helping and mothers' and fathers' actual spontaneous helping, and Table 11 presents, by adolescent age group, correlations between adolescents' anticipated spontaneous helping and mothers' and fathers' anticipated spontaneous helping. Mothers' and fathers' spontaneous helping, whether actual or anticipated, was generally unrelated to their

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children's spontaneous helping, with the exceptions that (1) mothers' actual spontaneous helping of strangers was negatively correlated with their younger adolescents' spontaneous helping of friends, and (2) fathers' anticipated helping of friends/family was positively correlated with older adolescents' anticipated helping of strangers.

<center>Relationships between Peer-Related Variables and Adolescent Helping</center>

<center>*Group Identification*</center>

Adolescent participants' responses to the group cohesiveness measure are presented, by age group and sex, in Table 12. Reliability of the Feelings of Group Identity subscale was adequate, though reliabilities of the Rejection of the Outgroup, Group Distinctiveness, and Restrictiveness to Non-Group Members measures were poor. Likewise, the reliability of the Combined Group Cohesion measures, which was a sum of scores on the four group cohesiveness subscales, was also poor. Thus, the previously validated Group Identity measure was the only group cohesiveness measure used in subsequent analyses.

A 2 (sex: male or female) $\times$ 2 (age group: younger or older) ANOVA was performed on adolescents' feelings of Group Identification. The main effect for sex was significant, $F(1, 191)$ = 23.82, $p < .001$, partial $\eta^2 = .12$. Females ($M = 6.18$) reported feeling a stronger group identity in their friendship group than did males ($M = 5.59$). The main effect for age group, $F(1, 191) = $ 1.51, *ns*, partial $\eta^2 = .01$, and the sex $\times$ age group interaction, $F(1, 191) = 3.49$, *ns*, partial $\eta^2 = $ .02, were non-significant.[10]

To determine the relationships among group identification and both actual and intended spontaneous helping of friends, non-friends, and strangers, correlations were calculated among these variables by sex and age group (see Table 13). Group Identification was unrelated to actual spontaneous helping for both younger and older males and females. However, Group

<center>43</center>

Identification was positively correlated with anticipated spontaneous helping of friends, non-friends, and strangers for older males and anticipated spontaneous helping of friends by females.

Norm of Helping within the Friendship Group

An adolescent's norm of helping within the friendship group score was computed by determining the mean of scores on items 2, 5, and 14 from the Group Helping Norm Measure (see Appendix E). These three items comprised a scale with adequate internal reliability (Cronbach's alpha = .88).

A 2 (sex: male or female) $\times$ 2 (age group: younger or older) ANOVA was performed on the helping norm scores. The main effect for sex was significant, $F (1, 191) = 31.85$, $p < .001$, partial $\eta^2 = .14$. Females ($M = 6.74$) reported that helping was more important in their friendship groups than did males ($M = 5.95$). The main effect for age group, $F (1, 191) = 2.43$, *ns*, partial $\eta^2 = .01$ ($M_{younger} = 6.24$, $M_{older} = 6.46$), and the sex $\times$ age group interaction, $F (1, 191) = 2.42$, *ns*, partial $\eta^2 = .01$, were non-significant.

Table 14 presents the correlations between friendship group helping norms and adolescents' planned and spontaneous helping by sex. Group helping norms were not significantly correlated with any of the measures of planned helping for males or females. However, helping norms were positively correlated with males' actual helping (i.e., "have you ever helped…?") of friends, non-friends, and strangers as well as anticipated helping (i.e., "would you ever help…?") of all three of these targets. For females, group helping norms were correlated only with anticipated helping of friends and non-friends.

When considered by age group, helping norms were positively correlated with both the younger and older adolescents' number of planned helping activities and dichotomous helping (refer back to Table 7).

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With respect to spontaneous helping, helping norms were correlated with younger adolescents' actual spontaneous helping ("have you…?") and anticipated spontaneous helping ("would you…?") of friends, non-friends, and strangers (refer back to Tables 10 and 11). In contrast, while older adolescents' group helping norms were related to anticipated spontaneous helping of friends, non-friends, and strangers, their group helping norms were related to actual spontaneous helping only of non-friends.

Parent and Peer Influences on Adolescent Helping

Planned Helping Regressions

To determine the influence of parent- and peer-related variables on adolescents' planned helping, adolescents' number of planned helping activities, dichotomous planned helping (i.e., whether or not they engaged in any planned helping), and total number of planned helping hours were each regressed on the predictors included in the present study. The following variables were entered as predictors into a hierarchical multiple linear regression: adolescent sex (block 1); the parent's total number of planned helping hours, whether the parent had engaged in any planned helping (parent's dichotomous planned helping), the parent's number of planned helping activities, adolescent helping norms, and age group (block 2); the group identification $\times$ helping norms interaction (block 3); and the three adolescent sex $\times$ parent's planned helping interactions (sex $\times$ parent's number of helping activities, sex $\times$ parent's dichotomous helping, and sex $\times$ parent's total hours of planned helping,; block 4). Regression equations were calculated for mothers and fathers separately.[11] As recommended by Cohen, Cohen, West, and Aiken (2003), prior to entry into the regression equation, all predictor variables were centered (i.e., the mean for each variable was subtracted from each data point and recoded into a new variable in order to set the mean of the new variable to 0, thus reducing multicollinearity and increasing

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interpretability of the results).[12] At each step, the variables were entered using a block entry

selection approach, that is, within a given step, all variables were entered simultaneously.

Mothers

All four steps of the regression involving adolescents' number of planned activities using

mothers' data were significant (see Table 15), though only the first step had a significant increase

in R^2 as indicated by a significant change in F. Adolescent sex was a significant predictor in the

first, second, and third steps of the hierarchical regression, with females engaging in more

activities than males. However, sex was not a significant predictor in step 4 when the sex $\times$

mother's helping interactions entered the equation. Adolescent sex $\times$ mother's dichotomous

helping was not a significant predictor of the number of planned activities, but it appears that this

variable may have attenuated the relationship between adolescent sex and the criterion.

Adolescents' perception of their group's helping norms was related to the number of planned

helping activities when the variable entered the equation in step 2, with stronger helping norms

being positively related to number of planned helping activities, but norms were not significantly

related to the criterion in steps 3 or 4.

Each of the steps in the regression predicting adolescents' dichotomous planned helping

was significant, though only steps 1 and 2 had significant increases in R^2 (as indicated by a

significant change in F, see Table 16). Adolescent sex was a significant predictor in the first

step, with a higher proportion of females having engaged in any planned helping than males, but

it was not a significant predictor in steps 2, 3, or 4. Adolescents' perception of their groups'

helping norms was the only significant predictor beginning with the second step, with

adolescents who reported that helping norms in their friendship group were relatively strong

being more likely to have engaged in at least one planned helping activity.

The regression predicting adolescents' total hours of planned helping was not significant (see Table 17).

Fathers

All four steps of the regression predicting adolescents' number of planned activities using fathers' data were significant (see Table 18). Adolescent sex was a significant predictor in steps 1-3, with females engaging in more planned helping activities than males. However, sex was no longer significant when the sex $\times$ father's helping interactions entered in step 4. Father's dichotomous helping was a significant predictor of the number of adolescent planned helping activities in each of the steps in which it entered the equation, but this was qualified by the sex $\times$ father's dichotomous helping interaction. Following the procedure outlined by Cohen et al. (2003) to probe the meaning of the interaction, an analysis of the simple slopes was conducted. In this analysis, the slope of the regression of the number of planned helping activities on father's dichotomous planned helping was calculated separately for both male and female adolescent participants. Figure 1 presents the plot of the simple slopes involved in this interaction with boys' and girls' number of planned helping activities compared based on whether their fathers had volunteered.[13] Whereas the number of activities in which males engaged did not appear to be affected by whether their fathers had engaged in any planned helping, females engaged in more planned helping activities if their fathers volunteered than if their fathers did not.

Steps 2, 3, and 4 of the regression predicting dichotomous planned helping were significant (see Table 19). Fathers' dichotomous helping and age group were significant predictors for each of the steps in which they entered the equation. Adolescents were more

likely to have engaged in any planned helping (1) if their fathers had done so and (2) if they were in the younger age group.

Only step 3 of the regression predicting adolescents' total number of planned hours using fathers' data was significant (see Table 20). In that step, fathers' dichotomous helping and the group identification $\times$ norm of helping interaction significantly predicted planned helping. Adolescents engaged in more total hours of planned helping when their fathers had engaged in at least one planned helping activity than when their fathers had not engaged in any. Once again following the procedure outlined by Cohen et al. (2003), an analysis of the simple slopes was conducted. In this analysis, the slope of the regression of total number of planned hours on group identification was calculated for three levels of helping norms. The three levels of helping norms used were the mean (i.e., 0, because the variable had been previously centered), one standard deviation below the mean (i.e., a "low" value), and one standard deviation above the mean (i.e., a "high" value; see Cohen et al., 2003). "Low" and "high" values of group identification (i.e., one standard deviation below and above the mean) were entered into each of the three new regression equations, and the results were plotted. The simple slopes plot is presented in Figure 2, in which the total number of planned helping hours of adolescents with low and high group identification is compared based on relatively high or low group helping norms. Adolescents with relatively high group identification engaged in more hours of planned helping when their group helping norms were stronger, whereas the opposite pattern was observed for adolescents with relatively low group identification.

Table 21 presents a summary of the six planned helping regressions.

In order to determine which of the variables in the present study were related to adolescents' spontaneous helping, adolescents' spontaneous helping of friends, non-friends, and strangers (both "have you…?" and "would you…?" responses) were regressed on the following variables in a hierarchical multiple linear regression: adolescent sex (block 1); parent's spontaneous helping of friends/family, parent's spontaneous helping of strangers, adolescent group helping norms, and age group (block 2); the group identification $\times$ helping norm interaction (block 3); and the adolescent sex $\times$ parent's spontaneous helping interactions (friends/family and strangers; block 4).   At each step, the variables were entered using a block entry selection approach. Four sets of regression equations were calculated, with "would you" and "have you" responses each serving as a criterion using both mothers' and fathers' responses (see footnote 11 once again). For each set of regressions, spontaneous helping of friends, non-friends, or strangers served as the criterion. Thus, 12 separate regression equations were calculated.

Mothers

   Regressions involving "have you…?" responses. Of the three "have you…?" regressions (see Tables 22-24), only the spontaneous helping of friends (see Table 22) was significantly related to the predictors. Sex and mother's spontaneous helping of friends and family were both significant predictors in each of the steps in which they were in the equation, with females engaging in more spontaneous helping of friends than males, and adolescents with mothers who had engaged in more spontaneous helping of friends engaging in more spontaneous helping of friends themselves. However, both of these effects were qualified by a significant adolescent sex $\times$ mother's spontaneous helping of friends and family interaction. Figure 3 presents the simple

slopes plot of the interaction and demonstrates that mothers' spontaneous helping of friends and family was related to considerably more adolescent spontaneous helping (and, especially, spontaneous helping of friends) in females than in males. In addition, the group identification $\times$ helping norms interaction was significantly related to adolescents' spontaneous helping of friends. Figure 4 presents the simple slopes plot of the interaction. Adolescents with relatively high group identification were less likely to have helped friends if their group's helping norms were relatively strong, while adolescents with low group identification were more likely to have helped a friend if their helping norms were relatively weak.

Regressions involving "would you...?" responses. At least one step of each of the three "would you...?" regressions was significant (see Tables 25-27). Spontaneous helping of friends, was significantly related to adolescent sex (females helped more than males), but only in the first step (see Table 25). Adolescent's perception of group helping norms was a significant predictor of spontaneous helping of friends such that adolescents with relatively strong group norms of helping anticipated being more likely to help their friends. However, this relationship was qualified by a significant group identification $\times$ helping norms interaction. Figure 5 presents the simple slopes plot of the interaction. Of the adolescents with stronger group identification, those with relatively strong group helping norms reported that they would be somewhat less likely to help their friends than those who had weaker helping norms. In contrast, among adolescents with relatively lower group identification, those with relatively strong group norms of helping were more likely to help their friends than those who had weaker helping norms.

Steps 2, 3, and 4 of the regression equation predicting spontaneous helping of non-friends were significant (see Table 26), though only step 2 contributed a significant increase in R^2. Adolescent group helping norms was the only significant predictor. The stronger the group's

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helping norms reported by adolescents, the more certain they were that they would help a non-friend.

Only the first step of the regression predicting spontaneous helping of strangers was significant (see Table 27), with sex being the only significant predictor. Following the entry of adolescent sex, females reported being more likely to help a stranger than did males.

Fathers

Regressions involving "have you…?" responses. Of the three "have you…?" regressions (see Tables 28-30), only the first step of the spontaneous helping of friends regression (see Table 28) was significantly related to the predictors. Adolescent sex was a significant predictor, with females reporting having engaged in more helping of friends than did males. However, adolescent sex was not a significant predictor when other variables were included in the equation.

Regressions involving "would you…?" responses. At least two steps of each of the three "would you…?" regressions were significant (see Tables 31-33).

All four steps of the regression predicting adolescents' anticipated spontaneous helping of friends was significant (see Table 31), though only the first two steps resulted in a significant increase in R^2. Spontaneous helping of friends was related to adolescent sex (with females reporting a greater likelihood of helping than males) following the first step, but sex was not a significant predictor following steps 2-4. Similarly, father's spontaneous helping of friends and family predicted the adolescent's spontaneous helping of friends. Specifically, fathers who reported being more likely to help their friends/family had adolescents who were more likely to help their own friends. However, this effect was significant following only steps 2 and 3 (but not step 4). Only adolescent group helping norms, which was a significant predictor in each of the

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three steps in which it was entered, was significant in step 4. Adolescents who perceived that their groups had stronger helping norms reported being more likely to spontaneously help friends than adolescents who perceived their groups to have weaker helping norms.

Steps 2, 3, and 4 of the regression predicting adolescents' anticipated spontaneous helping of non-friends were significant (see Table 32), and only adolescent group helping norms was a significant predictor. Adolescents who perceived stronger group helping norms reported being more likely to spontaneously help non-friends than adolescents who reported that their groups had weaker helping norms.

Only steps 2 and 3 of the regression predicting adolescents' anticipated spontaneous helping of strangers was significant (see Table 33), and only father's spontaneous helping of friends and family was a significant predictor. Fathers who reported being more likely to help their friends and family had adolescents who were more likely to help strangers.

A summary of the six "have you…?" regressions is presented in Table 34, and a summary of the six "would you…?" regressions is presented in Table 35.

DISCUSSION

Sex Differences in Helping

For both adolescent and adult participants, a higher proportion of females than males had engaged in at least one episode of planned helping, and females engaged in more planned helping activities than did males. Despite the fact that, for both adolescents and adults, the mean number of total planned helping hours was larger for females than for males, neither of these differences was statistically significant. The fact that a higher proportion of females had engaged in planned helping and that females engaged in more individual activities is consistent with prior research suggesting that females are especially likely to volunteer (Bartel & Barnett,

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2000; Corporation for National and Community Service, 2006). However, the lack of a difference between the total number of hours of planned helping reported by males and females was unexpected. Given that the mean difference was in the expected direction, the lack of statistical significance may be due, in part, to the relatively large variance in the total number of planned helping hours reported by participants (refer to Table 4). Nonetheless, while females generally engaged in more planned helping activities than males, those males who did engage in planned helping may be especially committed to those selected activities, engaging in many hours of planned helping, though at fewer distinct organizations, than females.

Among the adolescent sample, females reported engaging in, and expecting to engage in, more spontaneous helping than did males. Adolescent females may be more spontaneously helpful than adolescent males because of stronger prosocial values. In one relevant study, Beutel and Johnson (2004) found that White adolescent males held weaker prosocial values (e.g., deriving less "satisfaction from doing things for people," p. 384) than did White adolescent females. Perhaps adolescent females' higher level of satisfaction derived from helping others contributes to their greater likelihood of providing spontaneous (as well as planned) help. Another factor that may have contributed to a sex difference in spontaneous helping among adolescents (but not parents) concerns the measure used to assess this form of helping behavior. One-third of the spontaneous helping behaviors included on the adolescent spontaneous helping measure are expressive, or feelings-oriented, in nature (e.g., "console a [target] who has just read a hand-written note and appears extremely upset"). Perhaps adolescent males, more so than adult males, find this type of helping sex-inappropriate and unappealing and, thus, they are less likely to report engaging in (or being willing to engage in) this form of helping. Although a detailed examination of the different types of spontaneous helping is beyond the scope of the

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present study, future research should explore sex and age differences in instrumental and expressive spontaneous helping.

Age Differences in Adolescent Helping

With regard to planned helping, there were no age differences in the adolescent participants' dichotomous helping, number of activities, or total hours of helping.[14] However, age and sex interacted to produce a significant effect for total hours such that there was no age difference for females, but older males engaged in more hours of planned helping than younger males.

Although the younger and older adolescents did not differ in their ratings of actual spontaneous helping, when anticipated helping was examined, the older adolescents indicated that they would be more likely to help spontaneously than did younger adolescents. That is, older participants expected that they would be more spontaneously helpful than did younger participants, but there were no statistically significant differences in their reports of actual spontaneous helping. There are at least two explanations for this pattern of results. First, it may reflect a genuine difference in helpfulness between these two groups of adolescents. Perhaps older adolescents have internalized the value of helpfulness to a greater extent than their younger counterparts and anticipate that they would, in fact, be more helpful if given the opportunity. Alternatively, the pattern of results may be due to social desirability norms becoming clearer in the older participants; that is, older adolescents may have been especially cognizant that you "should" help others, and they reported expecting to be more likely to do so than their younger counterparts.

Overall, then, there was little difference in helping, either planned or spontaneous, between the younger and the older adolescent samples in the present study. Thus, individuals'

helping tendencies may be formed in large part by middle adolescence. This finding is consistent with the results of a longitudinal study (Eisenberg et al., 2002) that found consistency in prosocial behavior from early childhood to early adulthood.

Effect of Target on Helping

As expected, in the adolescent sample, for both actual and anticipated spontaneous helping, adolescents indicated more helping of friends than non-friends and more helping of non-friends than strangers. In addition, in the adult sample, for both actual and anticipated spontaneous helping, mothers and fathers indicated more helping of friends and family than strangers. These findings are consistent with Amato's (1990) assertion that helping of family and friends is the most common form of spontaneous help and Eberly and Montemayor's (1999) belief that the use of a "relational perspective" to examine helping would be fruitful. Further, although previous studies have determined that children (Hartup, 1996) and adolescents (Newcomb & Bagwell, 1995) treat friends and non-friends differently, the present study demonstrated that this differential treatment extends to helping behavior as well. Given that similarity of potential helper and recipient has been demonstrated to influence spontaneous helping in adults (Platow et al., 1999), the adolescents in the present study may have perceived friends as the most similar to themselves, strangers as the least similar, and non-friends as being between these two groups in perceived similarity. Another explanation for the "target of helping" effect is that adolescents may base their decision to help spontaneously on the perceived closeness of the relationship. Thus, adolescents would be most likely to help those with whom they feel closely connected (i.e., friends), somewhat less likely to help those with whom there is not a close relationship (i.e., non-friends), and least likely to help those with whom they share no relationship (i.e., strangers). Given that we are more likely to respond positively to, and form

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relationships with, those who are similar than those who are different from ourselves (Byrne, 1961; Hunt, 1935), it is likely that the effects of similarity and closeness on helping are closely intertwined.

Correlates of Adolescents' Planned Helping

Associations with Parents' Planned Helping

When considered by sex of adolescent, mothers' planned helping was uncorrelated with all measures of both sons' and daughters' planned helping used in the present study. Likewise, no measure of mothers' planned helping was significantly related to adolescents' planned helping in the multiple regression analyses. When considered by age group of adolescent, however, there was an association between mothers' dichotomous helping and their older adolescents' number of planned helping activities and dichotomous helping.

In contrast, fathers' planned helping was associated with adolescents' planned helping when analyzed by adolescent sex and when analyzed by adolescent age group. When considered by adolescent sex, (1) fathers' dichotomous planned helping was positively correlated with both sons' and daughters' total number of activities and dichotomous helping, and (2) fathers' total number of planned helping activities was related to sons' total number of planned helping activities. Like mothers, fathers' dichotomous planned helping was associated with their older adolescents' number of planned helping activities and dichotomous helping. There was also a positive correlation between fathers' number of planned helping activities and older adolescents' dichotomous volunteering and a negative correlation between fathers' total number of planned helping hours and younger adolescents' dichotomous helping.

When considered with other, potential predictors in the multiple regression analyses, fathers' planned helping (specifically, their dichotomous helping) was significantly related to all

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measures of their children's planned helping. Specifically, compared to fathers who had never volunteered, fathers who had ever volunteered were more likely to have adolescents who (1) had ever volunteered, (2) engaged in more activities, and (3) engaged in more hours of planned helping. Further, based on the regression analyses, daughters engaged in more planned helping activities if their fathers had volunteered than if their fathers had not.

Taken together, the pattern of relationships between parents' planned helping and their adolescents' planned helping was more robust for fathers than for mothers, though like fathers, mothers' planned helping was associated with their older adolescents' planned helping. The reason that fathers' planned helping was so strongly related to their children's planned helping is unclear. Perhaps adolescents expect their mothers to be more helpful than their fathers (a belief consistent with the finding that 91% of mothers had engaged in planned helping compared to 70% of fathers) such that when fathers do engage in planned helping, it sets a particularly strong example for their adolescent children. These helpful fathers, in addition to being especially salient models of helping, may encourage their children to engage in planned helping of others and may even include their children in the planned helping in which they themselves engage.

When analyzed by age group, both mothers' and fathers' planned helping was associated with their older adolescents' planned helping. Perhaps the planned helping of mothers and fathers differs qualitatively such that the kinds of helping selected by fathers may be ones that are engaged in concurrently by their early and middle adolescent offspring while mothers volunteer in ways that limit early adolescent participation. Alternatively, sons and daughters may become relatively more independent in middle adolescence, such that they are able to have more control over the planned helping activities in which they engage. Early adolescents, for example, are not old enough to have drivers' licenses and would be more dependent on their

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parents to transport them to planned helping sites than would middle adolescents. Thus, an adolescent's tendency to engage in planned helping activities like his or her mother and/or father may have been more apparent in the older than the younger sample.

Associations with Perception of Peer Group Helping Norms

Perception of peer group helping norms was correlated with younger and older adolescents' number of planned helping activities and dichotomous planned helping (see Table 7). However, in the multiple regression analyses, there was no consistent relationship between helping norms and planned helping.[15] Although not a major focus of the present study, it is noteworthy that the relationship between helping norms and planned helping was significant in the bivariate correlations but not when additional predictors were considered. Perhaps, then, the association of peer group helping norms and planned helping is rather weak, and the adolescents' tendency to engage in planned helping is more clearly associated with other variables such as their sex and parents' planned helping.

Correlates of Spontaneous helping

Associations with Parents' Spontaneous Helping

A significant positive correlation was found between mothers' and sons' actual spontaneous helping of friends.[16] Also, the multiple regression analyses revealed a positive relationship between mothers' actual helping of friends/family and their adolescents' actual spontaneous helping of friends. [17]

Fathers' anticipated helping of friends/family was significantly correlated with (1) their daughters' spontaneous helping of friends, non-friends, and strangers and (2) their older adolescents anticipated spontaneous helping of strangers. The multiple regression analyses also supported the importance of fathers' spontaneous helping in predicting adolescents' spontaneous

helping as fathers' anticipated helping of friends and family was significantly related to adolescents' anticipated helping of friends (in all but the last step of the regression) and strangers.

The extant literature on modeling has largely ignored the potential differential influence of mothers and fathers on their adolescent sons' and daughters' behaviors, and there were no explicit predictions in the present study concerning the interaction of sex of parent and sex of child on spontaneous helping. Thus, the present study's findings regarding the relation between mothers' and fathers' spontaneous helping and their adolescents' spontaneous helping should be taken as preliminary. Nevertheless, the results of the present study suggest that mothers' actual helping of friends and family may be an important predictor of their adolescents' spontaneous helping of their friends. Why fathers, who appear to be influential in predicting their adolescents' (actual) planned helping, were not influential in predicting their adolescents' actual spontaneous helping is unknown. Perhaps the adolescents' helping of friends, with whom they tend to share relatively close relationships, is more strongly related to mothers' than fathers' helping because females, who are believed to be more nurturing than males (Williams & Best, 1990), are the more salient model for their children for this form of helping.

It is worth noting that significant relationships between mothers' and adolescents' helping always involved *actual* spontaneous helping, whereas significant relationships between fathers' and adolescents' helping always involved *anticipated* spontaneous helping. The present study's assessment of anticipated helping asked participants whether they believed they would engage in particular acts of helping. Perhaps helpful fathers are important in creating general prosocial beliefs about helping spontaneously. An alternative explanation is that, like mothers, fathers' actual spontaneous helping may be important for predicting their children's spontaneous

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helping, but the specific examples of spontaneous helping used in the present study obscured this relationship. Although an attempt to create gender neutral spontaneous helping examples was made, the possibility exists that the particular examples selected for use in the present study were biased toward the types of helping for which mothers and adolescents are most closely associated. As noted earlier, one-third of the helping examples on the adolescent spontaneous helping measure were expressive, or feelings-oriented (and one-quarter of the examples on the parents' spontaneous helping measure were expressive). Given that the male sex role encourages engaging in instrumental, rather than expressive, helping (Belansky & Boggiano, 1994), perhaps correlations between fathers' and adolescents' actual helping were attenuated because fathers were relatively unlikely to engage in these nurturing types of helping. Additional research is needed to determine whether the relationship between parents' and adolescents' spontaneous helping is influenced by the type of helping being considered.

Finally, it is interesting that neither fathers' nor mothers' spontaneous helping of strangers was significantly related to their children's spontaneous helping. Instead, it was parents' spontaneous helping of family and friends that was most strongly associated with their children's actual (for mothers) and anticipated (for fathers) helping. This finding may be due to the relatively low likelihood of adolescents observing their parents spontaneously helping a stranger, thus reducing the chance that this form of modeling could have an effect on their adolescents' behavior. Whereas most prior helping research has examined strangers assisting strangers (e.g., Rushton, 1982), parents' helping of strangers was generally unrelated to adolescent helping. Instead, parents' modeling of spontaneous helping of family/friends appears to be an important predictor of their adolescents' spontaneous helping.

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Perceptions of Group Helping Norms

A group's norms convey expectations for individual group members' behavior (Oliner & Oliner, 1995). Because the peer group becomes an increasingly important source of information beginning in adolescence (Hartup, 1979), it was expected that adolescents' perceptions of their peer group helping norms would be associated with their helping behavior. Although the regression analyses revealed no consistent relationship between perceptions of group helping norms and actual spontaneous helping, adolescents' perceptions of peer group helping norms were related to anticipated spontaneous helping of both friends and non-friends (using data from both mothers and fathers). The correlational results, which examined the relationship between group helping norms and spontaneous helping based on adolescent sex and age, revealed a somewhat more complex pattern. For example, perceptions of peer group helping norms were consistently related to spontaneous helping for males. Compared to males reporting weak group norms of helping, males reporting strong group norms of helping (1) were more likely to have actually helped friends, non-friends, and strangers and (2) reported being more willing to help each of these targets in the future. In contrast to the consistent relationship between group norms and spontaneous helping for adolescent males, the relationship between helping norms and spontaneous helping for adolescent females was less robust and limited to "would you" ratings. Specifically, whereas females reporting strong group norms of helping anticipated being more likely to help friends and non-friends than those with weak group helping norms, the correlations between group helping norms and actual helping of these targets were not significant. It is important to note, however, that there may have been a range restriction in the females' data, as females were "on the ceiling" for helping norms (M = 6.74 out of 7, SD = .62, vs. M = 5.95, SD

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= 1.29, for males). Therefore, the relatively narrow range of scores on this variable for females likely attenuated the correlation between perceptions of group helping norms and spontaneous helping for females.

As with adolescent sex, the pattern of correlations by age group between perceptions of group helping norms and spontaneous helping was complex. Correlations were significant between group helping norms and both older and younger adolescents' *anticipated* helping of friends, non-friends, and strangers. Younger adolescents' group helping norms were, likewise, significantly related with *actual* spontaneous helping of friends, non-friends, and strangers. However, older adolescents' helping norms were significant predictors of actual spontaneous helping only for non-friends. Group helping norms, then, were associated with both younger and older male and female adolescents' spontaneous helping, although this pattern was relatively weak for the older adolescents' actual spontaneous helping.

Group Identification

There were no significant relationships between group identification and actual spontaneous helping of any target for younger or older adolescents. However, group identification was associated with anticipated helping of friends and non-friends (in both older and younger adolescents) and strangers (in older adolescents only). This pattern of results suggests that group identification's association with anticipated helping is quite robust, but it may be more "generalized" in older boys and girls than younger boys and girls.

Why might adolescents with a strong group identification expect to be helpful to friends and others? Adolescents who reported strong feelings of group identification may feel a general sense of connectedness, and perhaps empathy, toward others. These individuals, then, might be especially likely to seek out a group. Their feeling of connectedness and concern for others

might also have been bolstered as a result of being a group member. This explanation is supported by the finding of a strong association between individuals' reports of an emotional connection with others (i.e., empathy) and their tendency to engage in prosocial behavior (Batson & Coke, 1981). Because empathy, and the relationship between empathy and helping, grows stronger throughout childhood and adolescence (Eisenberg, 1986; Eisenberg & Miller, 1987), older adolescents reporting strong group identification might be more empathic, and show more generalization of their desire to help others (including strangers), than younger adolescents.

Review of Major Hypotheses

Now that the implications of the present study's overall findings have been addressed, the discussion now turns to a consideration of the five hypotheses that were tested.

H_1: Parents' modeling of planned helping was expected to be a significant predictor of adolescents' planned helping.

Previous research has indicated that parents' modeling of planned helping is related to their offspring's planned helping in both adolescence (Clary & Miller, 1986; Stukas et al., 1999) and adulthood (London, 1970; Oliner & Oliner, 1988). The present study found that fathers' planned helping was strongly related to adolescent helping. For example, fathers' total number of planned helping activities was correlated with sons' total number of planned helping activities, and fathers' dichotomous planned helping was correlated with sons' and daughters' total number of activities and dichotomous helping as well as older adolescents' number of planned helping activities and dichotomous planned helping. The multiple regression analyses (which considered sons and daughters together) revealed that fathers' dichotomous planned helping was related to all three adolescent measures of planned helping.

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In contrast, the relationship between mothers' and adolescents' planned helping was less robust. When considered by sex, mothers' planned helping was unrelated with sons' and daughters' helping in the bivariate correlations and in the multiple regressions. When considered by age, however, there was a positive relationship between mothers' dichotomous helping and their older adolescents' number of planned helping activities and dichotomous helping.

In sum, as predicted, parents' and adolescents' planned helping were found to be related. The association was more robust for fathers and adolescents than for mothers and adolescents, though when considered by age group, fathers' and mothers' planned helping were both related to older adolescents' planned helping.

As discussed earlier, perhaps the types of planned helping in which mothers engage is not particularly salient for younger adolescents, while older adolescents are more likely than younger adolescents to both notice and imitate their mothers. In contrast, helpful fathers may actively encourage their older and younger children to volunteer and, perhaps, to join them in volunteering. Yet another explanation is that older adolescents have more freedom to make choices about activities in which they engage due to a decreased dependence on their parents. For example, many middle adolescents have drivers' licenses and would be able to travel to volunteer sites (or, importantly, choose to engage in activities other than volunteering) without the assistance of their parents. Thus, older adolescents' planned helping behaviors might be more strongly related to their mothers' (and fathers') planned helping than the planned helping behaviors of younger adolescents.

Generally, then, the finding of the present study that parents' and adolescents' planned helping are related was consistent with earlier research. However, previously ignored relationships examined in the present study (i.e., differential patterns between parents' and early

vs. middle adolescents' helping, and the effect of the sex of parent and adolescent) expand our understanding of the complex relationship between parents' and adolescents' planned helping.

H_2: *Parents' modeling of spontaneous helping of strangers was expected to be a significant predictor of adolescents' spontaneous helping of strangers.*

Previous studies that have examined the effect of modeling spontaneous helping on spontaneous helping have typically involved young children, used strangers as models, and involved the helping of strangers (e.g., Midlarsky & Bryan, 1972; Rosenhan & White, 1967; Rushton, 1975, 1976, 1982). These results led to the prediction that adolescents in the present study who had parents who engaged in spontaneous helping of strangers would themselves be more likely to help strangers. The anticipated relationship was not found.

However, there were some relationships between parents' modeling of family and friends and adolescents' spontaneous helping. For mothers, actual past spontaneous helping of family and friends was correlated with boys' actual spontaneous helping of their friends. Regression analyses also revealed a relationship between mothers' actual helping of family and friends and adolescents' actual helping of friends. For fathers, anticipated helping of family and friends was correlated with girls' anticipated helping of friends, non-friends, and strangers. The regression that included fathers' helping of family and friends was not significant when all variables had entered the equation, but when fathers' helping of friends and family entered the regression, there was a significant relationship between fathers' helping of family and friends and adolescents' helping of friends. In sum, parents' spontaneous helping of family and friends was associated with adolescents' spontaneous helping. The reason why this relationship was significant for mothers' actual spontaneous helping and fathers' anticipated spontaneous helping is unknown.

Earlier research may have used strangers as models (and targets) out of convenience. The present study suggests, though, that previous researchers may have been too limited in their approach. Indeed, the present study revealed that parents' helping of family and friends (but not parents' helping of strangers) was related to their adolescents' behavior. As suggested earlier, adolescents may have the opportunity to observe their parents' helping of family and friends more than their helping of strangers and, thus, the parents' modeling of the helping of strangers did not relate to their adolescents' spontaneous helping as predicted.

> *H_3: The extent to which adolescents' friendship groups are cohesive was predicted to affect (spontaneous) helping of friends and non-friends such that cohesiveness would be positively related to helping friends but inversely related to helping non-friends.*

Hypothesis 3 was based on the assumption that strong identification as a member of a group would be concomitant with an ingroup bias that would be reflected by bestowing more benefits (i.e., helping) to group members and fewer benefits to non-group members. Consistent with the hypothesis, group identification was related to (anticipated) spontaneous helping of friends. However, it was also positively related to anticipated helping of non-friends and (for older adolescents only) strangers. Further, there was no relationship between group identification and the actual helping of any target.

The correlational nature of the data in the present study makes interpretation of this pattern difficult. It is possible, for example, that developing a strong group identification causes one to anticipate being more helpful. Conversely, individuals who generally construe themselves to be helpful may feel either more empathy or stronger feelings of connectedness toward others and, as a result, report having relatively stronger feelings of group identification. Over time, this feeling of empathy may "spread" to those who are not in one's own ingroup.

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Feeling strongly that one is an integral member of one's friendship group may not reflect group members' separation from, or beliefs about superiority regarding, other groups. Recall that the only measure of group cohesiveness with adequate internal reliability focused on group connectedness and pride. Participants with high values of group identification may be more helpful in general; clearly they believed that helping was important to their group as there was a significant correlation between group ID and group helping norms ($r = .35$, $p < .001$). This association may explain why anticipated helping extended beyond the group (i.e., friends) to non-friends and even to strangers.

> H_4: *Group norms of helping were expected to be positively associated with spontaneous helping of friends, but they were also expected to moderate the relationship between cohesiveness and helping of friends.*

In general, norms give us instructions for how to act in a given situation (Oliner & Oliner, 1995). When related to helping, then, we should expect that individuals who perceive strong norms of helping among their friends to be more likely to help their friends than would individuals who perceive that group helping norms are weak. However, norms were expected to dictate behavior more strongly for individuals who felt they identified strongly with their group. Thus, group cohesiveness was expected to be related more strongly to spontaneous helping of friends when adolescents perceived that there were strong group helping norms.

The analyses of the data that tested these predictions revealed a complex pattern. When computed by sex, strong group helping norms were correlated with males' actual and anticipated helping of friends, non-friends, and strangers. For females, strong group helping norms were associated with their anticipated helping of friends and non-friends. When computed by age group, younger adolescents' group helping norms were correlated with both their actual and their

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anticipated helping of friends, non-friends, and strangers, and older adolescents' group helping norms were correlated with their anticipated helping of friends, non-friends, and strangers as well as their actual helping of non-friends. In the regression analyses, norms were associated with anticipated, but not actual, helping of friends and non-friends.[18]

Thus, group helping norms seem to be related to the actual helping of boys and younger adolescents. Group helping norms were related to the anticipated helping of both younger and older boys and girls. The present data do not allow a definitive explanation for the different patterns found when actual and anticipated helping were considered. As discussed earlier, though, boys are generally less helpful than girls. Perhaps being in a group with a strong norm of helpfulness may have more of an effect on boys' prosocial behavior than on the prosocial behavior of relatively more helpful girls. Similarly, being in a helpful group may have a stronger influence on younger than older adolescents' actual prosocial behaviors.

Although not considered in this hypothesis, it is noteworthy that the perception of one's group helping norms was related to spontaneous helping of all targets, not just friends. Helpful adolescents may seek out groups with strong helping norms, and this general pattern of helpfulness may extend to other targets. Alternatively, being in a group with strong helping norms may actually promote a broad sense of helpfulness. Similar to the pattern found in which group identification was related to helping outside the group, the internalization of group helping norms may result in the "spreading" of concern to non-friends and strangers.

> H_5: The relative influence of parents and peers on adolescent planned and spontaneous helping was expected to differ as a function of the adolescent's age. Specifically, parents were expected to have relatively more influence on the younger age group, whereas peers were expected to have relatively more influence on the older age group.

Past research has suggested that adolescents use peers as sources of information more frequently than do children (Hartup, 1979), and this reliance on peers continues to increase throughout adolescence (Williamson, 1977). Given that peers are important sources of information regarding prosocial behaviors (Kusá, 1996), it was expected that the helping of middle adolescent participants in the present study would be more strongly related to their peers' attitudes, and less strongly related to their parents' behaviors, than would the helping of the (younger) early adolescent participants.

The only finding that was consistent with this prediction was that adolescents' group identification was associated more strongly with older than younger boys' and girls' anticipated helping. However, this hypothesis was generally unsupported as age differences were either not found (i.e., the relationship was similar for both age groups) or, in some cases, opposite of the predicted direction.

It was expected that the peer-related variables group identification and perceptions of group helping norms would be more strongly related to adolescents' helping in older than younger adolescents. Two of these relationships revealed no age-related difference, as perceptions of group helping norms were a significant correlate of (1) number of planned helping activities and dichotomous helping, and (2) anticipated spontaneous helping for both younger and older adolescents. Furthermore, the direction of two of the relationships was opposite of the direction predicted. Specifically, group identification was related to planned helping only in younger adolescents, and the perception of group helping norms was related to actual spontaneous helping (friends, non-friends, and strangers) in younger adolescents but was less consistently related to older adolescent's helping (i.e., only for non-friends).

Parent-related variables were expected to be more strongly related to younger than older adolescents' helping behavior. However, both parents' dichotomous planned helping was associated with their older adolescents' dichotomous planned helping, and there was no clear age pattern for either actual or anticipated spontaneous helping.

Generally, then, it appears that age does not moderate the relationship between parent or peer influence and adolescent helping as was expected. Particularly with respect to planned helping, the adolescent's age may obscure the relationship with parents' helping because it may take time for adolescents to develop either the maturity or the ability to independently engage in the kinds of planned helping modeled by parents. Thus, parents' helping might have a strong effect on younger adolescents' desire to engage in planned helping, but a lack of ability (e.g., to build a house with Habitat for Humanity) might reduce the likelihood that a younger adolescent is capable of imitating his or her parents' planned helping behavior. With respect to peers, it is possible that the age groups selected for the present study were too old to reveal the onset of peer influence. That is, if peer influence is already well established by age 12 or 13 (i.e., the approximate age of the early adolescents in the present study), the particular sample used in this study would have missed the emergence of peer influence on adolescents' helping. Although there were few age differences in the absolute amount of helping or the relationship between helping behavior and peer- or parent-related variables, it was, nonetheless, important to have included this variable in the study to help understand the helping process across adolescence and to point out the need to include even younger children in subsequent investigations.

Conclusion

Thus far, the discussion has addressed implications of specific findings section by section. Now, it turns to a more integrative approach in which broader themes of the dissertation are addressed and future research avenues are proposed.

Contributions of the Present Study

Several potential differences in helping were examined in the present study. There was no clear age-related helping pattern, though there was a sex difference (females were generally more helpful than males) and an effect of target (friends were helped more than non-friends, who were in turn helped more than strangers). Interestingly, both "sex" and "target" patterns found for the adolescents parallel results found for the participating parents. Of course, the nature of the data collected in present study do not allow a determination of the extent to which adolescents acquired these tendencies via social learning from their parents or via the general learning of sex-roles and norms regarding the helping of those who are close or distant. Future researchers may wish to examine whether sex difference patterns observed in adolescents, as well as differential helping of targets of varying relationship to the helper, are related to the specific patterns of helping observed within the home. In this way, we may determine whether the pattern observed in the present study is derived from the home environment or more generally from society. Additionally, future research should include younger participants to determine the age and circumstances under which the patterns observed in the present study emerge. Such a study with younger children might examine not only when sex differences and relationship-to-target differences in helping emerge, but also the mechanism by which adolescents' helping mirrors the helping of their parents'.

Although an understanding of individual differences in helping as well as the effect of target on helping help expand upon our knowledge of prosocial behavior, central to this study were the relative roles of parents and peers on adolescents' planned and spontaneous helping.

Parents' behavior was associated with both planned and spontaneous helping of adolescents. Fathers' planned helping was generally more strongly related to their adolescents' planned helping than was mothers' planned helping, perhaps because fathers more than mothers engage in planned helping that is salient or interesting to their offspring. Additionally, fathers might be especially likely to encourage their adolescents to volunteer with them. However, when analyzed by age group, both mothers' and fathers' planned helping were related to their older adolescents' planned helping. This may be because older adolescents are relatively more independent and can finally imitate the helping they observed in their parents when they were younger.

Parents' spontaneous helping of friends and family was consistently related to adolescents' spontaneous helping. This relationship was present both for mothers (actual helping) and fathers (anticipated helping). It is interesting that for (actual) planned helping, the relationship between fathers and adolescent helping was more robust than it was for mothers, but for actual spontaneous helping, the helping of mothers was more strongly related to their adolescents' helping. The specific acts of helping associated with planned and spontaneous helping may have contributed to this difference. Mothers' spontaneous helping of family and friends may be more expressive, or feelings-oriented, than the spontaneous helping of fathers. Additionally, adolescents may have observed or experienced this type of help more from mothers than from fathers, such that mothers' spontaneous helping is related more strongly with their own actual spontaneous helping. In contrast, planned helping, especially the types of helping

engaged in by fathers, may be more instrumental, or action-oriented, and directed at strangers. From infancy through at least middle childhood, fathers engage in more physical forms of play with their children, causing children to seek out fathers more so than mothers when they desire to play (Russell & Russell, 1987; Yogman et al., 1977, as cited in Bukatko & Daehler, 2004). Perhaps, parallel to these findings, fathers more than mothers model and engage their adolescents in an interesting, action-oriented form of planned helping.

Prior research has typically focused on the helping of strangers. In the present study, though, parents' modeling of the spontaneous helping of strangers was not found to be an important predictor of their children's helping. Instead, parents' helping of family and friends had a consistent relationship with their adolescents' helping. As discussed earlier, opportunities to help family and friends may be more ubiquitous than opportunities to help strangers, increasing the likelihood that adolescents might observe and experience this form of helping from their parents. In contrast, adolescents may have relatively few opportunities to observe their parents helping strangers in a spontaneous manner. Whatever the mechanism by which parent and adolescent spontaneous helping are related, parents' helpfulness toward their friends and families seems to have "spread" beyond adolescents' helping of friends. Specifically, parents' helping of friends and family was related not only to their adolescents' helping of friends, but also to the helping of non-friends and strangers as well. Parents' helping of family and friends, then, may serve as an important and deeply internalized role model for their adolescents.

In contrast to parental variables' relationship with both adolescent planned and spontaneous helping, peer variables (i.e., group helping norms and group identification) were more consistently related to spontaneous than planned helping. As discussed earlier, it was

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expected that group identification and perceptions of group helping norms would be related to adolescents' spontaneous helping (especially of friends) because all of the spontaneous helping assessed in the present study focused on targets who were either members or non-members of the adolescents' friendship group. That is, the peer-related variables were selected to be relevant to differentiating between ingroup and outgroup members, and the types of spontaneous helping considered here related directly to actual or anticipated helping of ingroup or outgroup members. It is impossible, of course, to determine the causal direction of such relationships given a correlational design. Especially helpful adolescents may seek out groups with strong helping norms and groups with which they feel a strong sense of identification. Conversely, it is possible that being a member of a group with strong helping norms and a strong sense of interconnection may encourage both concern for others and, ultimately, helping. Yet another possibility is that a third variable, such as the adolescents' tendency to empathize, may be linked with both the peer-related variables studied here (i.e., empathic adolescents may seek a connection with sensitive and helpful others) and the tendency to spontaneously assist peers.

Given that the target of planned helping examined in the present study was limited to strangers, it was not expected that variables like group identification and group helping norms would be strongly related to planned helping. Nonetheless, as outlined earlier, there were some relationships uncovered between peer variables and adolescents' planned helping. Expanding slightly upon earlier discussion, adolescents who are helpful (in both planned and spontaneous ways) may seek to join cohesive peer groups that have strong helping norms. Alternately, being a member of a cohesive peer group that has a strong norm of helping may promote prosocial behavior in adolescents (in both planned and spontaneous ways). Additional research, perhaps

employing a longitudinal design, is needed to establish the causal direction among these (and other related) variables.

Study Limitations and Suggestions for Future Research

Although care was taken to design a methodologically sound study, every study has some limitations. It is to the limitations of the present study, as well as ways that future research might address them, that the discussion now turns.

One restriction of the present study, discussed earlier, is that the data collected were correlational rather than based on a true experiment, so a precise determination of the cause of specific adolescent helping behaviors is impossible. For example, given that prior research has found that adolescents choose friends with values similar to their own (Hartup, 1979; Van Lier, Vitaro, Wanner, Vuijk, & Crijnen, 2005), adolescent participants in the present study may have chosen friendship groups that mirror their own norms of helping. Thus, rather than peer group helping norms influencing the individual's helping tendencies, pre-existing prosocial tendencies may have drawn the individual to a group with similarly strong norms of group helping. This peer choice, then, may come from prosocial values or modeling of parents or other family members. It is both logistically impossible and ethically questionable for researchers to experimentally manipulate parents' planned and spontaneous helping or helping norms within peer groups to experimentally test the hypotheses outlined here. Nonetheless, alternative explanations may be ruled out or supported by employing large-sample, multivariate designs.

Another limitation of the present study is that a cross-sectional, rather than a longitudinal, design was used. There are problems with cross-sectional designs (cf., Bukatko & Daehler, 2004, Chapter 2) that should cause the reader to accept only cautiously the conclusions presented here. One such problem is that intervening events experienced by the younger age cohort (but

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not the older group when they themselves were younger) may reduce the validity of the results. For example, a time lag in collecting the data may have had unintended consequences. In the present study, the middle adolescent sample's data were collected before Hurricane Katrina devastated much of the United States' Gulf Coast in August of 2005, but much of the data from the early adolescent sample were collected after the event. Given that the Red Cross saw a 50% increase in volunteers after Hurricane Katrina (Bynum, 2006), it is possible that some of the early adolescents' planned helping was spurred by this event. Even if participants did not help in ways that would directly benefit Hurricane Katrina victims, the number of examples of volunteerism featured on news programs might have increased helping generally. Fortunately, the relatively small age gap between the younger and older groups and the small number of age-related differences in helping, reduce the risk that very large cohort effects would explain the results found. Nonetheless, future researchers should use longitudinal or sequential designs to try to combat the weaknesses of the cross sectional approach chosen for this study.

Participants in the present study were relatively homogeneous. They were primarily drawn from White, college-educated, two-parent families. Future researchers should examine more diverse participants to determine whether similar patterns of relationships would be found in broader samples of parents and adolescents.

As an initial study in this area, potential predictors were necessarily limited. As noted earlier, the present study focused on parents' behavior and peers' norms and values. Parents' behaviors rather than parents' attitudes or prosocial exhortations were selected for study not only because of research that has found relationships between parents' and their offsprings' helping (e.g., Oliner & Oliner, 1988) but because of findings that children are more likely to help a needy other if they have earlier observed a helpful model than if they have instead been exhorted to

help (Bryan & Walbek, 1970). However, a variety of parenting practices beyond modeling (e.g., authoritative parenting, inductive discipline), and parental attitudes (e.g., attitudes toward helping generally or toward members of in- and outgroups) may be related to their children's helping. Likewise, it is possible that some parents discuss the importance of helping others, and this parenting behavior may have a powerful impact on adolescents' likelihood of helping others.

Because the primary focus of this study was adolescents', rather than younger children's, helping, and because of the increasing importance of peers' attitudes and norms throughout adolescence (Hartup, 1979; Williamson, 1977), the primary peer-related variables studied were perceptions of group helping norms (i.e., beliefs about peers' attitudes) and group identification. Future research might examine other peer-related variables that have been associated with children's and adolescents' prosocial behavior. For example, in addition to the predictors studied here, helping may be strongly related to peer group popularity (Attili et al., 1997; Bonn & Kruger, 1996), peer acceptance (Schonert-Reichl, 1999; Wentzel & Caldwell, 1997; Wentzel & McNamara, 1999), and perhaps other variables that have previously not been considered. Peer modeling of antisocial behaviors like smoking has been shown to have an important influence of adolescent behavior above and beyond the impact of parenting characteristics (Mewse, Eiser, Slater, & Lea, 2004). Therefore, we might expect peer modeling of prosocial behaviors (both planned and unplanned) to be related to adolescents' helping as well.

Beyond merely considering other predictors of helping behavior, it may be fruitful to examine alternative methods of assessing adolescents' helping behavior. Whereas the present study relied exclusively on self-reports of planned helping and (actual and anticipated) spontaneous helping, future research should consider multiple ratings of adolescent helping by peers, parents, and teachers. An alternative approach to addressing the exclusive use of self-

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reports might be to study spontaneous helping in contrived situations. Another approach might be a more qualitative examination of adolescents' motives for planned and spontaneous helping, perhaps derived from interviews with adolescents identified as helpers.

The number of spontaneous helping behaviors that was examined was limited by a desire to create parallel forms for the adolescent and adult participants. That is, because all of the items on the Parents' Spontaneous Helping Measure also appeared on the Adolescents' Spontaneous Helping Measure, any examples of spontaneous helping that might be unique to one group or the other was excluded. However, it is likely that in exchange for methodological rigor, some amount of ecological validity was lost. Specifically, as addressed earlier, adolescents' actual spontaneous helping is likely to be more expressive than many of the examples that were included on the Spontaneous Helping Measure (recall that only about one-third of the helping examples appear to be predominantly expressive). Congruent with this observation, other researchers have suggested that prosocial behavior is more often relational (i.e., associated with forming or sustaining relationships) than instrumental in both children (Greener & Crick, 1999) and adolescents (Bergin, Talley, & Hamer, 2003). In future research, it will be important to incorporate a broad range of ecologically valid prosocial behaviors. To this end, examining planned and spontaneous helping of friends, family members, and others may also provide a more complete picture of the antecedents of adolescents' prosocial behavior.

Although both actual and anticipated spontaneous helping were considered, only actual planned helping was included in the present study. Both actual and anticipated spontaneous helping were included because it is possible that participants may not have had the opportunity to engage in some of the specific acts described on the Spontaneous Helping Measure. Because planned helping is sought out by the helper and, by definition, planned in advance, it was

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assumed that all adolescent participants had an equal chance to engage in whatever planned helping opportunities exist. However, some participants might be interested and willing to engage in particular types of planned helping but they either (1) do not know these opportunities exist or (2) do know who to contact to initiate their volunteering. Thus, assessing anticipated planned helping (as well as actual planned helping) in future research may reveal additional information about parental and peer relationships with adolescent planned helping.

Finally, other than the finding that older boys engaged in more total hours of planned helping than younger boys, there were no significant age differences revealed in planned or actual spontaneous helping in the present study. Because only early and middle adolescents were included as participants, it is impossible to determine the age at which children begin to increase their spontaneous helping of friends, non-friends, nad strangers to the levels seen here. As discussed earlier, future research might incorporate younger children than those examined here to address this issue as well as to determine the age at which the differential helping of various targets becomes commonplace.

Concluding Statement

Previously, individual studies have examined many of the variables considered here. However, the present study is the first to explore the relationships among them simultaneously. As a result of this approach, a great deal has been learned about (1) sex differences in planned and spontaneous helping, (2) the effects of potential helpers' relationship to the target on the likelihood that they will provide help, (3) the role of parent and peer variables on adolescents' planned and spontaneous helping, (4) how mothers and fathers may play different roles in fostering their sons' and daughters' planned and spontaneous helping, and (5) the importance of parents' spontaneous helping of family and friends in predicting their adolescents' spontaneous

helping. By studying adolescent helping broadly, the interrelationships among these variables

became clearer as specific patterns among them emerged. Of course, a great deal more research

is necessary, but the examination of adolescent helping provided here should serve as a strong

base and as a starting point for future programs of research.

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APPENDIX A: ADOLESCENT DEMOGRAPHIC SHEET

Name: _____

Sex: Male   Female
(please circle one)

Age: _____

Grade in School: _____

Race: ____ African-American/Black
(please check one)
____ Asian

____ Caucasian/White

____ Hispanic

____ Native American

____ Other _____

How many brothers and
sisters do you have? _____

Appendix B: Planned Helping Measure

Volunteering Activity	Organization (Write "none" if the volunteering was not associated with an organization.)	Avg. amt. of time spent per volunteering session	Number of times you volunteered	Duration of Volunteering (use scale provided)	Primary Reason for Helping		
						Instrumental	Expressive
							Use Scale Provided
Confirming Blood Donors' Appointments	Red Cross	5 hours	16 times	4		4	2
Sing Christmas carols at a nursing home	Church Group	2 hours	4 times	5		2	5
		___ hours	___ times				
		___ hours	___ times				
		___ hours	___ times				
		___ hours	___ times				
		___ hours	___ times				
		___ hours	___ times				
		___ hours	___ times				
		___ hours	___ times				

APPENDIX C: ADOLESCENT SPONTANEOUS HELPING MEASURE

For the purposes of this survey, please think only about friends, non-friends, and strangers who are about your age (no more than two or three years older or younger). Use the following definitions of friend, non-friend, and stranger.

- Friend: A person you know, like, and trust

- Non-Friends: Non-friends are people you do not consider friends but who are also not strangers. You may have positive, neutral, or even negative feelings about them. This category includes everyone you know who is not considered a friend.

- Strangers: This group includes everyone about your age whom you have never seen before.

This questionnaire briefly describes several examples of helping. We would like you to make two responses. First, have you ever engaged in this behavior in the past? Circle the appropriate answer to the left of each example of helping. Second, think about how likely you would be to engage in each helping behavior if you found yourself in that situation. For each example of helping, please respond to the following question: **If the situation ever presented itself, how likely would you be to engage in this behavior?** Use the following scale to respond, and circle the number to the right of each statement that best reflects your honest opinion.

Not At All Likely			Somewhat Likely			Very Likely
1	2	3	4	5	6	7

Have you ever engaged in this behavior?				How likely would you be to engage in this behavior?
Yes No	1.	Help a [target] pick up something he or she has dropped (e.g., a bag, backpack, or notebook).		1 2 3 4 5 6 7
Yes No	2.	Share your umbrella with a [target]during a sudden rainstorm.		1 2 3 4 5 6 7
Yes No	3.	Open the door (or hold the door open) for a [target]whose hands are full.		1 2 3 4 5 6 7
Yes No	4.	Help a [target] to his/her feet after he/she stumbled and has fallen.		1 2 3 4 5 6 7
Yes No	5.	Carry a stack of library books for a [target] that s/he is about to drop.		1 2 3 4 5 6 7
Yes No	6.	Help a [target] look for a lost pet.		1 2 3 4 5 6 7
Yes No	7.	Console a [target] who has just read a hand-written note and appears extremely upset.		1 2 3 4 5 6 7
Yes No	8.	Comfort a [target] who has just been teased and laughed at by a bully.		1 2 3 4 5 6 7
Yes No	9.	Sit and talk with a [target] who is alone and looks very sad.		1 2 3 4 5 6 7

Note. In the version seen by participants, "[target]" was replaced by the underlined word "friend," "non-friend," or "stranger." The order was counter-balanced across participants.

APPENDIX D: GROUP COHESIVENESS MEASURE

For the purposes of this survey, a "group of friends" is defined as a set of three or more friends who all spend time together. That is, two people would not be a group, and neither would a set of independent friends who do not spend time together.

Based on the definition given above, do you have a group of friends? Yes   No (circle one)

If you answered "yes," please answer the remaining questions. If you answered "no," please put your pen or pencil down and wait until others have finished.

For the next six questions on this survey, think about your group of friends (if you have more than one group of friends, think about your "most important" group of friends). Use the following scale to answer the questions, and circle the number to the right of each question that best matches your opinion.

Not at All			Somewhat			Very Much
1	2	3	4	5	6	7

To what extent do the individuals in your group of friends feel . . .

    1. that it is important to belong to this group?   1 2 3 4 5 6 7

    2. like members of this group?   1 2 3 4 5 6 7

    3. connected to one another?   1 2 3 4 5 6 7

    4. important to the group?   1 2 3 4 5 6 7

    5. happy to be members of this group?   1 2 3 4 5 6 7

    6. proud to be part of this group?   1 2 3 4 5 6 7

(Continued on next page)

For the next six statements, continue thinking about your group of friends. Using the following scale, please indicate the extent to which you agree or disagree with each statement by circling the number to the right of each statement that best matches your opinion.

Strongly Disagree			Neither Agree Nor Disagree				Strongly Agree
1	2	3	4	5		6	7

7. I feel that the people in my group of friends are different from other kids my age (Distinctiveness)   1 2 3 4 5 6 7

8. In most ways, the friends in my group are pretty much like other kids in school (Distinctiveness, [-])   1 2 3 4 5 6 7

9. The friends in my group make a point not to have too much social contact with people who aren't in our group of friends (Rejection of non-ingroup)   1 2 3 4 5 6 7

10. I talk to lots of different people, even if they're not in my group of friends (Rejection of non-ingroup, [-])   1 2 3 4 5 6 7

11. If someone we don't know very well wants to do something with my group of friends, we usually don't let them (Restrictiveness to non-group members)   1 2 3 4 5 6 7

12. When someone wants to join my group of friends, we usually welcome them (Restrictiveness to non-group members, [-])   1 2 3 4 5 6 7

Note. Items 7-12 were scrambled, and subscale indications were removed, in the adolescent participants' version of the scale.

APPENDIX E: GROUP HELPING NORM MEASURE

Below are several activities and characteristics that adolescents sometimes find important in maintaining their group of friends. To the individuals in your group of friends, how important are each of the following in maintaining the group friendship? Using the following scale, circle the number to the right of each activity/characteristic that best matches your opinion.

Not at All Important			Somewhat Important			Very Important
1	2	3	4	5	6	7

1. Using technology together (like instant messaging or playing computer games)   1 2 3 4 5 6 7

2. **Helping each other when someone needs help**   1 2 3 4 5 6 7

3. Playing sports with one another   1 2 3 4 5 6 7

4. Liking the same kinds of movies   1 2 3 4 5 6 7

5. **Being there for each other if someone has a problem**   1 2 3 4 5 6 7

6. Living nearby one another   1 2 3 4 5 6 7

7. Studying together   1 2 3 4 5 6 7

8. Following the same sports teams   1 2 3 4 5 6 7

9. Spending time together   1 2 3 4 5 6 7

10. Eating lunch together   1 2 3 4 5 6 7

11. Watching similar television shows   1 2 3 4 5 6 7

12. Spending the night at each others' houses   1 2 3 4 5 6 7

13. Taking the same classes   1 2 3 4 5 6 7

14. **Knowing that we support one another if someone needs assistance**   1 2 3 4 5 6 7

1 2 3 4 5 6 7

Note. Items 2, 5, and 14 assess norm of helping within the group of friends. These were not in bold type on the adolescents' version of the measure.

APPENDIX F: PARENT DEMOGRAPHIC SHEET

Child's Name   _____

(Your child's name will not be used in any of the analyses, nor will your child be identified in any way in the results. Your child's name is only requested so that we may match your answers to your child's.)

Relationship to Child:
(please check one)

____ Parent

____ Step-Parent

____ Guardian

Your Sex:
(please circle one)

Male   Female

Your Age: _____

Marital Status:
(please circle one)

Single   Married   Divorced   Separated   Widowed

Race:
(please check one)

____ African-American/Black

____ Asian

____ Caucasian/White

____ Hispanic

____ Native American

____ Other _____

What is the highest level of education you have completed:

(please check one)

____ Elementary

____ High School

____ Some College or Associate's Degree

____ Bachelor's Degree

____ Some Graduate School

____ Graduate Degree(s)

APPENDIX G: PARENT SPONTANEOUS HELPING MEASURE

This questionnaire briefly describes several examples of helping. We would like you to make two responses for exam example.
- First, have you ever engaged in this behavior in the past? Circle the appropriate answer to the left of each example of helping.
- Second, think about how likely you would be to engage in each helping behavior if you found yourself in that situation. For each example of helping, please respond to the following question: **If the situation ever presented itself, <u>how likely</u> would you be to engage in this behavior?** Use the following scale to respond, and circle the number to the right of each statement that best reflects your honest opinion.

Not At All Likely			Somewhat Likely			Very Likely
1	2	3	4	5	6	7

Have you ever engaged in this behavior?			How likely would you be to engage in this behavior?
Yes No	1.	Help a [target] pick up something he or she has dropped (e.g., a bag of groceries).	1 2 3 4 5 6 7
Yes No	2.	Share your umbrella with a [target] during a sudden rainstorm.	1 2 3 4 5 6 7
Yes No	3.	Open the door (or hold the door open) for a [target] whose hands are full.	1 2 3 4 5 6 7
Yes No	4.	Help a [target] to his/her feet after s/he stumbled and has fallen.	1 2 3 4 5 6 7
Yes No	5.	Carry a stack of library books for a [target] that s/he is about to drop.	1 2 3 4 5 6 7
Yes No	6.	Help a [target] look for a lost pet.	1 2 3 4 5 6 7
Yes No	7.	Console a [target] who has just read a hand-written note and appears extremely upset.	1 2 3 4 5 6 7
Yes No	8.	Sit and talk with a [target] who is alone and looks very sad.	1 2 3 4 5 6 7

Note. In the version seen by participants, "[target]" was replaced by the underlined word(s) "friend or family member" or "stranger." The order was counter-balanced across participants.

APPENDIX H: PARENTAL LETTER AND INFORMED CONSENT FORM

Dear Parent:

My name is Jeff Bartel, and I am currently pursuing a doctoral degree from the Department of Psychology at Kansas State University. This letter describes the research project I am planning to conduct this semester that will serve as the basis for my dissertation. This study has been approved by the Human Subjects Committee at Kansas State University and requires the participation of seventh- and eighth-grade students as well as their parents. I am hoping that, after you read this letter, you will be interested in taking part in this study.

The general purpose of this research is to investigate parental and peer influences on adolescents' helping behavior. For this research, I am asking (1) for your permission to allow your child to participate, and (2) for your consent (and the consent of any other parent/step-parent/guardian currently living in your home) to participate.

Your Child's Participation. Children will be asked to complete questionnaires assessing their experiences engaging in a particular type of helping behavior as well as estimations of their likelihood of engaging in other types of helping behavior in the future. They will also be asked questions about the characteristics of their peer group. These surveys will be completed in your child's regular classroom at school, and they should take only 30 minutes to complete.

Your Participation. You will be asked to complete two brief questionnaires that are similar in content to those completed by your child. One of these assesses your past experiences engaging in a particular type of helping behavior, and the other assesses your reported likelihood of engaging in other types of helping behavior in the future. These questionnaires should take only about 15 minutes to complete. Your adolescent will be asked to bring home your questionnaires. After you have completed them, we ask that you have your child return the questionnaires to his or her teacher in the envelope provided for this purpose. Parents are asked to return the questionnaire packet within one week after receiving it.

Participation in this study is voluntary. This research involves no foreseeable risks and places no stress on the participants. Indeed, the large majority of adolescents and parents who have taken part in prior similar studies have found participation quite enjoyable. All of the data collected (from the adolescent and adult participants) will be kept confidential. No participants' names will be used in the analysis of data or in the reporting of the results of this study. All parents and adolescents are free to withdraw from this study at any time if they wish.

If you have questions or concerns about the design or procedures associated with this study, please feel free to call me at (717) 530-5714 or Dr. Mark Barnett, Professor of Psychology and faculty advisor for this project, at (785) 532-0603. If you have any questions about the rights of participants in this study or about the manner in which the study is conducted, you may contact Dr. Rick Scheidt (Chair, Committee on Research Involving Human Subjects, 1 Fairchild Hall, Kansas State University) at (785) 532-3224.

Please indicate on the attached form whether you give (or do not give) consent for you and your child to take part in this study. For children who have another parent/step-parent/guardian at home, it is extremely important for him or her to participate as well. Please share this letter and ask him or her to also sign the attached permission form. There are two copies of the permission slip attached. Please sign and return the second copy (marked "Experimenter Copy") to your child's teacher.

Thank you very much for your cooperation.

Sincerely,

Jeffrey S. Bartel, MS

Permission Slip – Your Copy (please retain)

Child's Name (Please Print): _____

Please check the "yes" or "no" box below, and provide the information requested.

❑ *Yes*, I understand the procedures outlined on the previous page and give consent for myself and my child to participate in the study.

I understand this project is research and that our participation is completely voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time and stop participating at any time without explanation or penalty and that even with my consent, my son or daughter may stop participating at any time.

I verify that my signature below indicates that (1) I have read and understood this consent form, and willingly agree to participate in this study under the terms described, (2) my child has permission to participate in the study, and (3) I acknowledge that I have received a copy of this consent form.

1st Parent/Step-Parent/Guardian's Name (Please Print): _____

1st Parent/Step-Parent/Guardian's Signature: _____

Date: _____

Relationship to Child (circle one):   Parent   Step-Parent   Guardian

2nd Parent/Step-Parent/Guardian's Name (Please Print): _____

2nd Parent/Step-Parent/Guardian's Signature: _____

Date: _____

Relationship to Child (circle one): Parent   Step-Parent   Guardian

❑ *No,* I do not give consent for myself or my child to participate in the study.

Parent/Step-Parent/Guardian's Name: _____

Parent/Step-Parent/Guardian's Signature: _____

Date: _____

Permission Slip – Experimenter Copy (please return)

Child's Name (Please Print): _____

Please check the "yes" or "no" box below, and provide the information requested.

❑ *Yes*, I understand the procedures outlined on the previous page and give consent for myself and my child to participate in the study.

I understand this project is research and that our participation is completely voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time and stop participating at any time without explanation or penalty and that even with my consent, my son or daughter may stop participating at any time.

I verify that my signature below indicates that (1) I have read and understood this consent form, and willingly agree to participate in this study under the terms described, (2) my child has permission to participate in the study, and (3) I acknowledge that I have received a copy of this consent form.

1st Parent/Step-Parent/Guardian's Name (Please Print): _____

1st Parent/Step-Parent/Guardian's Signature: _____

Date: _____

Relationship to Child (circle one):   Parent   Step-Parent   Guardian

2nd Parent/Step-Parent/Guardian's Name (Please Print): _____

2nd Parent/Step-Parent/Guardian's Signature: _____

Date: _____

Relationship to Child (circle one): Parent   Step-Parent   Guardian

❑ *No,* I do not give consent for myself or my child to participate in the study.

Parent/Step-Parent/Guardian's Name: _____

Parent/Step-Parent/Guardian's Signature: _____

Date: _____

After the study is completed, a summary of the results of the study will be distributed to those who are interested. Would you like to receive a copy of this summary?
❑ Yes ❑ No   (Please check one)

If you checked "yes," please provide a mailing address below where the summary should be sent.

_____

_____

_____

TABLE 1. Number of adolescent participants by age group, sex, and number of participating parents

Adolescents	Younger group			Older group		
	Boys	Girls	Total	Boys	Girls	Total
With 0 parents	21	30	51	21	16	37
Mother only	9	17	26	6	17	23
Father only	0	1	1	4	0	4
Two parents	15[a]	9	24	15	15	30
Total	45	57	102	46	48	94

[a] One male participant in the younger age group had two mothers complete the surveys. Because a determination of which mother is "primary" is impossible, this participant's data were not included in analyses in which sex of parent was considered.

TABLE 2. Number of adolescents with at least one parent participating by age group, sex, grade, and race

	Younger group	Older Group
Sex		
Males	24	25
Females	27	32
Grade		
7th	47	0
8th	3	0
9th	1	0
10th	0	16
11th	0	18
12th	0	23
Race		
Asian	1	0
Black	2	2
Hispanic	0	3
White	45	48
Other race	3	4

TABLE 3. Number of mothers and fathers of younger and older adolescents by relationship to adolescent, marital status, race, and highest level of education

	Mothers		Fathers	
	Younger group	Older Group	Younger group	Older Group
Relationship				
Parent	46	51	19	27
Step-parent	1	0	3	6
Guardian	2	2	2	1
Marital Status				
Married	42	45	24	29
Divorced	2	3	0	5
Separated	1	1	0	0
Single	4	2	0	0
Race				
Asian	1	0	0	1
Black	0	0	0	1
Hispanic	0	2	0	0
White	48	51	23	32
Other race	0	0	1	0
Highest Level of				
Education	0	0	0	1
Elementary	16	26	7	19
High school	24	17	7	10
Some college	4	2	6	2
Bachelor's	2	1	1	0
Some grad school	3	7	3	2
Grad degree(s)				

TABLE 4. Planned helping measure statistics for adolescents and parents

| | Adolescents | | | | Parents | |
| | Younger | | Older | | | |
	Boys	Girls	Boys	Girls	Mothers	Fathers
Number of Activities	1.89	3.25	1.65	2.94	3.58	2.11
	(1.97)	(1.79)	(1.74)	(2.13)	(2.66)	(2.21)
Dichotomous planned helping[a]	72.7%	94.7%	60.9%	87.5%	91.0%	69.6%
	(45.5)	(22.5)	(49.3)	(33.4)	(28.8)	(46.4)
Total number of hours	23.70	84.63	138.27	69.53	314.57	215.35
	(39.55)	(190.21)	(381.62)	(119.43)	(741.77)	(571.51)

Note. Standard deviations appear in parentheses.

[a] Values are the percentage of participants who had engaged in any planned helping.

TABLE 5. Spontaneous helping measure descriptive statistics for adolescents and parents

| | Adolescents | | | | Parents | |
| | Younger | | Older | | | |
	Boys	Girls	Boys	Girls	Mothers	Fathers
Have you ever helped a … ?[a]						
Friend (or family member)[b]	78.8% (31.6)	91.1% (16.2)	76.1% (31.2)	92.0% (16.5)	90.7% (15.8)	87.3% (19.6)
Non-friend	49.2% (33.6)	65.2% (35.4)	53.6% (31.8)	57.6% (33.5)		
Stranger	36.4% (30.8)	48.5% (31.0)	38.4% (27.2)	46.5% (27.3)	62.8% (25.5)	61.8% (28.4)
Would you ever help a … ?[c]						
Friend	5.64 (1.46)	6.50 (.63)	6.01 (1.01)	6.61 (.59)	6.70 (.63)	6.34 (.84)
Non-friend	3.94 (1.67)	5.11 (1.35)	4.74 (1.27)	4.90 (1.36)		
Stranger	3.52 (1.65)	4.44 (1.49)	4.10 (1.39)	4.69 (1.31)	5.52 (1.11)	5.40 (1.19)

Note. Adult participants did not indicate whether they have helped (or would help) a non-friend. See footnote 8. Standard deviations appear in parentheses.

[a] Results are the average percentage of three (for adolescents) or four (for adults) opportunities to help a particular target to which a participant said "yes." Each adolescent participant, for example, could have a score of 0, 33.3, 66.7, or 100%, depending on whether he or she had helped 0, 1, 2, or 3 of the three targets

[b] The target for adolescent participants was a "friend," and for adult participants it was a "friend or family member"

[c] Results are means.

TABLE 6. Correlations between scores on adolescent and parent planned helping measures by sex

| | | | Adolescents | | | | | |
| | | | Boys | | | Girls | | |
			Total # Activities	Dichotomous	Total # Hours	Total # Activities	Dichotomous	Total # Hours
Parents	Mothers	Total # activities	.09	.22	-.12	.10	.13	.04
		Dichotomous	.10	.20	.10	.23	.20	.15
		Total # hours	.07	.01	-.13	-.11	.10	-.01
	Fathers	Total # activities	.37*	.29	-.07	.21	.35	-.09
		Dichotomous	.36*	.45**	.15	.59**	.59**	.27
		Total # hours	.08	.20	-.07	.26	.33	.01

*p < .05, **p < .01

TABLE 7. Correlations between adolescent planned helping and peer- and parent-related variables by adolescent age group

	Younger Group			Older Group		
	Num. activities	Vol./no vol.	Tot. hrs.	Num. activities	Vol./no vol.	Tot. hrs.
Helping norms	.20*	.21*	.12	.40***	.26*	-.01
Group ID	.10	.22*	.19	-.01	.01	-.15
Mothers num. activities	-.12	.10	-.17	.26	.20	-.02
Mothers' vol./no vol.	-.03	-.10	-.01	.34*	.37**	.14
Mothers' tot. hrs.	.01	-.02	-.15	-.07	.10	-.06
Fathers' num. activities	.06	-.05	-.20	.31	.41*	-.01
Fathers' vol./no vol.	.25	.22	.06	.47**	.54**	.21
Fathers' tot. hrs.	-.18	-.46*	-.29	.00	.28	-.06

Notes. Num. activities = number of planned helping activities; Vol./no vol. = dichotomous helping; Tot. hrs. = total number of planned helping hours. Vol./no vol. was coded 0 = no volunteering, 1 = some volunteering.
$* p < .05, ** p < .01, *** p < .001$

TABLE 8. Correlations among scores on adolescent and parent actual spontaneous helping measures (have you helped…?) by sex

| | | | Adolescents | | | | | |
| | | | Boys | | | Girls | | |
Parents			Friends	Non-Friends	Strangers	Friends	Non-Friends	Strangers
	Mothers	Friends/Family	.54***	.12	-.00	.10	.16	.13
		Strangers	.05	-.06	.01	-.19	.14	.19
	Fathers	Friends/Family	.01	.07	.11	.11	-.07	.13
		Strangers	-.15	-.06	-.11	-.17	-.16	.05

***$p < .001$

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TABLE 9. Correlations among scores on adolescent and parent anticipated spontaneous helping measures (would you help…?) by sex

| | | | Adolescents | | | | | |
| | | | Boys | | | Girls | | |
			Friends	Non-Friends	Strangers	Friends	Non-Friends	Strangers
Parents	Mothers	Friends/Family	-.06	-.11	-.12	.11	.17	.06
		Strangers	.03	-.24	-.19	.07	.12	.06
	Fathers	Friends/Family	.02	-.23	.21	.49*	.40*	.51**
		Strangers	-.15	-.05	.01	.25	.27	.39

*p < .05, **p < .01

TABLE 10. Correlations between adolescent spontaneous helping ("have you…?") and peer- and parent-related variables by adolescent age group

	Younger Group			Older Group		
	Friends	Non-friends	Strangers	Friends	Non-friends	Strangers
Helping norms	.40**	.21*	.24*	.20	.35*	.13
Group ID	.11	.01	.07	.13	.18	-.01
Mothers' helping of friends/family	.25	.01	.02	.19	.18	.05
Mothers' helping of strangers	-.32*	.09	.13	.06	.01	.07
Fathers' helping of friends/family	-.13	-.06	-.02	.04	.02	.17
Fathers' helping of strangers	-.04	-.04	.06	-.33	-.23	-.16

Note. Correlations are based on parents' "have you" ratings.
* $p < .05$, ** $p < .01$

TABLE 11. Correlations between adolescent spontaneous helping ("would you…?") and peer- and parent-related variables by adolescent age group

	Younger Group			Older Group		
	Friends	Non-friends	Strangers	Friends	Non-friends	Strangers
Helping norms	.52***	.44***	.34**	.59***	.52***	.38***
Group ID	.32**	.27**	.19	.43***	.38***	.33**
Mothers' helping of friends/family	.02	-.23	-.24	-.03	.22	.08
Mothers' helping of strangers	.14	-.09	-.11	-.10	-.03	-.04
Fathers' helping of friends/family	-.16	-.35	-.01	.17	.33	.42*
Fathers' helping of strangers	.08	-.12	.06	-.11	.23	.18

Note. Correlations are based on parents' "would you" ratings.
* *p* < .05, ** *p* < .01, *** *p* < .001

TABLE 12. Adolescent means on group cohesiveness measures by age group and sex, and group cohesiveness measure reliabilities

	Younger Adolescents		Older Adolescents		Cronbach's Alpha
	Boys	Girls	Boys	Girls	
Group Identity	5.55	6.37	5.63	5.99	.82
Outgroup rejection	3.38	1.97	2.24	1.57	.22
Group distinctiveness	3.85	3.99	4.14	3.53	.66
Restrictiveness	3.70	3.33	3.02	2.37	.50
Combined group cohesion	4.60	4.80	4.38	4.24	.54

TABLE 13. Correlations between spontaneous helping (of friends, non-friends, and strangers) and group identification by adolescent age group

| | | Younger Adolescents | | Older Adolescents | |
		Boys	Girls	Boys	Girls
Have you helped?	Friends	-.01	.01	.06	.12
	Non-friends	-.09	-.13	.13	.23
	Strangers	.00	-.09	.01	-.10
Would you help?	Friends	.18	.15	.43**	.32*
	Non-friends	.14	.08	.51***	.19
	Strangers	.15	-.10	.39*	.18

*$p < .05$, **$p < .01$, ***$p < .001$

TABLE 14. Correlations between adolescent friendship group helping norms and adolescent helping by sex

		Boys	Girls
Planned helping	Total # activities	.20	.16
	Dichotomous helping	.15	.02
	Total # hours	.07	.08
Spontaneous helping	Friend (have you)	.29**	.00
	Non-Friend (have you)	.33**	.09
	Stranger (have you)	.23*	.01
	Friend (would you)	.53***	.29**
	Non-Friend (would you)	.53***	.27**
	Stranger (would you)	.42***	.09

*p < .05, **p < .01, ***p < .001

TABLE 15. Hierarchical regression analysis of adolescent planned helping (number of volunteering activities) regressed on adolescent, mother-related, and peer-related predictors

Variable	Adolescent Number of Volunteering Activities			
	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	.39***	.30**	.30**	.07
Mother's tot. hrs.		-.06	-.06	.01
Mother's vol./no vol.		.18	.19	.20
Mother's num. activities		-.01	-.02	-.02
Helping norms		.23*	.20	.20
Age group		-.03	-.03	-.02
Group ID × Helping norms			-.07	-.08
Adolescent sex × Mother's tot. hrs.				-.10
Adolescent Sex × Mother's vol./no vol.				.24
Adolescent sex × Mothers' num. activities				.06
ΔR^2	.15	.08	.00	.01
ΔF	16.58***	1.79	.43	.47
df	1, 91	5, 86	1, 85	3, 82
R^2	.15	.23	.24	.25
Adjusted R^2	.15	.18	.18	.16
Overall F	16.58***	4.38**	3.79**	2.74**
df	1, 91	6, 86	7, 85	10, 82

Notes. $n = 93$. All predictors (except mothers' Vol./no vol.; see footnote 12) were centered before entry. Standardized regression coefficients are reported. Adolescent sex was coded 1 = male, 2 = female; Vol./no vol. was coded 0 = no volunteering, 1 = some volunteering; Age group was coded 1 = younger adolescents, 2 = older adolescents. Tot. hrs. = parent's total number of planned helping hours; Vol./no vol. = parent's dichotomous helping; Num. activities = mother's number of planned helping activities.
*$p < .05$, **$p < .01$, *** $p < .001$

TABLE 16. Hierarchical regression analysis of adolescent planned helping (dichotomous volunteering) regressed on adolescent, mother-related, and peer-related predictors

Variable	Adolescent Dichotomous Volunteering			
	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	.30**	.17	.17	.36
Mother's tot. hrs.		.01	.01	-.22
Mother's vol./no vol.		.16	.18	.18
Mother's num. activities		.08	.07	.09
Helping norms		.31**	.27*	.31**
Age group		-.10	-.10	-.13
Group ID $\times$ Helping norms			-.11	-.09
Adolescent sex $\times$ Mother's tot. hrs.				.30
Adolescent Sex $\times$ Mother's vol./no vol.				-.19
Adolescent sex $\times$ Mothers' num. activities				-.06
ΔR^2	.09	.14	.01	.03
ΔF	8.64**	2.98*	1.24	1.20
df	1, 91	5, 86	1, 85	3, 82
R^2	.09	.22	.23	.27
Adjusted R^2	.08	.17	.17	.18
Overall F	8.64**	4.08**	3.69**	2.96**
df	1, 91	6, 86	7, 85	10, 82

Notes. $n = 93$. All predictors (except Mothers' vol./no vol.; see footnote 12) were centered before entry. Standardized regression coefficients are reported. Adolescent sex was coded 1 = male, 2 = female; Vol./no vol. was coded 0 = no volunteering, 1 = some volunteering; Age group was coded 1 = younger adolescents, 2 = older adolescents. Tot. hrs. = parent's total number of planned helping hours; Vol./no vol. = mother's dichotomous helping; Num. activities = mother's number of planned helping activities. * $p < .05$. ** $p < .01$.

TABLE 17. Hierarchical regression analysis of adolescent planned helping (total hours volunteered) regressed on adolescent, mother-related, and peer-related predictors

Variable	Adolescent Total Hours Volunteered			
	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	-.15	-.18	-.18	.12
Mother's tot. hrs.		-.05	-.05	-.20
Mother's vol./no vol.		.19	.18	.18
Mother's num. activities		-.12	-.11	-.08
Helping norms		.02	.05	.06
Age group		.19	.19	.17
Group ID $\times$ Helping norms			.09	.09
Adolescent sex $\times$ Mother's tot. hrs.				.17
Adolescent Sex $\times$ Mother's vol./no vol.				-.30
Adolescent sex $\times$ Mothers' num. activities				.08
ΔR^2	.02	.07	.01	.02
ΔF	2.07	1.33	.61	.64
df	1, 91	5, 86	1, 85	3, 82
R^2	.02	.09	.10	.12
Adjusted R^2	.01	.03	.03	.01
Overall F	2.07	1.46	1.33	1.11
df	1, 91	6, 86	7, 85	10, 82

Note. n = 93. All predictors (except Mothers' vol./no vol.; see footnote 12) were centered before entry. Standardized regression coefficients are reported. Adolescent sex was coded 1 = male, 2 = female; Vol./no vol. was coded 0 = no volunteering, 1 = some volunteering; Age group was coded 1 = younger adolescents, 2 = older adolescents. Tot. hrs. = parent's total number of planned helping hours; Vol./no vol. = mother's dichotomous helping; Num. activities = mother's number of planned helping activities.

TABLE 18. Hierarchical regression analysis of adolescent planned helping (number of volunteering activities) regressed on adolescent, father-related, and peer-related predictors

Variable	Adolescent Number of Volunteering Activities			
	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	.54***	.49***	.49***	-.11
Father's tot. hrs.		-.06	-.06	-.32
Father's vol./no vol.		.47**	.46**	.54**
Father's num. activities		-.05	-.05	-.07
Helping norms		.07	.07	.06
Age group		.00	.00	-.03
Group ID $\times$ Helping norms			-.01	-.02
Adolescent sex $\times$ Father's Tot. Hrs.				-.28
Adolescent sex $\times$ Father's vol./no vol.				.69*
Adolescent sex $\times$ Father's num. activities				-.24
ΔR^2	.29	.18	.00	.08
ΔF	20.60***	3.21*	.00	2.41
df	1, 51	5, 46	1, 45	3, 42
R^2	.29	.47	.47	.55
Adjusted R^2	.27	.40	.39	.44
Overall F	20.60***	6.86***	5.75***	5.12***
df	1, 51	6, 46	7, 45	10, 42

Notes. n = 53. All predictors (except Fathers' vol./no vol.; see footnote 12) were centered before entry. Standardized regression coefficients are reported. Adolescent sex was coded 1 = male, 2 = female; Vol./no vol. was coded 0 = no volunteering, 1 = some volunteering; Age group was coded 1 = younger adolescents, 2 = older adolescents. Tot. hrs. = parent's total number of planned helping hours; Vol./no vol. = father's dichotomous helping; Num. activities = father's number of planned helping activities.
* $p < .05$, ** $p < .01$, *** $p < .001$

TABLE 19. Hierarchical regression analysis of adolescent planned helping (dichotomous volunteering) regressed on adolescent, father-related, and peer-related predictors

Variable	Adolescent Dichotomous Volunteering			
	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	.24	.22	.22	.24
Father's tot. hrs.		.11	.10	.14
Father's vol./no vol.		.46**	.46**	.45*
Father's num. activities		-.08	-.07	-.08
Helping norms		.10	.10	.10
Age group		-.31*	-.29*	-.29*
Group ID $\times$ Helping norms			-.06	-.06
Adolescent sex $\times$ Father's Tot. Hrs.				.04
Adolescent sex $\times$ Father's vol./no vol.				-.01
Adolescent sex $\times$ Father's num. activities				-.03
ΔR^2	.06	.35	.00	.00
ΔF	3.23	5.42**	.22	.02
df	1, 51	5, 46	1, 45	3, 42
R^2	.06	.40	.41	.41
Adjusted R^2	.04	.33	.32	.27
Overall F	3.23	5.29***	4.49**	2.94**
df	1, 51	6, 46	7, 45	10, 42

Notes. n = 53. All predictors (except Father's vol./no vol.; see footnote 12) were centered before entry. Standardized regression coefficients are reported. Adolescent sex was coded 1 = male, 2 = female; Vol./no vol. was coded 0 = no volunteering, 1 = some volunteering; Age group was coded 1 = younger adolescents, 2 = older adolescents. Tot. hrs. = parent's total number of planned helping hours; Vol./no vol. = father's dichotomous helping; Num. activities = father's number of planned helping activities.
* $p < .05$, **$p < .01$, *** $p < .001$

TABLE 20. Hierarchical regression analysis of adolescent planned helping (total hours volunteered) regressed on adolescent, father-related, and peer-related predictors

	Adolescent Total Hours Volunteered			
Variable	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	-.09	-.01	.01	.28
Father's tot. hrs.		-.10	-.06	-.13
Father's vol./no vol.		.36	.40*	.38*
Father's num. activities		-.20	-.23	-.21
Helping norms		-.22	-.18	-.18
Age group		.21	.11	.14
Group ID × Helping norms			.38**	.38**
Adolescent sex × Father's Tot. Hrs.				-.07
Adolescent sex × Father's vol./no vol.				-.36
Adolescent sex × Father's num. activities				.17
ΔR^2	.01	.14	.13	.03
ΔF	.44	1.55	7.97**	.51
df	1, 51	5, 46	1, 45	3, 42
R^2	.01	.15	.28	.30
Adjusted R^2	-.01	.04	.17	.14
Overall F	.43	1.37	2.49*	1.84
df	1, 51	6, 46	7, 45	10, 42

Notes. $n = 53$. All predictors (except Father's vol./no vol.; see footnote 12) were centered before entry. Standardized regression coefficients are reported. Adolescent sex was coded 1 = male, 2 = female; Vol./no vol. was coded 0 = no volunteering, 1 = some volunteering; Age group was coded 1 = younger adolescents, 2 = older adolescents. Tot. hrs. = parent's total number of planned helping hours; Vol./no vol. = father's dichotomous helping; Num. activities = father's number of planned helping activities.
* $p < .05$. ** $p < .01$.

TABLE 21. Summary of regressions (from Tables 15-20) predicting adolescent planned helping

		Mothers			Fathers		
	Criterion / Predictor	Adol. num. activities	Adol. vol./no vol.	Adol. tot. hrs.	Adol. num. activities	Adol. vol./no vol.	Adol. tot. hrs.
Step 1	Adolescent sex	F > M[a]	F > M[c]		F > M[a]		
Step 2	Parent's tot. hrs.						
	Parent's vol./ no vol				Vol. > No Vol.	Vol. > No Vol.	Vol. > No Vol.
	Parent's num. activities						
	Helping norms	+[b]	+				
	Age group					Younger > Older	
Step 3	Group ID × Helping norms						See text
Step 4	Sex × Parent's tot. hrs.						
	Sex × Parent Num. Activities						
	Sex × Parent vol./no vol.				See text		
	Regression Significant? (step[s])	Yes (1-4)	Yes (1-4)	No	Yes (1-4)	Yes (2-4)	Yes (3)
	Refer to table number	15	16	17	18	19	20

Note. Tot. Hrs. = total number of planned helping hours; Vol./No Vol. = dichotomous helping; Num. Activities = number of planned helping activities. + = the regression coefficient was positive
[a] Adolescent sex was a significant predictor after steps 1-3 but not after step 4.
[b] Adolescents' perception of group helping norms was a significant predictor only after step 2.
[c] Adolescent sex was a significant predictor only after step 1.

TABLE 22. Hierarchical regression analysis of adolescent spontaneous helping of friends ("have you…?") regressed on adolescent, mother-related, and peer-related predictors

Variable	Step 1 β	Step 2 β	Step 3 β	Step 4 β
	Adolescent Spontaneous Helping of Friends			
Adolescent sex	.31**	.34**	.33**	.38***
Mother's spon. friends/family		.30**	.30**	.50***
Mother's spon. strangers		-.13	-.13	-.18
Helping norms		.03	-.05	-.04
Age group		-.07	-.06	-.07
Group ID $\times$ Helping norms			-.26**	-.19*
Adolescent Sex $\times$ Mother's spon. friends/family				-.40***
Adolescent Sex $\times$ Mother's spon. strangers				.01
ΔR^2	.10	.10	.06	.12
ΔF	9.87**	2.63*	7.25**	8.42***
df	1, 94	4, 90	1, 89	2, 87
R^2	.10	.19	.25	.37
Adjusted R^2	.09	.15	.20	.31
Overall F	9.87**	4.21**	4.96***	6.45***
df	1, 94	5, 90	6, 89	8, 87

Notes. n = 96. All predictors were centered before entry. Standardized regression coefficients are reported. Regressions use mothers' "have you…?" spontaneous help responses. Sex was coded 1 = male, 2 = female; Age group was coded 1 = younger adolescents, 2 = older adolescents. Mother's spon. friends/family = mother's spontaneous helping of friends & family; Mother's spon. strangers = mother's spontaneous helping of strangers.
* $p < .05$. **$p < .01$. *** $p < .001$

TABLE 23. Hierarchical regression analysis of adolescent spontaneous helping of non-friends ("have you…?") regressed on adolescent, mother-related, and peer-related predictors

Variable	Adolescent Spontaneous Helping of Non-Friends			
	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	.04	.06	.07	.08
Mother's spon. friends/family		.12	.12	.18
Mother's spon. strangers		.01	.01	-.03
Helping norms		-.02	.04	.04
Age group		.00	.00	-.01
Group ID $\times$ Helping norms			.20	.22
Adolescent Sex $\times$ Mother's spon. friends/family				-.11
Adolescent Sex $\times$ Mother's spon. strangers				.07
ΔR^2	.00	.02	.03	.01
ΔF	.16	.35	3.21	.37
df	1, 94	4, 90	1, 89	2, 87
R^2	.00	.02	.05	.06
Adjusted R^2	-.01	-.04	-.01	-.03
Overall F	.16	.31	.80	.69
df	1, 94	5, 90	6, 89	8, 87

Notes. n = 96. All predictors were centered before entry. Standardized regression coefficients are reported. Regressions use mothers' "have you…?" spontaneous help responses. Sex was coded 1 = male, 2 = female; Age group was coded 1 = younger adolescents, 2 = older adolescents. Mother's spon. friends/family = mother's spontaneous helping of friends & family; Mother's spon. strangers = mother's spontaneous helping of strangers.

TABLE 24. Hierarchical regression analysis of adolescent spontaneous helping of strangers ("have you…?") regressed on adolescent, mother-related, and peer-related predictors

	Adolescent Spontaneous Helping of Strangers			
Variable	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	.15	.13	.14	.13
Mother's spon. friends/family		.04	.04	.03
Mother's spon. strangers		.12	.12	.12
Helping norms		.03	.07	.07
Age group		-.01	-.01	-.01
Group ID $\times$ Helping norms			.10	.10
Adolescent Sex $\times$ Mother's spon. friends/family				.04
Adolescent Sex $\times$ Mother's spon. strangers				.03
ΔR^2	.02	.02	.01	.00
ΔF	2.01	.48	.90	.13
df	1, 94	4, 90	1, 89	2, 87
R^2	.02	.04	.05	.05
Adjusted R^2	.01	-.01	-.01	-.03
Overall F	2.01	.78	.80	.62
df	1, 94	5, 90	6, 89	8, 87

Notes. n = 96. All predictors were centered before entry. Standardized regression coefficients are reported. Regressions use mothers' "have you…?" spontaneous help responses. Sex was coded 1 = male, 2 = female; Age group was coded 1 = younger adolescents, 2 = older adolescents. Mother's spon. friends/family = mother's spontaneous helping of friends & family; Mother's spon. strangers = mother's spontaneous helping of strangers.

TABLE 25. Hierarchical regression analysis of adolescent spontaneous helping of friends ("would you…?") regressed on adolescent, mother-related, and peer-related predictors

	Adolescent Spontaneous Helping of Friends			
Variable	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	.26**	.14	.14	.13
Mother's spon. friends/family		.04	.05	-.02
Mother's spon. strangers		.06	.08	.11
Helping norms		.39***	.28**	.28**
Age group		-.04	-.02	-.02
Group ID × Helping norms			-.36***	-.36***
Adolescent Sex × Mother's spon. friends/family				.11
Adolescent Sex × Mother's spon. strangers				-.09
ΔR^2	.07	.13	.12	.01
ΔF	7.10**	3.81**	15.31***	.64
df	1, 96	4, 92	1, 91	2, 89
R^2	.07	.20	.32	.33
Adjusted R^2	.06	.16	.27	.27
Overall F	7.10**	4.63**	7.01***	5.38***
df	1, 96	5, 92	6, 91	8, 89

Notes. n = 98. All predictors were centered before entry. Standardized regression coefficients are reported. Regressions use mothers' "would you…?" spontaneous help responses. Adolescent sex was coded 1 = male, 2 = female; Age group was coded 1 = younger adolescents, 2 = older adolescents. Mother's spon. friends/family = mother's spontaneous helping of friends & family; Mother's spon. strangers = mother's spontaneous helping of strangers.
**$p < .01$. *** $p < .001$

TABLE 26. Hierarchical regression analysis of adolescent spontaneous helping of non-friends ("would you…?") regressed on adolescent, mother-related, and peer-related predictors

Variable	Step 1 β	Step 2 β	Step 3 β	Step 4 β
	Adolescent Spontaneous Helping of Non-Friends			
Adolescent sex	.16	.05	.05	.04
Mother's spon. friends/family		.16	.15	.11
Mother's spon. strangers		-.09	-.09	-.13
Helping norms		.37**	.42***	.39**
Age group		-.03	-.04	-.04
Group ID $\times$ Helping norms			.16	.15
Adolescent Sex $\times$ Mother's spon. friends/family				.05
Adolescent Sex $\times$ Mother's spon. strangers				.10
ΔR^2	.03	.13	.02	.01
ΔF	2.53	3.66**	2.70	.74
df	1, 96	4, 92	1, 91	2, 89
R^2	.03	.16	.18	.20
Adjusted R^2	.02	.11	.13	.13
Overall F	2.53	3.49**	3.41**	2.73*
df	1, 96	5, 92	6, 91	8, 89

Notes. $n = 98$. All predictors were centered before entry. Standardized regression coefficients are reported. Regressions use mothers' "would you…?" spontaneous help responses. Adolescent sex was coded 1 = male, 2 = female; Age group was coded 1 = younger adolescents, 2 = older adolescents. Mother's spon. friends/family = mother's spontaneous helping of friends & family; Mother's spon. strangers = mother's spontaneous helping of strangers. * $p < .05$. **$p < .01$. *** $p < .001$

TABLE 27. Hierarchical regression analysis of adolescent spontaneous helping of strangers ("would you…?") regressed on adolescent, mother-related, and peer-related predictors

Variable	Adolescent Spontaneous Helping of Strangers			
	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	.25*	.18	.18	.18
Mother's spon. friends/family		.05	.05	.02
Mother's spon. strangers		-.05	-.06	-.09
Helping norms		.19	.21	.19
Age group		-.01	-.01	-.01
Group ID $\times$ Helping norms			.05	.05
Adolescent Sex $\times$ Mother's spon. friends/family				.04
Adolescent Sex $\times$ Mother's spon. strangers				.09
ΔR^2	.06	.03	.00	.01
ΔF	6.07*	.85	.25	.47
df	1, 95	4, 91	1, 90	2, 88
R^2	.06	.09	.10	.11
Adjusted R^2	.05	.04	.04	.03
Overall F	6.07*	1.89	1.60	1.30
df	1, 95	5, 91	6, 90	8, 88

Notes. n = 97. All predictors were centered before entry. Standardized regression coefficients are reported. Regressions use mothers' "would you…?" spontaneous help responses. Adolescent sex was coded 1 = male, 2 = female; Age group was coded 1 = younger adolescents, 2 = older adolescents. Mother's spon. friends/family = mother's spontaneous helping of friends & family; Mother's spon. strangers = mother's spontaneous helping of strangers.

TABLE 28. Hierarchical regression analysis of adolescent spontaneous helping of friends ("have you…?") regressed on adolescent, father-related, and peer-related predictors

Variable	Adolescent Spontaneous Helping of Friends			
	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	.31*	.25	.25	.25
Father's spon. friends/family		.12	.11	.11
Father's spon. strangers		-.26	-.26	-.25
Helping norms		-.03	-.03	-.02
Age group		-.21	-.21	-.21
Group ID $\times$ Helping norms			.00	.00
Adolescent sex $\times$ Father's spon. friends/family				.01
Adolescent sex $\times$ Father's spon. strangers				-.01
ΔR^2	.09	.07	.00	.00
ΔF	5.67*	1.07	.00	.00
df	1, 55	4, 51	1, 50	2, 48
R^2	.09	.16	.16	.16
Adjusted R^2	.08	.08	.06	.03
Overall F	5.67*	2.00	1.63	1.18
df	1, 55	5, 51	6, 50	8, 48

Notes. n = 57. All predictors were centered before entry. Standardized regression coefficients are reported. Regressions use fathers' "have you…?" spontaneous help responses. Adolescent sex was coded 1 = male, 2 = female; Age group was coded 1 = younger adolescents, 2 = older adolescents. Father's spon. friends/family = father's spontaneous helping of friends & family; Father's spon. strangers = father's spontaneous helping of strangers.
* $p < .05$.

TABLE 29. Hierarchical regression analysis of adolescent spontaneous helping of non-friends ("have you…?") regressed on adolescent, father-related, and peer-related predictors

	Adolescent Spontaneous Helping of Non-Friends			
Variable	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	.17	.04	.04	.04
Father's spon. friends/family		.05	.07	.08
Father's spon. strangers		-.16	-.16	-.17
Helping norms		.20	.21	.22
Age group		-.05	-.07	-.08
Group ID $\times$ Helping norms			.08	.09
Adolescent sex $\times$ Father's spon. friends/family				-.09
Adolescent sex $\times$ Father's spon. strangers				-.02
ΔR^2	.03	.04	.01	.01
ΔF	1.53	.60	.33	.27
df	1, 55	4, 51	1, 50	2, 48
R^2	.03	.07	.08	.09
Adjusted R^2	.01	-.02	-.03	-.07
Overall F	1.53	.78	.70	.57
df	1, 55	5, 51	6, 50	8, 48

Notes. $n = 57$. All predictors were centered before entry. Standardized regression coefficients are reported. Regressions use fathers' "have you…?" spontaneous help responses. Adolescent sex was coded 1 = male, 2 = female; Age group was coded 1 = younger adolescents, 2 = older adolescents. Father's spon. friends/family = father's spontaneous helping of friends & family; Father's spon. strangers = father's spontaneous helping of strangers.

TABLE 30. Hierarchical regression analysis of adolescent spontaneous helping of strangers ("have you…?") regressed on adolescent, father-related, and peer-related predictors

Variable	Adolescent Spontaneous Helping of Strangers			
	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	.14	.17	.16	.16
Father's spon. friends/family		.15	.14	.14
Father's spon. strangers		-.12	-.11	-.11
Helping norms		-.07	-.07	-.06
Age group		-.06	-.04	-.02
Group ID $\times$ Helping norms			-.06	-.08
Adolescent sex $\times$ Father's spon. friends/family				-.06
Adolescent sex $\times$ Father's spon. strangers				.11
ΔR^2	.02	.03	.00	.01
ΔF	1.14	.38	.16	.25
df	1, 55	4, 51	1, 50	2, 48
R^2	.02	.05	.05	.06
Adjusted R^2	.00	-.05	-.06	-.10
Overall F	1.14	.52	.45	.39
df	1, 55	5, 51	6, 50	8, 48

Notes. $n = 57$. All predictors were centered before entry. Standardized regression coefficients are reported. Regressions use fathers' "have you…?" spontaneous help responses. Adolescent sex was coded 1 = male, 2 = female; Age group was coded 1 = younger adolescents, 2 = older adolescents. Father's spon. friends/family = father's spontaneous helping of friends & family; Father's spon. strangers = father's spontaneous helping of strangers.

TABLE 31. Hierarchical regression analysis of adolescent spontaneous helping of friends ("would you…?") regressed on adolescent, father-related, and peer-related predictors

Variable	Adolescent Spontaneous Helping of Friends			
	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	.28*	.08	.08	.08
Father's spon. friends/family		.34*	.33*	.32
Father's spon. strangers		-.21	-.21	-.23
Helping norms		.51***	.50***	.48**
Age group		-.08	-.06	-.06
Group ID $\times$ Helping norms			-.09	-.10
Adolescent sex $\times$ Father's spon. friends/family				.06
Adolescent sex $\times$ Father's spon. strangers				.01
ΔR^2	.08	.27	.01	.00
ΔF	4.82*	5.28**	.58	.13
df	1, 56	4, 52	1, 51	2, 49
R^2	.08	.35	.35	.36
Adjusted R^2	.06	.28	.28	.25
Overall F	4.82*	5.49***	4.63**	3.39**
df	1, 56	5, 52	6, 51	8, 49

Notes. $n = 58$. All predictors were centered before entry. Standardized regression coefficients are reported. Regressions use fathers' "would you…?" spontaneous help responses. Adolescent sex was coded 1 = male, 2 = female; Age group was coded 1 = younger adolescents, 2 = older adolescents. Father's spon. friends/family = father's spontaneous helping of friends & family; Father's spon. strangers = father's spontaneous helping of strangers.
* $p < .05$. ** $p < .01$. *** $p < .001$

TABLE 32. Hierarchical regression analysis of adolescent spontaneous helping of non-friends ("would you…?") regressed on adolescent, father-related, and peer-related predictors

Variable	Adolescent Spontaneous Helping of Non-Friends			
	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	.10	-.14	-.14	-.13
Father's spon. friends/family		.08	.10	.10
Father's spon. strangers		.06	.06	-.01
Helping norms		.59***	.61***	.56***
Age group		.01	-.03	-.02
Group ID $\times$ Helping norms			.17	.14
Adolescent sex $\times$ Father's spon. friends/family				.20
Adolescent sex $\times$ Father's spon. strangers				-.06
ΔR^2	.01	.28	.03	.02
ΔF	.59	5.02**	1.85	.84
df	1, 56	4, 52	1, 51	2, 49
R^2	.01	.29	.31	.33
Adjusted R^2	-.01	.22	.23	.23
Overall F	.59	4.17**	3.84**	3.07**
df	1, 56	5, 52	6, 51	8, 49

Notes. $n = 58$. All predictors were centered before entry. Standardized regression coefficients are reported. Regressions use fathers' "would you…?" spontaneous help responses. Adolescent sex was coded 1 = male, 2 = female; Age group was coded 1 = younger adolescents, 2 = older adolescents. Father's spon. friends/family = father's spontaneous helping of friends & family; Father's spon. strangers = father's spontaneous helping of strangers.
**$p < .01$. *** $p < .001$

TABLE 33. Hierarchical regression analysis of adolescent spontaneous helping of strangers ("would you…?") regressed on adolescent, father-related, and peer-related predictors

Variable	Adolescent Spontaneous Helping of Strangers			
	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Adolescent sex	.19	.14	.13	.13
Father's spon. friends/family		.42*	.41*	.39*
Father's spon. strangers		-.09	-.08	-.07
Helping norms		.27	.25	.25
Age group		.05	.09	.10
Group ID $\times$ Helping norms			-.15	-.15
Adolescent sex $\times$ Father's spon. friends/family				-.03
Adolescent sex $\times$ Father's spon. strangers				.07
ΔR^2	.04	.17	.02	.00
ΔF	2.16	2.77*	1.24	.07
df	1, 55	4, 51	1, 50	2, 48
R^2	.04	.21	.23	.23
Adjusted R^2	.02	.13	.14	.10
Overall F	2.16	2.70*	2.47*	1.80
df	1, 55	5, 51	6, 50	8, 48

Notes. $n = 57$. All predictors were centered before entry. Standardized regression coefficients are reported. Regressions use fathers' "would you…?" spontaneous help responses. Adolescent sex was coded 1 = male, 2 = female; Age group was coded 1 = younger adolescents, 2 = older adolescents. Father's spon. friends/family = father's spontaneous helping of friends & family; Father's spon. strangers = father's spontaneous helping of strangers.
* $p < .05$.

TABLE 34. Summary of regressions (from Tables 22-24 and 28-30) predicting adolescent spontaneous helping ("have you…?") of friends, non-friends, and strangers

		Mothers			Fathers		
	Criterion (Adolescent spontaneous helping of…) Predictor	Friends	Non-friends	Strangers	Friends	Non-friends	Strangers
Step 1	Sex	F > M			F > M[a]		
Step 2	Parent's spon. friends/family	+					
	Parent's spon. strangers						
	Helping norms						
	Age group						
Step 3	Group ID × Helping norms	See text					
Step 4	Sex × Parent's spon. friends/family	See text					
	Sex × Parent spon. strangers						
	Regression Significant? (step)	Yes (1-4)	No	No	Yes (1)	No	No
	Refer to table number	22	23	24	28	29	30

Notes. Regressions use parent's "have you…?" spontaneous help responses. Parent's spon. friends/family = parent's spontaneous helping of friends & family; Parent's spon. strangers = parent's spontaneous helping of strangers. + = the regression coefficient was positive
[a] Adolescent sex was a significant predictor following step 1 but not following steps 2-4.

TABLE 35. Summary of regressions (from Tables 25-27 & 31-33) predicting adolescent spontaneous helping ("would you…?")

		Mothers			Fathers		
	Criterion (Adolescent spontaneous helping of…) / Predictor	Friends	Non-friends	Strangers	Friends	Non-friends	Strangers
Step 1	Sex	$F > M^a$		$F > M^a$	$F > M^a$		
Step 2	Parent's spon. friends/family				$+^b$		$+$
	Parent's spon. strangers						
	Helping norms	$+$	$+$		$+$	$+$	
	Age group						
Step 3	Group ID $\times$ Helping norms	See text					
Step 4	Sex $\times$ Parent's spon. friends/family						
	Sex $\times$ Parent spon. strangers						
	Regression Significant? (step)	Yes	Yes (2-4)	Yes (1)	Yes (1-4)	Yes (2-4)	Yes (2-3)
	Refer to table number	25	26	27	31	32	33

Note. Regressions use parent's "would you…?" spontaneous help responses. Parent's spon. friends/family = parent's spontaneous helping of friends & family; Parent's spon. strangers = parent's spontaneous helping of strangers. + = the regression coefficient was positive
[a] Sex was a significant predictor following step 1 but not following steps 2-4.
[b] Fathers' spontaneous helping of friends & family was significant after steps 2 and 3 but not after step 4.
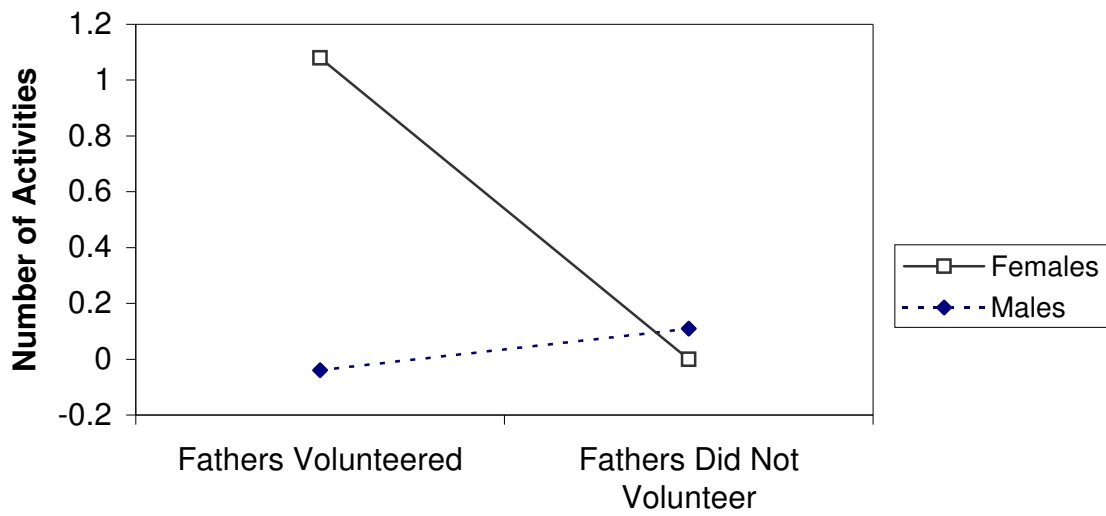
Figure 1. Simple slopes plot of the adolescent sex × fathers' dichotomous planned helping

interaction effect on adolescent number of planned activities (refer to Table 18.)
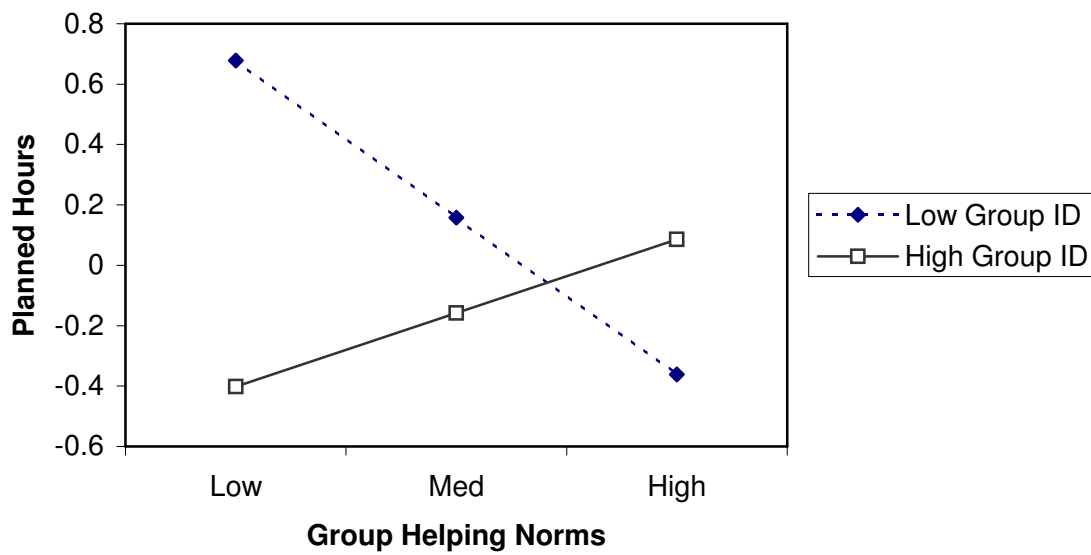
Figure 2. Simple slopes plot of group helping norms $\times$ group identification interaction effect on adolescents' total hours of planned helping using fathers' data (refer to Table 20.)
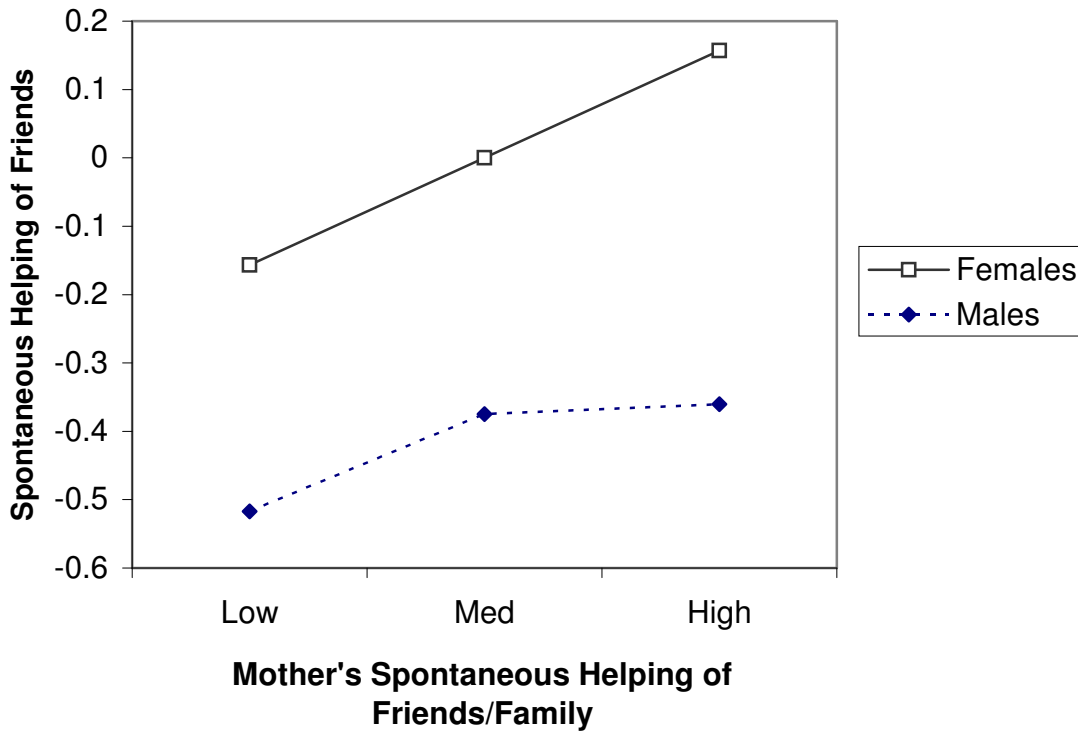
Figure 3. Simple slopes plot of the adolescent sex × mother's spontaneous helping of

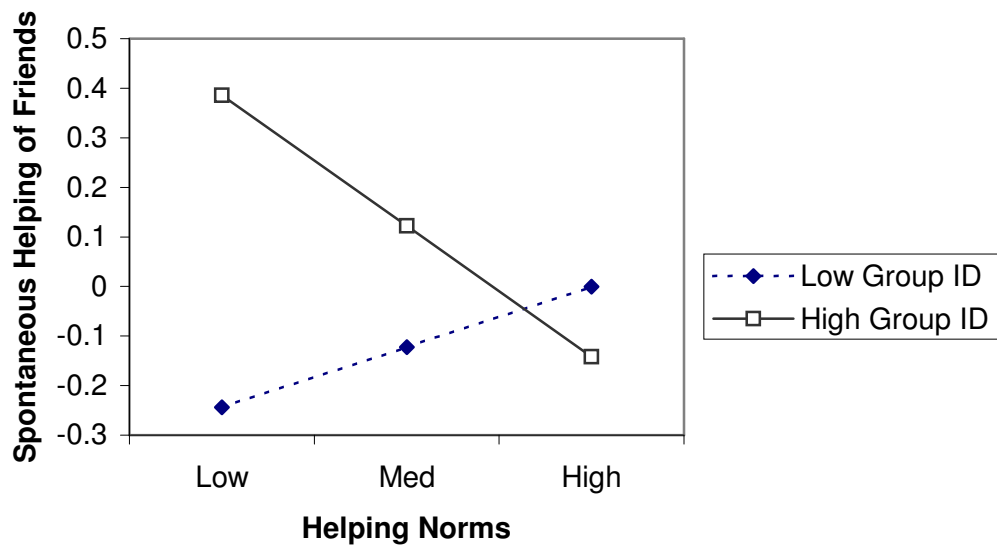friends/family interaction on adolescent spontaneous helping of friends ("have you…"; refer to

Table 22)

Figure 4. Simple slopes plot of the group identification × helping norms interaction effect on spontaneous helping of friends ("have you…") using mothers' data (refer to Table 22.)
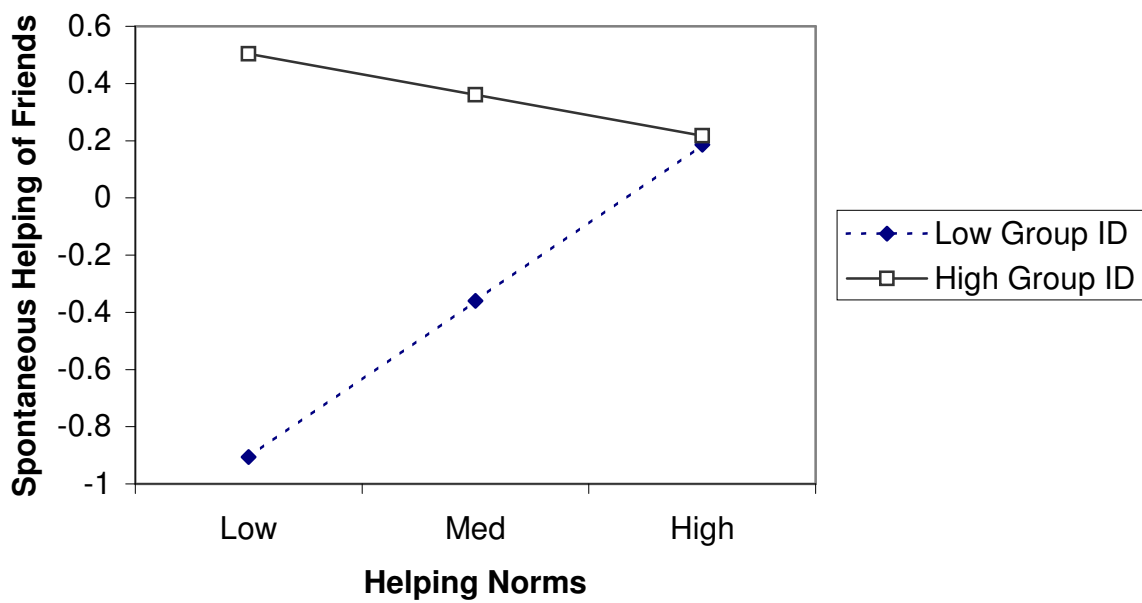
Figure 5. Simple slopes plot of the group identification × helping norms interaction effect on

spontaneous helping of friends ("would you...") using mothers' data (refer to Table 25.)

FOOTNOTES

[1] Another type of helping, emergency helping, also meets Amato's (1990) definition of "spontaneous helping." However, spontaneous helping is better classified in another division of Smithson et al.'s (1983) taxonomy, namely, "serious" helping (e.g., helping a heart attack victim). Serious spontaneous helping is contrasted with "nonserious" spontaneous helping (e.g., mailing a letter you found on the street). The present study focused on spontaneous helping of the "nonserious" variety, and consequently, emergency helping was not included.

[2] In the present study, although the target of spontaneous helping (i.e., friends, non-friends, and strangers) was examined, the only targets of planned helping that were considered are strangers. The reason is that the helping of friends – even if it is "planned" – does not typically meet the criterion of being of a "formal nature" that is a part of the definition of planned helping (Amato, 1990). Thus, planned helping of strangers (e.g., donating blood for the Red Cross) was examined while "planned" helping of a friend (e.g., picking up the mail while the person is on vacation) was not.

[3] The helping studied by Eberly and Montemayor (1999) was "planned" in the sense that it was anticipated in advance of the helping episode. However, it does not meet the definition of "planned helping" discussed earlier because it does not occur in a "formal" setting (Amato, 1990; see footnote 2).

[4] Recent research by Batson, Lishner, Cook, and Sawyer (2005) has suggested that it is not similarity *per se* but rather a feeling of nurturance toward the potential help recipient that induces the actor to provide help. Regardless of the exact mechanism, similarity does, indeed, seem to be related to the likelihood of providing help.

[5] Although not considered in the present study, participants also indicated how instrumental (i.e., action-oriented) and expressive (i.e., emotion-oriented) they perceived each type of planned helping to be as well as the duration (i.e., one time to several years) devoted to each planned helping activity.

[6] Of the 196 adolescents participating in the present study, only 8 (4.1%) identified themselves as not having a "group of friends" as defined in the instructions. The proportion of individuals without a group of friends is consistent with research by Kiesner and Notari (2002, cited in Kiesner et al., 2002) who suggested that this number is typically low, approximately 5-6%. In the present study, these participants were excluded from analyses that require a friendship group.

[7] Because anticipated behavior toward only two targets were rated by adults (i.e., friends/family and strangers; see footnote 8), an even number of items was required to yield an even number of ratings for the likelihood of helping each target. Consequently, item 8 from the adolescent measure was not included on the adult version of the spontaneous helping measure.

[8] As discussed previously, much of the helping in which adults engage is spontaneous helping of family members (Amato, 1990). Thus, a parent's tendency to engage in this category of helping may represent an important model for an adolescent's own spontaneous helping. For the parents, spontaneous helping of family was combined with spontaneous helping of friends because of the similar "ingroup" nature of the helping, that is, the recipient of the help has a close relationship with the helper when either friends or family members are the targets of the help. Another difference between the classification of targets of parental helping and the targets of adolescent helping involves the exclusion of parental helping of non-friends. The parental analog

of adolescent's non-friend helping was not included because it is less likely that the adolescent would have an opportunity to observe his or her parents' interactions with acquaintances than with friends.

[9] Upon completion of the dissertation, a summary of the results will be sent to teachers and principals at participating schools as well as to parents who requested a copy.

[10] Although the other group cohesiveness measures did not have adequate reliabilities to be included in the primary analyses, a series of exploratory analyses of variance were conducted to examine whether there were any sex or age group differences on these measures. A 2 (sex: male or female) $\times$ 2 (age group: younger or older) ANOVA was performed on adolescents' rejection of the outgroup ratings. Both the sex, $F(1, 191) = 8.97$, $p < .01$, partial $\eta^2 = .05$, and the age group, $F(1, 191) = 4.96$, $p < .05$, partial $\eta^2 = .03$, main effects were significant. Males ($M = 2.81$) reported that they rejected those in the outgroup to a greater extent than did females ($M = 1.77$), and the younger adolescents ($M = 2.59$) reported rejecting those in the outgroup to a greater extent than did the older adolescents ($M = 1.90$). The sex $\times$ age group interaction was not significant, $F(1, 191) = 1.13$, ns, partial $\eta^2 = .01$.

A 2 (sex: male or female) $\times$ 2 (age group: younger or older) ANOVA was performed on adolescents' feelings that their friendship group is distinct from others their age. The sex, $F(1, 191) = .94$, ns, partial $\eta^2 = .01$, and age group, $F(1, 191) = .12$, ns, partial $\eta^2 = .00$, main effect, and sex $\times$ age group interaction, $F(1, 191) = 2.50$, ns, partial $\eta^2 = .01$, were all non-significant.

A 2 (sex: male or female) $\times$ 2 (age group: younger or older) ANOVA was performed on adolescents' perceptions that their friendship group is restrictive to non-group members. Both the sex, $F(1, 191) = 6.31$, $p < .05$, partial $\eta^2 = .03$, and the age group, $F(1, 191) = 16.12$, $p < .001$,

partial $\eta^2 = .08$, main effects were significant. Males ($M = 3.36$) reported that they rejected those in the outgroup to a greater extent than did females ($M = 2.85$), and the younger adolescents ($M = 3.49$) reported rejecting those in the outgroup to a greater extent than did the older adolescents ($M = 2.69$). The sex $\times$ age group interaction was not significant, $F(1, 191) = .48$, *ns*, partial $\eta^2 = .00$.

A 2 (sex: male or female) $\times$ 2 (age group: younger or older) ANOVA was performed on the combined group cohesion measure (including group identity, rejection of the outgroup, group distinctiveness, and restrictiveness to non-group members). The main effect of age group was significant, $F(1, 191) = 11.77$, $p < .01$, partial $\eta^2 = .06$. The younger age group ($M = 4.71$) expressed a stronger feeling of "group cohesiveness" than did the older age group ($M = 4.31$). The main effect for sex, $F(1, 191) = .07$, *ns*, partial $\eta^2 = .00$, and the sex $\times$ age group interaction, $F(1, 191) = 2.28$, *ns*, partial $\eta^2 = .01$, were non-significant.

[11] There were two reasons to separate regressions for mothers and fathers. First, the number of participants eligible for inclusion would have been considerably smaller if adolescents required both a mother's and a father's responses to be eligible. Given the listwise exclusion of variables from regressions, and because the proportion of adolescent participants with both a mother and a father participating was small (54 out of 196 adolescent participants, see Table 1), the requirement that both a mother and a father provide data would have greatly reduced the number of participants included in the regression analyses. Second, the pattern of correlational results (see Tables 6-11) suggests that a father's and mother's helping may be related differently to their adolescent's helping behavior.

[12] The only exception to the centering of predictor variables was parents' dichotomous

helping which, with a meaningful zero point, is more interpretable without centering (see Cohen et al., 2003, Chapter 7). Although parents' number of planned helping activities and total number of planned hours might also be argued to have equally meaningful zero points, the high intercorrelations among these three items would likely have caused problems of multicollinearity in the multiple regression analyses. Thus, these variables were also centered.

[13] Because the variables were centered prior to entry into the regression, and because standardized regression coefficients were used in the simple slopes analyses, the values on the *y-axis* of the figures presenting the simple slopes of the interactions are only intended to illustrate *relatively* greater and smaller values of the criterion and not absolute ones.

[14] The lone exception was the regression predicting dichotomous helping using fathers' data (see Table 19). In that analysis alone, a higher proportion of younger than older participants reported engaging in planned helping. However, because the same regression involving data from mothers (see Table 16) and the main effect of age group in the analysis of variance (see p. 41) were nonsignificant, this age effect is considered unreliable and will not be addressed. For the remainder of the Discussion, similarly inconsistent and unreliable patterns of results will not be addressed.

[15] The only exceptions to the lack of relationship between adolescents' perception of group helping norms and planned helping in the multiple regression analyses are among the inconsistent and unreliable findings discussed in Footnote 14. They will be noted, but not discussed in detail, here.

The relationships between both dichotomous helping and number of activities and perceptions of group helping norms were significant only when using mothers' data and, when

predicting the number of activities, only following the second step (see Tables 15 and 16). The relationship between the total number of hours planned helping and group helping norms was significant (1) only in the regression using fathers' data, and (2) in an interaction with group identification (see Table 20). In that interaction, adolescents with strong group identification engaged in more hours of planned helping to the extent that they perceived their group as having relatively strong helping norms; those with weak group identification helped more to the extent they perceived their group as having relatively weak helping norms (see Figure 2).

[16] An additional significant correlation was the negative correlation between mothers' spontaneous helping of strangers and younger adolescents' spontaneous helping of friends. Parents' spontaneous helping of strangers, which may be less likely to be viewed by adolescents than parents' helping of friends and family, was otherwise unrelated to any other index of adolescents' spontaneous help. This lone, counterintuitive finding is unrelated to any other spontaneous help result and will not be discussed further.

[17] There is a discrepancy between the correlational analyses, which yielded a relationship only between mothers' and sons' spontaneous helping of friends, and the multiple regression analyses, which revealed a strong relationship between mothers' and adolescents' spontaneous helping of friends. A possible explanation for this discrepancy is as follows: A very large proportion of females in the present study reported having helped their friends spontaneously (91.1% of younger adolescents, 92.0% of older adolescents, and 90.7% of mothers). Because a smaller proportion of males reported having helped a friend spontaneously (78.8% and 76.1% of younger and older adolescents, respectively), the correlation between mothers' and adolescents' spontaneous helping of friends would be attenuated less when sons than daughters are considered.

The regression analyses, however, accounted for the variance in common between adolescent sex and mothers' spontaneous helping of friends, allowing the relationship between mothers and their adolescents (sons *and* daughters) to emerge as significant. Further, the range restriction may also explain the significant interaction of mothers' spontaneous helping of friends/family and adolescent sex in the regression (see Table 22 and Figure 3). That is, after removing the effect of sex from the multiple regression analysis, the slope of the line reflecting mothers' influence on daughters was steeper than the slope of the line reflecting mothers' influence on sons.

[18] The interaction that would show moderation was significant, but only for the mothers' data, suggesting that this is an unreliable finding. (As noted in Footnote 14, unreliable findings such as this will not be addressed.)