

PARENTAL SCAFFOLDING AND CHILDREN'S EVERYDAY HELPING

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ABSTRACT

Children's *everyday helping*, or their active involvement in parents' routines and chores, seems relevant to children's social and moral development, yet is poorly understood. To date, most research on children's everyday help has focused on demonstrating that children readily help parents and experimenters with everyday tasks. The present study relates children's everyday help to how parents guide, or *scaffold*, their children's activities, and examines the active aspects of children's everyday helping.

A community sample of sixty-one parents and children, between 18 and 24 months of age, was assessed on a series of helping tasks, adapted from prior studies on children's help in everyday contexts. These helping tasks were structured with a set of communicative cues, whereby children could help the experimenter when the former was engaged in an attempt to solve a problem, after the experimenter nonverbally requested help, or after the experimenter verbally requested help. Parent-child dyads were assessed on measures of parental scaffolding of chores and social understanding, and children were assessed on measures of children's social approach to the experimenter, and on measures of empathy, and social cognition.

Only parents' scaffolding of chores was related to whether or not children offered help. In contrast, both the children's social approach and parental scaffolding on chores were found to predict children helping earlier in the sequence of communicative cues. The relevance of these finding to social cognitive and moral development is discussed.

Keywords: HELPING; SCAFFOLDING; SOCIAL INTERACTION; SOCIAL COGNITION; EMPATHY; MORAL DEVELOPMENT

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INTRODUCTION

Young children like to participate in their parents' daily routines and chores. Parents commonly report that their children are involved in household chores such as sweeping, washing dishes, laundry, and gardening¹. In a laboratory study, Harriet Rheingold (1982) observed that as toddlers "follow their parents through a round of everyday activities, they often spontaneously execute behaviors that if performed by older persons would be labeled as helping" (p. 114). Her study mapped out features of children's 'everyday help', such as children's active participation in household routines, and parents' guidance of children's actions.

Rheingold (1982) wondered whether to "place a prosocial construction" (p. 114) on everyday help. In most theories of moral psychology, moral actions arise from social understanding. Thus, at first glance, children's everyday helping seems highly relevant to children's moral, social, and social cognitive development (Dahl, Campos, & Witherington, 2011; Svetlova, Nichols, & Brownell, 2010). However, as parents commonly report, everyday help is a mixed blessing. Children fold, but also unfold, laundry. They load the dishwasher, but with clean and dirty dishes. They close doors or turn off lights without much regard to context or need². Rheingold (1982) remarked that parents, "[r]ather than expressing satisfaction in the[ir] children's efforts... reported that to avoid what they viewed as interference they tried to accomplish ... chores while the[ir]

¹ Unless otherwise noted, the examples given here are drawn from answers from parents of 18- to 24-month-old children in response to a questionnaire for the present study [see Appendix 1 for chore questionnaire and representative examples].

² Over the course of the present study, several children closed the door to the testing room (blocking off a secondary video camera) or brought objects on the ground (e.g., small pieces of wicker that had fallen off a wicker basket) to their parents. One child refused to begin the session until a plastic safety plug was inserted into an electrical outlet.

children were taking their naps” (p. 122). Philosophers and psychologists describe morality and moral development in many ways – but the term ‘annoying’ rarely comes up³. In its imperfections, and in other regards to be discussed further along, everyday help is difficult to connect to existing theories of sociomoral development.

Although Rheingold’s (1982) seminal study has inspired research on young children’s help in everyday contexts, these studies have largely addressed only whether, and when, children help an experimenter in a variety of everyday situations. Other aspects of everyday help, such as the role of parents in guiding children’s actions, and children’s active participation in everyday routines, and individual differences in helping, remain poorly understood. After a brief review of the features of everyday help, the work of five groups of researchers is discussed. The present study is an attempt to extend these studies to examine the neglected aspects of everyday helping, and look at how everyday help may fit into the larger picture of sociomoral development.

³ In conversation, many parents in the present study seemed to recognize the desirability of helping their children help, even if individual completion of the chores by the parent would be more expeditious. Interestingly, the ‘minority’ tradition in ethics, Aristotelian *virtue ethics*, does make an important place for the formation of habits in the young in moral development (e.g., Hursthouse, 1999).

CHILDREN'S EVERYDAY HELP

Features of everyday help

Children's help is often viewed as an outcome of social cognitive processes such as *empathy* (e.g., Hoffman, 2000) or *perspective taking* (e.g., Vaish, Carpenter, & Tomasello, 2009)⁴. Although these concepts differ in their relative stress on affect or cognition, they are thought to occur through an understanding of the mind of the other⁵. An appropriate action must then arise, somehow, from this understanding, implicating a further problem of motivation. Expressing commonly held views, Warneken and Tomasello (2006) state that help requires "both an understanding of others' goals and an altruistic motivation to help" (p. 1301)⁶.

This would mean that at some level, whether cognitive or affective, helping involves knowing something "about the goal the other is attempting to achieve as well as

⁴ Although the present study will use measures of empathy and internal state language (i.e., that putatively capture distinct aspects of social understanding), these will be treated broadly as social cognitive factors in the discussion.

⁵ Perhaps because of this underlying similarity, researchers struggle to define and distinguish these constructs from one another (e.g., Batson, 2009; Davis, 1994; De Vignemont, 2008).

⁶ The term 'goal' is rarely defined in psychology. The term is commonly treated as a behavioural manifestation of an intention, i.e., a mental state in the other that causes a sequence of actions (e.g., Rizzolatti & Fabbri-Destro, 2008). For example, I reach for the pen because I have an intention in my mind of getting a pen. However, at other times, goals are attributed to elements of organized action (e.g., Bickhard & Richie, 1983). I reach for the pen in order to write down a phone number. Reaching for pen was intentional because it serves this larger goal. The latter case implies that perceiving intentional acts does not epistemically privilege the actor over the helper, as goal-directed implies organized action (e.g., reaching for a pen, and grabbing some paper), that is not necessarily isomorphically represented in the mind of the other (e.g., a mental intention to reach for a pen, rather than, say, to write down a phone number). Developmentally, different pathways would seem to lead to learning about goals-as-mental-states (e.g., talking about the minds of others), and goals-as-organized-action (e.g., participating in these actions). Perhaps problematically for the former view, people perceive goals in mindless things like animated geometric shapes (e.g., Kuhlmeier, Wynn, & Bloom, 2003) and robotic arms (e.g., Gazzola, Rizzolatti, Wicker, & Keysers, 2007), which would seem to imply that people can be good at perceiving and anticipating actions, but bad at perceiving the mental states behind these goal-like actions.

the current obstacles to that goal,”⁷ and implies that “[m]otivationally, exerting effort to help another person—with no immediate benefit to oneself—is costly” (Warneken & Tomasello, 2006, p. 1301). In fact, everyday help is often costly to the time and patience of parents. Parents report difficulty in *preventing* their toddlers’ involvement in daily chores; children react with anger to exclusion from parents’ activities – they are, at times, uncooperatively cooperative (Abe & Izard, 1999; Forman, 2007). And in contrast to a more deliberative understanding of the inner states of the other, everyday helping is often characterized by partial competence in the task at hand. Children get involved in routines (e.g., their parent doing laundry), and can complete some actions involved in the tasks (e.g., unfolding the laundry), yet their efforts are often misplaced (e.g., unfolding folded, clean laundry).

In part to manage children’s insistent participation, and to ensure that chores are actually completed, parents guide their children’s actions. Parents break larger tasks, such as baking, into parts, such as mixing ingredients. They introduce play implements, such as small brooms, assign the child fabricated tasks, allow child to observe, but not touch, or remove the child from the room entirely. Broadly speaking, these strategies are forms of *guided participation* (Rogoff, 2003), or *scaffolding* (Wood, Bruner, & Ross, 1976), processes whereby parents facilitate, hinder, or otherwise shape their children’s learning by transforming tasks that are beyond the child’s current abilities into activities that the child can understand⁸.

⁷ Typically an obstacle is construed as a physical obstacle (e.g., a closed door). However, obstacles can be understood as relative to the capacity of the agent carrying out the act, and children’s judgment of others’ capacities appears to develop over time (see, Paulus & Moore, 2011).

⁸ Attempts to look at moral development through the lens of scaffolding are relatively rare, and largely relate to formal character education in schools (e.g., Sokol, Hammond, & Berkowitz, 2010; Turner & Berkowitz, 2005). Furthermore, these efforts examine scaffolding of children’s moral understanding. In everyday help, parents seem to scaffold children’s skills in performing the chores.

The psychological mechanisms of help are generally thought to unfold, and develop, in distressing emotional circumstances⁹. In contrast, the emotional context of everyday help is relatively benign¹⁰. Rheingold (1982) characterized children's affective state during everyday help as one of "alacrity," or ready cheerfulness. Children seem to enjoy social inclusion and shared participation (Dahl, Campos, & Witherington, 2011). Furthermore, the emotional state of parents during routine chores - whatever the frustrations of managing an insistent child - is typically something other than the sadness or pain thought to motivate help. The overall emotional context of everyday help, cheerful on the part of the child, and relatively calm on the part of the parent, is poorly matched to the more dolorous picture of sociomoral action prominent in psychology (e.g., Wispé, 1991).

Everyday help is active, in that children jump in to take part in on-going activities. Many theoretical accounts portray prototypical helping as a reaction to some relatively static problem (e.g., someone is upset and crying). The child must then deduce the mental state of the other¹¹. The archetype of everyday help seems to be non-problematic, everyday situations, such as cooking, or cleaning, that progress and

⁹ For example, Hoffman (2000) portrays the roots of empathy in infants' reactive crying. Tucker, Luu, and Derryberry (2005) postulate that empathy develops through both directly experienced and observed instances of physical pain.

¹⁰ Felix Warneken (personal communication) remarked that laboratory studies of everyday help seemed to occur in situations of 'no emotion,' which precluded the relevance of empathy. However, this issue rests on the definition of emotion, which is in fact poorly understood in both the empathy and moral development literature, and the psychological literature more broadly (Campos, Dahl, & He, 2010). Emotions are commonly divided into basic or innate categories, such as sad, happy, angry, and so on that are universal and divorced from cognitive components (e.g., Ekman, 1998). As John Dewey (1895/1972) argued long ago, basic psychological concepts such as 'interest' fuse cognition, motivation, and emotion (see also, Bickhard, 2000; Piaget, 1954/1981; Sokol & Hammond, 2009). Activities such as trying to sweep a floor involve interests - and problems can trigger emotions such as frustration (Svetlova et al., 2010). Perhaps within a revised conceptual framework, with a more broadly defined concept of emotion, everyday help would seem relevant to so-called affective-helping.

¹¹ A common assumption is that helping is predicated on generating a representation of the mind of the other (e.g., Bratman, 1992). For example, Buttelman and colleagues (Buttelman, Carpenter, & Tomasello, 2009) remark that helping occurs when children "imagin[e] (as it were) a thought bubble in [the helpee's] head" (p. 342). This thought bubble has as its contents the "cognitive content driving [the other's] behavior" (p. 341).

change over time¹². Helping someone make a cake involves different actions before and after the eggs are cracked¹³. Rheingold (1982) noted that children often initiated participation in routine tasks without the explicit invitation of parents, and on occasion “began to execute a task before the parent began it or even voiced an intention to do so” (p. 118). At home, young children take responsibility over certain routines, such as feeding pets, pressing elevator buttons, or helping to dress younger siblings. In these ways, children may alter situations such that problems do not occur; for example, by offering a younger sibling a toy before the latter becomes upset.

Although everyday help differs from standard conceptions of help in many regards, these conceptions face some troublesome issues. For example, Svetlova, Nichols, and Brownell (2010) remark that an unintended, and unfortunate, consequence of framing people’s moral actions as processes driven by social understanding is that such a view problematizes “prosocial acts in young children who have... rudimentary social-cognitive abilities” (p. 1814). Indeed, in order to explain why young children help, many nominally developmental theorists have concluded that social cognition and morality are innate (e.g., Caron, 2009; Hasting, Zahn-Waxler, & McShane, 2006)¹⁴. At an

¹² Recently, some psychologists and philosophers emphasized a more active and dynamic role for moral and social actors (e.g., Gallagher, 2007; De Jaegher, 2009; Johansson, 2008; Shanon, 2008). These ‘intersubjective’ approaches tend to begin their theoretical examination on the unnoticed, though not unremarkable, smoothness of everyday interaction, whereas typical approaches begin with situations of breakdown and misunderstanding (Shanker & King, 2002).

¹³ As sociologist Émile Durkheim (1955) discussed in his 1913-1914 Sorbonne course on pragmatism, the dynamism of reality presents a (fatal, in his view) problem with the thought bubble (or copy) view of understanding. If a child was to form a thought bubble representation of the others’ inner state to solve the problem at hand, this thought bubble would then need to change with the situation (e.g., a person might need a knife to cut onions, then a spoon to stir them into the soup). But then, the child would essentially have a thought bubble ‘movie’ that duplicates what they perceive (i.e., two copies of the same unfolding set of actions), and whose contribution to understanding above and beyond what is perceived is unclear.

¹⁴ This move essentially pushes advanced social cognitive mechanisms into the minds of infants (Müller & Overton, 1998). Although, somewhat paradoxically, many developmental researchers readily adopt nativism, the concept ‘innate’ is deeply problematic and difficult to define (Mameli & Bateson, 2006).

empirical level¹⁵, researchers have found that children help more in positive emotional situations than negative ones (e.g., Chapman, Zahn-Waxler, Cooperman, & Iannotti, 1987). Nevertheless, theories of moral development tend to focus on painful and sad situations, and neglect the importance of play and sharing (Brownell, Zerwas, & Balaram, 2002).

In sum, everyday help involves active participation in another's ongoing activity in relative mundane contexts that is guided by others. These features are quite different than those emphasized in typical accounts of sociomoral development. And these accounts have some recognized problems. Learning more about everyday help has the potential to shed light both on this poorly understood characteristic of young children's activity and inform our understanding of social cognition and moral development.

Research on everyday help

Rheingold's (1982) original study of everyday help had children of 18, 24, and 30 months of age perform household chores with their mother or father, or with an unfamiliar adult, in a lab setting. She found that older children tended to participate more, and more competently, than younger children (with an average participation in 63% of their parent's tasks at 18 months, 78% for 24 months, and 89% for 30 months)¹⁶. However, both younger and older children tended to assist the unfamiliar adult, with no differentiation by age. Rheingold also found that children would take on tasks without prompting from parents, and that the proclivity to do so increased with age.

For parent-child interactions, Rheingold (1982) examined "how effective the parents were in engaging the children in the chores, and how they responded once the

¹⁵ Empirical research on moral action, particularly in children, is relatively rare (Dunfield, Kuhlmeier, O'Connell, & Kelley 2011),

¹⁶ These differences were not reported as statistically significant.

children began to participate” (p. 115). Rheingold could not find a “simple relationship ... between the frequency with which ... parents performed the different tasks and the percentage of these that the children participated in” (p. 118). She did find evidence that parents elicited children’s participation in tasks, such as by describing their actions (e.g., “I’m sweeping”). However, assessing parents’ involvement with their children was complicated by the fact that Rheingold had instructed parents to avoid explicitly coercing or directing their child’s activities, such as by using the word ‘help’ ¹⁷.

Drawing on Rheingold’s (1982) finding that children help relatively spontaneously, Liskowski and colleagues conducted a series of studies (Liskowski, Carpenter, Henning, Striano, & Tomasello, 2004; Liskowski, Carpenter, Striano, & Tomasello, 2006; both reviewed in Liskowski, 2005) examining 12-month-old and 18-month-old infants’ proclivity to assist and inform others through pointing to events that were not seen by an experimenter and objects. This ‘everyday pointing,’ examined in situations that could occur in everyday life, is roughly analogous to everyday helping.

Liskowski and colleagues found that infants pointed to inform an adult looking for an object, whose location was known to the infant, and to inform adults of interesting events. They hypothesized that, psychologically, pointing-as-helping and pointing-to-inform both require that infants “understand that the other needs information” and thereby “understand the addressee as an intentional agent” (Liskowski et al., 2006, p. 185). Furthermore, motivationally, infants are motivated to “use their communicative

¹⁷ Rheingold’s intention in introducing this restriction was to see if children would help relatively spontaneously. As discussed further in the methodology section, parents participating in pilot testing for the present study found this restriction unnatural and unlike how they spoke to their children at home.

abilities to provide information for others” (p. 185)¹⁸. In other words, this participation with the other, whether in informational or helping contexts, was attributed to a fairly complex psychological understanding of the other.

Warneken and Tomasello (2006, 2007) used structured helping situations to examine how 14- and 18-month-old children assist unfamiliar adults in everyday situations. Warneken and Tomasello (2006) looked at what they dubbed ‘instrumental’ helping in 18-month-old children, comparing their performance to that of chimpanzees. Instrumental help involves assistance to “people who are faced with an instrumental problem and are unable to reach their goal” (p. 1301). These sorts of instrumental problems could include trying to retrieve an object out of reach, or trying to open a door with one’s hands full¹⁹. In the relatively low emotional context of such tasks, and in their general nature (e.g., picking up dropped objects), they resemble those that a child could encounter in everyday help.

Like Liszkowski and colleagues (2006), Warneken and Tomasello attribute help to psychological understanding of the other. Perhaps because Warneken and Tomasello were intent on comparing humans and chimpanzees, little detail was recorded about features of children’s help. For the 18-month-olds, nearly all children helped on at least 1 of 5 tasks, and children generally helped relatively quickly (average latency = 5.2 seconds). Children helped more in retrieving objects that were out-of-reach, and less often on tasks that required coordination, such as opening a cabinet for an experimenter whose hands were full. The 14-month-olds showed similar results (Warneken &

¹⁸ D’Entremont and Seamans (2007) offer an alternative account, arguing that in some circumstances the child’s social engagement with others has the emergent function of helping others, whereas in other circumstances this engagement has the function of sharing information.

¹⁹ Warneken and Tomasello (2006) classified tasks as: *out-of-reach* (e.g., a dropped clothespin), *physical obstacle* (e.g., a closed door), *wrong result* (e.g., failure to correctly stack some objects) and *wrong means* (e.g., trying to retrieve a dropped object through some unworkable method, where a more viable means exists).

Tomasello, 2007). Warneken and Tomasello (2006) found that all children helped on at least one trial, and that when children did help, they do so relatively quickly. However, these differences were not systematically explored²⁰.

In the experimental structure used by Warneken and Tomasello (2006, 2007), an adult experimenter encountered problems but did not explicitly invite children's assistance. After the experimenter encountered some problem (e.g., dropping a clothespin), they made an exclamation such as "Oh!" and then looked at the object related to this problem for 10 seconds. They then alternated their gaze between the child and the object for 10 seconds, finally verbalising the problem (e.g., "my marker!"). In Warneken and Tomasello's view, this meant that the child had understand the goal of the other with only a few 'hints.'

Svetlova, Nichols, and Brownell (2010) modified Warneken and Tomasello's (2006) study, adding a richer sequence of communicative cues in a study of help in 18-month-old and 30-month-old children. Their experimental sequence began with the experimenter talking about the problem (e.g., "I need to open the door"), then a social gaze similar to the Warneken and Tomasello procedure, and finally an explicit appeal for help. According to Svetlova and colleagues, this cue structure better scaffolded the child's understanding of the intention of the 'helpee'. Indeed, Svetlova and colleagues found that both age groups of children helped on the majority of trials, although younger children needed more support (i.e., cues) to help than older children.

In contrast to Warneken and Tomasello's (2006) use of what they categorized as instrumental tasks, sub-divided by problem-type (e.g., out-of-reach), Svetlova and

²⁰ Chimpanzees helped less than humans; however, they did help on at least one of the tasks they took part in, which the authors interpret as evolutionarily significant, positing that "the common ancestor to chimpanzees and humans already possessed some tendency to help before humans began down their unique path of hypercooperativeness" (Warneken & Tomasello, 2006, p. 1302).

colleagues (2010) categorized tasks by the putative type of social cognitive knowledge required to solve the task. In addition to instrumental tasks (i.e., completing some goal sequence), they had emotion tasks (i.e., understanding the emotion state in another), and altruism tasks (i.e., giving up something of one's own to help the other). The emotion tasks involved situations with a problem relating to the experimenter's own state (e.g., being cold and needing to warm up). The altruism tasks were variations of the emotion tasks where the solution involved the child giving up an object of their own. For example, one emotion task involved the experimenter shivering with cold, and requesting a blanket, and the corresponding altruism version required that children hand their own blanket, brought from home, to the experimenter.

Svetlova and colleagues (2010) found that younger children were more likely to offer help in the action condition than either the emotion or altruism conditions, and that children helped with fewer cues in the action condition. In contrast, older children were more likely to offer help in the action condition than the emotion condition, and more likely to help in the emotion condition than the altruism condition, and again with fewer cues. Greater success in the emotion condition was attributed to greater social cognitive abilities in 30-month-old children, whereas success in the altruism conditions was attributed to motivational developments (e.g., overcoming possessiveness). However, Svetlova and colleagues remarked that the classification of the instrumental and emotion

tasks was somewhat problematic, as instrumental tasks involved emotions such as frustration²¹.

Using a similar classificatory scheme to Svetlova and colleagues (2010), but the simpler cue structure of Warneken and Tomasello (2006), Dunfield, Kuhlmeier, O'Connell, and Kelley (2011) sought to examine whether 18- and 24-month-old children engage in different forms of helping, which they classified as helping (analogous to instrumental helping), sharing (altruism), and comforting (emotion based helping). Unlike Svetlova and colleagues, the sharing task involved items given to the child during the study (e.g., snacks), rather than the child's own objects brought from home. Again unlike Svetlova and colleagues Dunfield and colleagues found that children did not comfort, although they did share and help. There were no age differences in proclivity to help or share.

In sum, studies on everyday help have built on some aspects of Rheingold's (1982) initial work. The central findings of these studies are that: 1) children tend to help, and 2) they tend to do so relatively quickly. However, while these two facts are clear, the reason that individual children help more or less, and why they take more or less time to do so, is unknown. A third finding, emerging from studies by Svetlova and colleagues (2010) and Dunfield and colleagues (2011), is that different task configurations, such as having children share an object, or respond to someone in distress, lead to different

²¹ Another important point of consideration is that expression of emotion in the so-called instrumental tasks intimately involved the solution to the problem in question (e.g., a person bumping into a door and then staring at the door), whereas in the emotion tasks the initial expression of emotion (e.g., shivering) is only symbolically linked to the solution to the problem (e.g., a blanket). Importantly, however, neither expression is more 'mental' than the other (cf. the interpretation of Svetlova and colleagues). Some early critics and commentators (e.g., Dewey, 1894/1971; Mead, 1934) of Darwin's *Expression of the emotions in man and animals* (1872/1988) seized on Darwin's neglect of the problem of the relation between actions and the expression of emotion. Unfortunately, the issue has been neglected in subsequent emotion literature. A related issue is then that, a so-called emotion task, such as a person shivering in cold, becomes a so-called instrumental type task when the other looks over to a needed blanket that is out-of-reach.

levels of helping. However, a systemic comparison of these task structures is difficult, in part because experimenters have structured tasks in different ways (e.g., cue structures, different experimental operationalization of sharing, emotion, etc.).

Parental scaffolding and the occurrence of help

In their comparative study, Warneken and Tomasello (2006) speculate that children tend to help others, at least as compared to chimpanzees, due to their cooperativeness, and greater social cognition. They initially seem to rule out a role for parents, stating that, “[i]nfants 18 months of age are too young to have received much verbal encouragement for helping from parents” (p. 1302)²². However, in the subsequent sentence, they state that:

[E]ven if they had received some prior encouragement, many of the current tasks would have been unfamiliar for them, and the recipient of the help was an unfamiliar adult as well. In any case, viewed from a larger evolutionary perspective, the fact that human parents encourage their children to help others and that children comply by helping (even before they are linguistic) are noteworthy as the teaching and learning of prosocial norms (p. 1302)²³.

Rheingold (1982) and Svetlova and colleagues (2010) also postulate that parental scaffolding may play a role in explaining why children help. Rheingold notes the importance parents’ scaffolding of chores. Her postulate is somewhat different than Warneken and Tomasello’s (2006) view that parents (might) teach prosocial norms, emphasising instead how parents scaffold the actual completion of chores. In other words, children’s helping may arise not from parents ‘explicitly’ teaching about helping (e.g., with reference to others’ frustrated goals, intentions, or sadness), but by guiding

²² Warneken and Tomasello (2009) elaborate that the “early ontogenetic emergence of spontaneous helping in young children and its presence in our nearest primate relatives, suggest that helping others with their instrumental goals somehow comes naturally to humans, not exclusively through cultural transmission or explicit teaching” (p. 397).

²³ Dunfield and colleagues (2011) state their agreement with Warneken and Tomasello (2006), i.e., to say that children’s help is natural, and if parental encouragement of help is found, this is also evidence that help is natural (p. 244).

children's participation in routine activities²⁴. Svetlova and colleagues cite Carpendale and Lewis' (2004) view that children's social understanding forms within social interaction with parents. This social interaction could be of the type Rheingold describes, but could also involve talk about the psychological states of others (i.e., a role for scaffolding of chores, and for scaffolding of psychological state understanding).

Social cognition, social approach, and the timing of help

A related question is why, when children help, they tend to so promptly. Rheingold (1982) remarked that children begin to help without encouragement, and that children sometimes begin to help before the other even begins chores and routines. Warneken and Tomasello (2006) noted that children tend to help soon after an experimenter encounters a problem, and before they are solicited, via gaze, for help. Svetlova and colleagues (2010) introduced a richer cue structure, but likewise found that children tend to help before being invited to do so, either by gaze, or verbally. In their view, the cues make the goal of the experimenter more salient, allowing children who are more skilled at social understanding to help earlier in the cue sequence.

Alternatively, the cues may be understood as phases of an unfolding interaction sequence²⁵. In Svetlova and colleagues' (2010) experimental design, the cues can be grouped in three phases: 1) the experimenter encounters a problem (e.g., bumping into

²⁴ Donald Hebb (1949/2002; Hebb, Lambert, & Tucker, 1971) argued that in addition to the commonly recognized pathways of innate knowledge and explicit learning, we should consider learning without explicit instruction. Learning in one area can structure the organization of behaviour in other areas. For example, children's fear of the dark may be a result from learning to interact in lighted environments. This familiar lighted environment is disrupted when the lights are shut off, leading to an emotional response. However, the child was never instructed or explicitly taught to fear the dark. In everyday help, children learning to interact with others in everyday chores may structure their actions in cases where people encounter problems.

²⁵ A reasonable question is whether this cue sequence is one that might be encountered outside the lab – i.e. is whether this is natural kind (Hendriks-Jansen, 1996). Clearly, its structure is somewhat contrived for the purpose of the study. On the other hand, it is more naturalistic than some laboratory tasks used with children (e.g., involving puppets rather than real actors).

a cupboard with hands full) and talks to themselves about solving the problem²⁶, 2) they look over at the child, and 3) they ask the child to help (see Table 1). In both the Warneken and Tomasello (2006, 2007) and Dunfield and colleagues' (2011) experimental designs, only the first two phases are present, and no speech occurs in the first phase.

Table 1 Cues for Child Tasks and Action Phases (adapted from Svetlova et al., 2010)

Cue presentation	Description	Action Phase
1	Exclamation (e.g., "Oh!")	<i>Individual action</i> Experimenter acting by themselves.
2	Description of problem (e.g., "it's closed!")	
3	Describing general goal (e.g., "I need to put these away")	
4	Describing specific goal (e.g., "I need to open the door")	
5	Alternating gaze between object and child	<i>Nonverbal request</i> Experimenter interacts with the child.
6	Begin attempting to retrieve object in earnest	
7	General request for help ("Can you help me?")	<i>Verbal request</i> Experimenter talks with the child.
8	Specific request for help ("Can you open the door?")	
Termination	If after three repetitions of the specific request child does not help, task is terminated.	

Importantly, a sequential interpretation of the social cues facilitates linking the general experimental paradigm of Warneken and Tomasello (2006, 2007), Svetlova and colleagues (2010), and Dunfield and colleagues (2011), to the active nature of everyday help noted by Rheingold (1982). Children who begin to help the experimenter when the

²⁶ Although the experimenter is talking (in Svetlova and colleagues' experimental design), they make no attempt to communicate with the child.

latter is engaged in individual action are leaping into the other's situation, without invitation, in much the way Rheingold noted²⁷.

In some ways, children who act at different stages in the sequence are interacting in different, but not necessarily better or worse, ways (i.e., children who get involved in the individual action phase are no more helpful than those who help during the social gesture, or verbal request phase). The particulars here would very much depend on the situation (e.g., waiting for a verbal request to help from someone who is choking is not particularly helpful, and neither is offering an unsolicited answer to a crossword puzzle). Furthermore, for parents, children's active participation is often a problem and source of frustration. In this sense, children who wait until someone invites or solicits their help, is being more helpful.

In other ways, children who help more actively, over those who wait, are displaying a better grasp of the fact that a person has encountered a problem. The child may recognize that something has gone awry (e.g., dropping a clothespin) and attempt to repair the situation (handing the clothespin back to the other). Children's active participation also seems to be related to other forms of everyday helping. For example, parents note that children actively take on tasks, such as feeding pets or helping to dress younger siblings, without prompting and in ways that are actually helpful. In these ways, active participation seems indicative of better social understanding. As such, there are valid reasons to suspect that social cognitive factors could be related to when children help, and there are also sensible reasons that this may not be true.

In addition to these factors, children's reaction to novel situations and people may play a role in mediating when children help (Kochanska, 1995). Broadly speaking, a

²⁷ The experimenter in the individual action phase is either looking at the object in question (Dunfield et al., 2011; Warneken & Tomasello, 2006) or talking about what they need to do (Svetlova et al., 2010).

more outgoing temperament may be associated with children being more willing to jump into a situation, particularly with an unknown experimenter²⁸. Children with more fearful temperaments may wait and to see what happens.

The present study

The present study is an attempt to relate the oft-neglected features of everyday help such as children's active, and even anticipatory, participation with others, and the role of parental scaffolding, to current experimental findings. The primary hypothesis of the present study is that parental scaffolding of chores will be related to children's active helping for an experimenter. Children's helping on various tasks will be examined with regards to whether and when, in the sequence of cues, the child helped. Variables of interest are as follows:

General variables:

Age

Sex

Theoretically relevant variables:

Empathy: Children's understanding of the emotions of others.

Social cognition: Children's understanding of others' psychological states.

Empirically relevant variables:

Social approach: Children's approach to strangers in mildly novel situations.

Variables hypothesized to be related to everyday help:

Social understanding scaffolding: Parents' scaffolding of children's understanding of sociomoral concepts.

²⁸ Differences in children's reaction to the testing situation were noted in pilot testing and early testing. Some children would stick close to their parent(s) early on in testing. Other children approached the experimenter quite readily. A third pattern was noted, where children stood approximately halfway in the small testing room, approaching the experimenter, yet also staying closer to the parent(s). Kochanska's (1995) measure of proximity to their mother from a study on morality was adapted for use in the present study.

Action scaffolding: Parents' scaffolding of children's participation in chores.

Dependent variables:

Helping: How many tasks children help with.

Action phase of help: How spontaneously children help.

Anticipatory help: Children's attempt to help before a problem is encountered.

A correlational analysis will be used to determine whether to proceed with regression of the variables of interest on to the dependent variables. Subsequent planned regression analysis will examine what factors predict variance in children's everyday help.

METHODS

Participants

Participants were 61 parent-child dyads²⁹. The children (30 girls and 31 boys) were between 18 and 24 months of age ($M = 90.90$ weeks, $SD = 9.80$)³⁰. Participants came from working-class and middle-class families in a large Western Canadian city, recruited via ads posted in local newspapers, daycares and libraries, and on the Internet³¹. Mothers took part in the parent-child tasks; if and when present, fathers participated in filling out the questionnaires. Twenty-nine of the children attended daycare at least part-time. Twenty-five children had one sibling and 7 had two siblings³². Twenty-three children were from homes where languages other than, or in addition to, English were spoken; however, all the children could understand English. Two children were excluded because their fraternal twin sibling also took part in the study. The twin included in the study was chosen at random. Additionally, two other children were

²⁹ Regarding the distribution of ages, a criterion for determining that a distribution is normal is by creating a confidence interval, through adding and subtracting twice the standard error of skew (and kurtosis), to the obtained skew (kurtosis) value and check to see if 0 is found in that interval. Using this conservative criterion, the distribution for age was neither skewed, nor leptokurtic or platykurtic.

³⁰ Although children appear to get somewhat more competent at helping with age (Svetlova et al., 2010), the effect seems less dramatic for children under 24 months of age (Dunfield et al., 2011; Warneken & Tomasello, 2006, 2007), and, according to Rheingold's findings, age-related differences are less pronounced when children participate with experimenters, rather than their parents.

³¹ Many families who participated in the study came from neighbourhoods located near or on the university campus where the study was conducted. The majority of mothers had a college or university education.

³² Neither daycare attendance nor number of siblings was correlated with any of the variables of interest in the study.

excluded because their fraternal triplet sibling took part. Again, the triplet included in the study was chosen at random³³.

General Procedure

After participants arrived in the study room, parents and children participated in a warm-up play session. Children were invited to open a cabinet and a wicker basket, both of which were used later in the experimental tasks. They were also shown a blanket, and how it could be wrapped around their shoulders if they got cold (Svetlova et al., 2010, p. 1818). The parents were in the room with their children at all times. After reading a book with their child, parents were instructed to appear busy working on a set of questionnaires. After the experimental tasks were completed, parents were asked to have a 'tea party' with their child and then clean up. The sessions were recorded on two video cameras for later coding³⁴.

Child tasks

Children took part in 5 helping tasks (6 trials total) with an experimenter (adapted from Warneken and Tomasello [2006] and Svetlova et al. [2010]). In each of the tasks the child was afforded the opportunity to assist the experimenter as the latter encountered a problem. Following Svetlova and colleagues, the experimental tasks were structured with a series of 8 cues (Table 2). The cues were presented with a 3-5 second delay.

³³ The twin and triplet siblings were excluded from the study because their parent had engaged in the parent-child tasks multiple times when working with these children.

³⁴ As noted earlier, children often 'helpfully' closed the door through whose frame the second camera was filming. The primary camera was concealed behind a one-way mirror.

The order of the 5 tasks was randomized³⁵. Each task had only one trial, with the exception of the book task, which had two trials.

Plate task. In this task (adapted from Warneken & Tomasello, 2006), the experimenter was stacking plates, and a plate slipped and fell. In the final cue sequence, the child is asked to stack the plate.

Laundry task. In this task (adapted from Warneken & Tomasello, 2006), the experimenter was hanging dishcloths on a clothesline and dropped a clothespin. In the final cue, the child was asked to hand the clothespin to the experimenter.

Novel box task. In this task (adapted from Warneken & Tomasello, 2006), the experimenter was stirring a spoon in a teacup and accidentally dropped the spoon into a hole at the top of an open-faced box. In the final cue, the child was asked to retrieve the spoon.

Blanket task. In this task (adapted from Svetlova et al., 2010), the experimenter begins to shiver from cold. In the final cue, the child was asked to hand a blanket to the experimenter.

Book task. In this task (adapted from Warneken & Tomasello, 2006), the experimenter attempted to put away a stack of books either in a wooden cabinet or a wicker toybox. The door was closed and the experimenter's hands were full of books. In the final cue sequence, the child was asked to open the doors. In a subsequent trial, the experimenter took more books to the other, unused, location. The location used first was randomized for each child.

³⁵ A check for repeated measures found no effect for the number of trials on helping.

Parent-child tasks

At the beginning of the session, parents and children read a book together. At the end of the session, the parent and child had a ‘tea party’, using objects available in the room, and then cleaned up together.

Book reading. The dyads read the picture book *Hug* by Jez Alborough (2001). The story is about a young monkey, Bobo, who is separated from, and looking for, his mother. The book uses only three words (‘hug’, ‘Bobo’, ‘Mommy’).

Chores. In this task (adapted from Rheingold, 1982), dyads cleaned up after a pretend tea party. Parents were instructed to put away dishes, dishtowels, and cups, ‘like they would at home.’ Unlike in Rheingold’s study, parents were not asked to refrain from using the word ‘help’ or were otherwise restricted in how they completed the task.³⁶

Questionnaires

Parents were asked to fill out a set of questionnaires on chores in the home (see Appendix 1), demographics (Appendix 2), the child’s psychological vocabulary (the Internal States Language Questionnaire; Bretherton & Beeghly, 1982; Appendix 3), and a measure of empathy (the affective subscale of the Griffith Empathy Measure – Parental Report; Dadds et al., 2008; Appendix 4).

Measures

Child task measures

Presence of help. The tasks were scored for whether or not the child helped. Children who did not help on a given task even after the experimenter explicitly asked

³⁶ In pilot testing for the present study, parents were asked not to use the word ‘help,’ following Rheingold (1982). Many parents reported that this was very unnatural for them. As the purpose of the cleaning task is to simulate cleaning at home, the decision was made not to restrict parents’ talk.

them three times to finish a task were assigned a score of 0 for that task. Children who helped before this were assigned a score of 1.

Action phase. The tasks were scored using a scoring system adapted from Svetlova et al. (2010) reflecting when, in the phases of the experimenter's actions, children helped (see Table 1). Children could help when the experimenter was engaged in *individual action* (the experimenter encountered a problem and subsequently talked to themselves about it), a *nonverbal request* (the experimenter looked at the child and attempted to solve the problem), or a *verbal request* (the experimenter explicitly requested help from the child), or children might offer no help even after the final cue was repeated three times. Children's help was assigned a score from 3 (helping during the initial stage of action), through 0 (no participation)³⁷.

Anticipation. The two trials of the book task were examined to see whether in the second trial, children opened the previous location before the experimenter came to the new location with more books. This was assigned a score of either 0 (no anticipation) or 1 (anticipation).

³⁷ This modified coding system was used to better reflect the three phases of communication used in the cues. In contrast, the eight-point system used by Svetlova et al. (2010) assigns more weight to the initial experimenter utterances (which are scored with four points) than gestural invitations to help (two points) or spoken requests for help (two points). Results for the present study were analyzed using both coding schemes, with no differences in statistical significance. Only the communicative scoring is reported hereafter.

Parent-child tasks measures

Action scaffolding. In the chore task, parents' scaffolding of their child's involvement in the task of cleaning up was examined for parents' inclusion of the children in the cleanup task. To some extent, scaffolding was thereby examined along the lines of a continuum between what Williams, Mastergeorge, and Ontai (2010) call an adult-centred strategy, using directives, moving the child around, and so on, to a child-centred strategy, integrating the child's activities into the task at hand. Parents could cooperate with their child to complete the task. In contrast, they may simply take over tasks from the child, largely excluding them from the tasks. Another extreme, although one not observed in the present study, would be to fully allocate the task to the child.

As Rheingold (1982) remarked, parents may solicit children into taking part by altering their own activity to integrate their child's existing activity into cleaning up (e.g., referring to and focussing on the objects the child is currently engaged with), talking about the task at hand ("I'm putting these away"), and so on. Parents can encourage children to figure out what to do ("Where should we put these?"). Or they can simply use the child as an agent to accomplish particular task elements (e.g., "open the door").

Action scaffolding scoring. Parental scaffolding on the chore task was scored on a 5-point scale (adapted from Hammond, Müller, Carpendale, Bibok, & Liebermann-Finestone, 2011). Although this scale is, at first glance, somewhat simplistic, it may better reflect the relational nature of scaffolding. Scaffolding emerges from the interaction of the parent and child. Although scaffolding is initiated by, and therefore causally related to, the actions of the parent, its structure is determined by the interaction between parent and child. Bernier, Carlson, and Whipple (2010) remark that scaffolding consists of "respecting the child's rhythm, and ensuring that he or she plays an active role in successful completion of the task" (p. 335). At times, scaffolding may require

heavy involvement by the parent (e.g., directing the child to do specific tasks in specific ways), and at other times, backing down and observing. Therefore, scaffolding cannot be related to particular actions the parent does, but rather the way the parent guides the child's activity over time in relation to the child's ability to do the task.

A scaffolding score was assigned based on the proportion of time parents scaffolded in an appropriate manner, and, conversely reflected the amount of time the parent spent inefficiently scaffolding:

0 - The parent gives little to no appropriate support (i.e., scaffolding 0- 25% of the time). Failure to provide appropriate support could include instances where the parent interfered with the child's efforts.

1 - The parent provides appropriate scaffolding some of the time (i.e., 25 – 40%)

2 - The parent provides appropriate scaffolding about half of the time (i.e., 40- 60%)

3 - The parent provides appropriate scaffolding most of the time (i.e., 60-75%)

4 - The parent provides consistent and appropriate scaffolding almost all of the time (i.e., 75-100%).

Social understanding scaffolding. Parents' scaffolding of children's understanding of mental state and emotion words during the book reading was used as a measure of *social understanding scaffolding*. The book used in the book task has no written narrative, so parents had freedom in choosing what elements of the story to talk about and make salient (Hammond, Bibok, Liebermann, Williams, Carpendale, & Müller, 2011). In a critical section of the storybook featured early in the story, the young monkey protagonist is looking sad and is walking past pairs of other animals who are watching the monkey. This section of the story was identified as relevant to parents' social understanding scaffolding as it occurs early in the story, before the narrative is clearly

established, and because the monkey's emotional state is subtle and muted, as is the reaction of the surrounding animals³⁸.

Social understanding scaffolding scoring. The parent-child reading task was examined for parents' emphasis of the emotional and anticipatory aspects of the storybook. With the exception of the zero score, scoring was additive, in the sense that dyads who were assigned a score of two included elements of a score of one, and so on. The parents were scored zero if they failed to mention the monkey's state; one point for noting that the monkey was sad, or that the other animals were looking at the monkey; two points for asking the child why the monkey was sad, or why the animals were looking at the monkey; three points for offering an explanation; and four points for emphasizing all elements (i.e., talking about both the monkey and the other animals, and asking the child about both of these elements).

Individual differences

Social approach. Children's social approach was explored adapting a measure of proximity of the child to their mother from Kochanska (1995) that assesses children's reactions to mild novelty. Children were assigned a score of between 0 and 2 based on their level of approach to the experimenter at the outset of the first helping task. Children who stayed close to their parent (e.g., clinging to the parent's leg) were assigned a score of 0, children who approached the experimenter somewhat, but also stayed close to the parent (e.g., standing halfway between the two) were assigned a score of 1, and children who moved towards the experimenter were assigned a score of 2.

Empathy. The child's empathy was examined using the affect subscale of the Griffiths Empathy Measure (Dadds et al., 2008; Appendix 4), which is based on Bryant's

³⁸ At a practical level, the appearance of this section early in the story is helpful as toddlers vary widely in their interest in books.

(1982) commonly-used self-report of empathy. The Griffiths Empathy Measure has both a cognitive subscale, involving explicit understanding (e.g., “My child doesn't understand why other people cry out of happiness”), and affective subscale (e.g., “My child gets upset when he/she sees another child being punished for being naughty”). Only the 9-item affective subscale was used in constructing a measure of empathy in the child³⁹. Each question was scored on a 9-point Likert scale ranging from -4 to +4. Total scores could range from -36 to +36.

Internal state language. The child’s social cognition was assessed using the Internal State Language Questionnaire (ISLQ; Bretherton & Beeghly, 1982; Appendix 3). The occurrence of particular psychological words in the child’s productive vocabulary was scored either present (1) or absent (0). Total scores could range from 0 to 84. This measure can be a concurrent and predictive measure of children’s social cognition (e.g., Carlson, Mandell, & Williams, 2004)⁴⁰.

Interrater reliability

Interrater reliability was assessed for over half of the participants for both the child and parent-child tasks. A second coder, blind to the study hypotheses, coded the child tasks. Cohen’s κ ranged from .88 for the laundry task to .84 for the blanket task. To determine interrater reliability for action scaffolding, another coder, trained using a

³⁹ The Griffith empathy measure is based on the most commonly used self-report of empathy by Bryant (1982). In the present study, although the entire questionnaire was filled out, the cognitive subscale was not used in that its questions that seemed inappropriate for toddlers, a fact also noted by many parents (e.g., My child rarely understands why other people cry.). A similarly affective-focused questionnaire by Rieffe, Ketelaar, and Wiefferlink (2010) was found after the study was in progress.

⁴⁰ In pilot testing, a visual perspective taking task was introduced that involved children being shown a one-side picture held vertical in a stand and then being asked to show the picture to the experimenter who was sitting behind the picture (e.g., by rotating the stand so the experimenter could see it, or, for children with lower perspective taking, pointing to the picture, even though the experimenter could not see what they were pointing to). However, many children tended to be unable to perform the task (e.g., they played with the object, rather than follow commands to show it to the experimenter). The ISLQ, a parent report, was used instead.

coding manual, coded video recordings of 40 participants. ICC, calculated using a two-way random, absolute agreement, single measure design, was .80. For social understanding scaffolding, ICC was .79. In cases of disagreement, the primary coder's rating was used.

RESULTS

Descriptives

Children's helping

Table 2 shows the frequency of passing the helping tasks. Children helped most often in the plate task (57 of 61 children), and least often in the blanket task (43 of 61 children). Thirty-five of 61 participants helped in all 6 trials of the 5 tasks. All 61 participants helped on at least one trial. An aggregate pass score was calculated by summing up passed tasks for all trials. Children passed, on average, 5.20 trials (SD= 1.25).

Table 2 Descriptive Statistics for Child Helping Tasks by Pass-Fail

Task	<i>Pass</i>	<i>Fail</i>
Plate	57	4
Laundry	56	5
Novel Box	53	8
Blanket	43	18
Book Trial 1	53	8
Book Trial 2	55	6

Phase of children's helping

An average action phase score was calculated for each child (the average of the child's scores on each task)⁴¹. The mean of the average score across children was 1.89 (SD= .61), with average action scores for each child ranging from 0.33 to 2.83. Table 3 shows the means by task. On most tasks, children helped most often in the individual action phase (i.e., a mode of 3); however, broken down by task, the blanket task had a mode of 1, which indicates that children helped most often at the verbal request communicative level on that task.

Table 3 Descriptive Statistics for Child Helping Tasks by Communicative Cue

Task	Phase of participation				
	<i>Mean</i>	<i>Median</i>	<i>Mode</i>	<i>SD</i>	<i>Range</i>
Plate	2.21	3.00	3	.99	3
Laundry	2.02	2.00	3	1.06	3
Novel Box	2.00	2.00	3	1.13	3
Blanket	1.05	1.00	1	.83	3
Book – Trial 1	1.85	2.00	3	1.14	3
Book – Trial 2	2.20	3.00	3	1.06	3

⁴¹ Both the blanket task and the second trial of the book task were unusual as compared to the other tasks. Children tended to help on the blanket task after the experimenter invited the child to retrieve the blanket. The second book trial was unusual in the children occasionally paused at the first location, and sometimes uttered or gestured in an attempt to get the experimenter to put books in this location. All correlations stayed significant, and no new correlations appeared, if either trial, or both, were removed from the analysis.

Anticipation on second book task trial

In the second book task trial, over half of the participants (32 of 61) opened the door of the initial location as the experimenter lifted a second stack of books to carry to an alternate location.

Parental scaffolding

Table 4 shows the means for parental scaffolding.

Table 4 Descriptive Statistics for Parent Action Scaffolding and Social Understanding Scaffolding

<i>Measure</i>	<i>Mean</i>	<i>SD</i>	<i>Minimum</i>	<i>Maximum</i>
Action Scaffolding	1.66	1.12	0	4
Social Understanding Scaffolding	1.59	1.10	0	4

Empathy, internal state language, and social approach

Table 5 shows the means for children's empathy, social approach, and internal state language.

Table 5 Descriptive Statistics for Child Empathy, Social Approach, and Internal State Language

<i>Measure</i>	<i>Mean</i>	<i>SD</i>	<i>Minimum</i>	<i>Maximum</i>
Social Approach	1.39	.82	0	2
Empathy	9.75	10.30	-28	35
Internal State Language	15.13	15.53	0	60

Correlation analyses

Correlation between pass-fail rates on individual helping tasks

Table 6 shows the correlation matrix for the 6 helping tasks. A Benjamini-Hochberg correction was applied for the resulting 13 correlation coefficients, to control Type 1 error (Benjamini & Hochberg, 1995). Cronbach's alpha was calculated at .683⁴².

Table 6 Correlation Table for Pass-Fail Scores of Individual Helping Tasks

Variable	P	L	NB	BL	BT1
Plate (P)					
Laundry (L)	.162				
Novel Box (NB)	.486**	.592**			
Blanket (BL)	.264	.331**	.281		
Book Trial 1 (BT1)	.289	.238	.137	.281	
Book Trial 2 (BT2)	.357**	-.099	.035	.269	.524**

**=significant at the .01 level

Correlation between action phase scores on individual helping tasks

Table 7 shows the correlation matrix for the 6 helping tasks by action phase. A Benjamini-Hochberg correction was applied for the resulting 13 correlation coefficients, to control Type 1 error (Benjamini & Hochberg, 1995). Similar to above, internal consistency was calculated for these items. Cronbach's alpha was 0.626.

⁴² This value falls into the rule-of-thumb 'questionable', and approaching 'acceptable,' level of internal consistency. Removing any of the items led to a reduction in Cronbach's alpha. Given that the interpretative purpose here was to aggregate the variables to give a sense of children's helping on average, rather than claim unidimensionality (which would require further statistical analyses), this level was deemed acceptable for the present study.

Table 7 Correlation Table for Action Phase Scores of Individual Helping Tasks

Variable	P	L	NB	BL	BT1
Plate (P)					
Laundry (L)	.253				
Novel Box (NB)	.436**	.308*			
Blanket (BL)	.233	.171	.233		
Book Trial 1 (BT1)	.326**	.224	.325*	.203	
Book Trial 2 (BT2)	.071	-.092	.014	.255	.328**

*= significant at the .05 level; **=significant at the .01 level

Correlation between variables of interest

Table 8 shows the correlation matrix for the 10 variables of interest: age, sex, internal state language, social approach, empathy, action scaffolding, social understanding scaffolding, aggregate help score, average action phase score, and anticipation on book trial 2. A Benjamini-Hochberg correction was applied for the resulting 45 correlation coefficients, to control Type 1 error (Benjamini & Hochberg, 1995).

Gender, empathy, and anticipation on the second book trial were not related to any other variables. Seven significant correlations were found. Age was correlated to internal state language, which was in turn correlated to scaffolding of social understanding, which was in turn correlated to action scaffolding. Parents who tended to scaffold chores, also tended to scaffold during book reading. This latter scaffolding was related to both the child's age and internal state language assessed through the ISLQ. The aggregate of helping was correlated only to action scaffolding. The average action

phase score was correlated to both social approach and to action scaffolding. In other words, only action scaffolding was correlated with the total number of tasks on which children successfully helped, whereas both social approach and action scaffolding were correlated with when children helped. Finally, children's aggregate help score on average action phase score were correlated.

Table 8 Correlation Table

Variable	A	S	E	ISL	SA	SUS	AS	AH	AAP
Age [in weeks] (A)									
Sex (S)	.027								
Empathy (E)	.039	-.066							
Internal State Language (ISL)	.511***	.228	.204						
Social Approach (SA)	-.092	-.193	-.061	-.184					
Social Understanding Scaffolding (SUS)	.248	.219	-.096	.419**	.015				
Action Scaffolding (AS)	.230	-.049	-.134	.164	.113	.450***			
Aggregate Help (AH)	.230	-.103	-.075	.078	.264	.278	.571***		
Average Action Phase (AAP)	.052	-.079	.029	.081	.453***	.244	.383**	.719***	
Anticipation Book Trial 2 (ABT)	.153	.083	-.209	.196	.057	.304	.236	.151	.185

= significant at the .01 level *= significant at the .001 level

Regression analyses

Two regression analyses were carried out for the two dependent variables (aggregate help score and average action phase). No regression was carried out for anticipation on book trial 2, which was not correlated to any of the variables of interest (Table 8).

Regression of variables of interest on aggregate help score

The variables of interest were regressed on the aggregate help score. Entered predictors were age and sex (Step 1), empathy and internal state language (Step 2), social approach (Step 3), action scaffolding (Step 4), social understanding scaffolding (Step 5). Table 9 shows the regression model. The inclusion of social approach in the regression model explained approximately 6 percent of the variance in children's aggregate help scores. However, social approach did not uniquely predict aggregate help scores (i.e., the beta term is not significant)⁴³. Action scaffolding uniquely accounted for approximately 20 percent of the variance beyond that accounted for by social approach. The entire model accounted for approximately 30 percent of the variance in aggregate help scores.

⁴³ Consequently, no interaction term was entered into the regression equation.

Table 9 Hierarchical Regression for Aggregate Help Score

Predictor	Adjusted ΔR^2	Standardized β	ΔF (df ₁ , df ₂)
Step 1	.033		2.019 (2, 58)
Age		.152	
Sex		-.039	
Step 2	-.026		.254 (2, 56)
Empathy		.012	
ISL		-.057	
Step 3	.060		4.564* (1, 55)
Social Approach		.203	
Step 4	.044		3.729 (1, 54)
Social Understanding		.045	
Scaffolding			
Step 5	.195		16.191** (1, 53)
Action Scaffolding		.502**	
Model Test	.306		4.780** (7, 53)

*= significant at the .05 level; **= significant at the .001 level

Regression of variables of interest on average action phase score

The variables of interest correlated with children's average action phase were entered as predictors for children's average action phase score⁴⁴. As above, entered predictors were age and sex (Step 1), empathy and internal state language (Step 2), social approach (Step 3), action scaffolding (Step 4), social understanding scaffolding (Step 5), and an additional interaction term, social approach x action scaffolding (Step 6). Table 10 shows the regression modeling. Social approach accounted for approximately 22 percent of the variance in children's action phase score, whereas action scaffolding accounted for approximately 6 percent of the variance beyond that accounted for by social approach. The total model accounted for approximately 24 percent of the variance in average action phase scores.

⁴⁴ All independent variables, except for the dichotomous sex variable, were centered for the regression, in order to include an interaction term.

Table 10 Hierarchical Regression for Average Action Phase

Predictor	Adjusted ΔR^2	Standardized β	ΔF (df ₁ , df ₂)
Step 1	-.025		.272 (2, 58)
Age		-.046	
Sex		-.003	
Step 2	-.029		.211 (2, 56)
Empathy		.094	
ISL		.078	
Step 3	.219		15.670** (1, 55)
Social Approach		.433**	
Step 4	.028		2.863 (1, 54)
Social Understanding		.089	
Scaffolding			
Step 5	.060		5.450* (1, 53)
Action Scaffolding		.301*	
Step 6	-.014		.055 (1, 52)
Social Approach x			
Action Scaffolding		-0.28	
Model Test	.240		3.374** (8, 52)

*=significant at the .05 level; **= significant at the .01 level

DISCUSSION

The present study examined sixty-one 18- to 24-month-old children's everyday help in structured situations with an experimenter, and in a chore activity with parents. Children's help was examined in relation to whether children helped, and also when they helped, in an experimenter's action sequence, involving individual action, a social gesture, and a verbal invitation. Additionally, children's anticipation of the experimenter's actions was examined in a task involving the experimenter carrying books a second time, but to a new location. Rheingold (1982) had noted children's active and anticipatory help; this was recorded more systematically in the present study.

The presence or absence of help across tasks and the average action phase children participated in across tasks was examined in relation to differences in parental scaffolding, both of chores, and of social understanding, and individual differences in the child, including age, sex, empathy, internal state language, and social approach⁴⁵. Parental action scaffolding was predictive of how often children helped across tasks (i.e., with the total number of helping tasks the child passed). Both social approach and parents' action scaffolding were uniquely predictive (i.e., no interaction) of the phase of action at which children participated. Over half of children anticipated the experimenter going to the initial location on the second book trial. This was not correlated with any other variables of interest.

As with Warneken and Tomasello's (2006) and Svetlova and colleagues' (2010) studies, children were generally helpful, helping with, on average, on more than 5 out of

⁴⁵ Kochanska (1995) had examined social approach in a study of maternal discipline; however, it has not been examined in relation to everyday help.

the 6 trials. If they helped, children tended to do so, on average, either during the gestural phase or verbal invitation phase of the helping cues (average action phase score 1.89, SD= .61). When looked at by task, the modal score of children's help for all tasks save the blanket task was 3. In other words, in most of the tasks, children actively involved themselves in the activity of the other without being asked to do so⁴⁶.

A few of the tasks merit further discussion. The plate task, where children picked up a dropped plate, had the highest rate of helping, and children, on average, helped the fastest after the experimenter encountered a problem. Helping on the plate task involves an interaction with objects in that correctly helping on this task involved stacking plates. As such, children could have helped, even if, for example, the experimenter had dropped the plate and left the room. No further coordination with the social other was required. Furthermore, the necessary helping pattern could be perceived to some extent from affordances of the plates for stacking (i.e., the dipped center of the plate)⁴⁷. In contrast, the laundry task, although also an easy task for children, involved handing a dropped clothespin back to the experimenter. The child thereby had to coordinate both with the object and with the experimenter (Leonova, 2004).

The blanket task had the lowest rate of helping⁴⁸. In the blanket task, the experimenter shivered from cold, and eventually requested a blanket. The experimenter had not interacted with the blanket in the early part of the action sequence – making this

⁴⁶ The average action phase score for tasks excluding the blanket task was 1.81, SD= .67.

⁴⁷ During some initial pilot testing, flat DVD cases were used rather than plates. Helping rates seemed lower, although the question was not systematically explored. The philosophical tradition used to explore helping and social understanding places an immense importance on the 'problem of other minds' and little on the 'problem of objects'. However, as James Gibson (1963) pointed out, from the infants' point of view, constructing an understanding of both objects and people is equally a problem. Gibson (1986) postulated that people perceive object *affordances*, or properties that allow certain actions, such that doors are perceived as 'openable' and plates 'stackable.' The salience of these action possibilities may play a role in how difficult or easy children find certain tasks.

⁴⁸ Nevertheless, seventy percent of participants (43 of 61) helped on this task.

task unlike all other tasks, where the experimenter encountered a problem with a given object and acting on that object was also part of the solution to the problem⁴⁹. Of the 43 children who helped, only three helped during the individual action phase (when the experimenter was shivering and talking about being cold). The rest either helped when the experimenter began to alternate gaze between the child and the blanket and reach for the blanket, or when the experimenter asked for help. Looked at communicatively, this means that children did not respond to the experimenter's shivering as indicating the need for a blanket. However, when the experimenter began to reach for a blanket, the task was transformed into a more familiar, so-called 'instrumental,' situation. As Svetlova and colleagues (2010) remark, these latter situations are also emotional. Perhaps the blanket task, with its highly symbolic nature (with shivering linked to the need for blanket) was less familiar to children⁵⁰.

A third task of interest is the second trial of the book task. The second book trial offered children an opportunity to anticipate the activity of the experimenter by opening the door of a location where the experimenter had previously put the books away, before the experimenter brought more books. Over half of the participants opened the door at the previous location for the experimenter before the experimenter encountered a problem at the new location. This anticipation was, in fact, an error by the child, as the experimenter subsequently went to a different location than the one opened by the child. Many children went to the new location fairly quickly after the experimenter brought the books to that location. However, several children stayed at the first location, and

⁴⁹ Instead, the experimenter had demonstrated to children at the beginning of the session that the blanket could be put around their shoulders if they were cold.

⁵⁰ Interestingly, the mother of one of the two children who helped during the individual action phase of the blanket task (the child was 18 months old), remarked that they often did this routine at home, i.e., the mom indicating she was cold and the child fetching a blanket.

responded by repeatedly pointing at this initial location. One child even removed the books from the experimenter's hands and put them away in the first location⁵¹.

Scaffolding, social cognition, and social approach

Rheingold (1982), Svetlova and colleagues (2010) - and, to some extent, Warneken and Tomasello (2006) - had all speculated that scaffolding would be related to greater skill in helping, as was found here. However, the present study assessed two forms of scaffolding: parents' action scaffolding of chores, and parents' scaffolding of social understanding. Only the former was related to helping⁵². Scaffolding of chores was also predictive of the phase of action in which children took part in the task. Therefore, scaffolding of chores was related to helping, which is thought to be a marker of social cognitive and moral development, and also to helping earlier in the action sequence, which is less clearly a social cognitive and moral achievement (e.g., given that jumping into another's activities can be rude, unhelpful, or in error).

One interpretation of these findings is that action scaffolding plays a role in children's skill with cooperating with others. This cooperation is, in its everyday context, relatively mundane and also somewhat complicated, characterised by alacrity from children, and sometimes, annoyance by parents. However, in circumstances where someone encounters a problem, cooperation takes on a moral hue and becomes helping.

⁵¹ After some deliberation, this instance was coded as helping.

⁵² The measure of social understanding scaffolding, a book reading task, may have been insufficient to the task of measuring parents' scaffolding of children's psychological understanding. However, this measure was correlated with children's internal state language.

Perhaps in a similar way, measures of the children's social cognition, i.e., internal state language and empathy, were unrelated to help⁵³. As noted earlier, the nature of everyday helping is such that its relation to social cognitive factors, as standardly conceived, is unclear. Children's helping is often taken to indicate improved social cognitive skills, broadly conceived (e.g., Warneken & Tomasello, 2006). However, the way that everyday helping was analysed here, emphasising children's tendency to leap into tasks, is less obviously related to social cognition. Arguably, the children who acted earlier in the communicative sequence acted in an inappropriate manner. Those who anticipated where the experimenter was going with books on the second book trial were wrong. Those who helped when the experimenter was engaged in individual action were getting involved with someone who had not asked for any help. Judged from this perspective, they were demonstrating lower social cognitive ability than children who waited to see if their help was required.

On the other hand, as compared to children who did not help at all, children who participated, even if they did so in the individual action phase, did seem to display a greater understanding of other people. Children responded to a problem another person had encountered and was attempting to solve, without success. This response seems to involve an understanding of acting with and alongside others, rather than the ability to talk about others using psychological terms, or respond in kind to others' emotional displays. Helping may demonstrate a type of action-based, or sensori-motor, knowledge of others.

Children's social approach to an unfamiliar individual, and mildly novel situation, was related to when, but not whether, they helped. Social approach could be considered

⁵³ Again, the inadequacy of measures, both of which were parent reports, may be at issue; researchers have long had difficulty connecting existing measures of social cognition and empathy to helping (e.g., Blasi, 1980; Eisenberg & Miller, 1987; Eisenberg, Losoya, & Spinrad, 2006).

as a performance factor, whereby more fearful children may be inhibited from acting with another. In the lab setting, there were no consequences for children helping earlier in the sequence as opposed to later. However, outside the lab, social approach could play a more formative role. Social cognition occurs in social interaction, which has a time-sensitive structure (Klin et al., 2003). In some situations, children who act sooner, and those who wait, act in a different contexts, and thereby experience different outcomes (Block, 2002).

But is it really help?

Rheingold (1982) raised the issue of whether everyday help in young children can really be considered helping. She conceded that attributing helping “to very young children may appear unjustified to those who wish to reserve the terms for persons old enough to verbalize their intentions and thus, it is assumed, to be explicitly aware of their motives” (p. 114). To this concession we could add that even the way that children help is sometimes difficult to link to theories of social or moral development. At home, their everyday help is not always helpful. In the lab setting, their help is of an active nature, where they introduce themselves into the activities of another, uninvited.

Conceptually, if morality is thought to require reflection and articulation of intention, then children’s everyday help in children too young to articulate these reasons cannot be relevant to morality. From a deontological perspective, everyday help is difficult to link to morality because of children’s pleasure in participating with others. In such perspectives, morality is supposed to arise through a sense of duty. In consequentialist theories, or evolutionary theories of morality, a conscious reflection on motives may not be a necessary condition of morality. Morality is assessed in different ways, such as outcomes. The question becomes does everyday help make a contribution to morality, regardless of children’s psychological understanding or

experience of morality. Yet another way to look at Rheingold's question, from a character or virtue ethics perspective, is to ask whether everyday help plays a role in moral development (Hendriks-Jansen, 1996, pp. 11-12).

Where does everyday help come from?

Rheingold (1982) remarked that a "fundamental characteristic of human infants that underlies helping, and many other prosocial behaviors, is their interest in people and their activities" (p.115). Children's interest in others appears to begin much earlier than the appearance of everyday help (e.g., Liszkowski et al., 2006). Children's involvement in daily routines in activities such as feeding may lay a developmental foundation for everyday help (Reddy, 2008).

Everyday help, in so far as it occurs in the context of routines and chores, would seem to be tied to children's physical and motor development. For example, children cannot as easily get involved in certain chores until they can walk, or at least scoot or crawl relatively competently. However, in that children's everyday helping also involves parental scaffolding, parents may scaffold children's interaction such that the child can participate in activities (e.g., by bringing ingredients to the child's chair so that they can mix them). Therefore, everyday help may begin in very different ages in different children, in part related to physical and motor development, and in part to parental factors.

Where does everyday help go?

There are two senses to the question of how everyday help changes over the course of development. One sense of this question is related to whether and how everyday help plays a role in subsequent moral development. Parental scaffolding of everyday help seems to emphasise parsing actions, rather than, say, providing children

explicit instruction on how to understand others. The lessons learned in participating with parents may provide children with the skill to act in concert with others (Müller & Carpendale, 2000). These skills may then contribute to the child's activities in situations when routines breakdown and problems occur (Bibok, Carpendale, & Lewis, 2008). Children's everyday help may contribute to moral development as children's activities in routine contexts build more reflective moral understanding⁵⁴.

In other words, children's participation in everyday help alongside parents could form the basis of later social and moral development (Campbell, Christopher, & Bickhard, 2002; Carpendale, 2000). To a large extent, the literature on moral development has emphasised a 'top-down' approach, where a certain moral understanding is required to produce moral action (Blasi, 1980). A 'bottom-up' perspective, where certain forms of activity gradually build up moral understanding stresses an important role for parents in shaping children's cooperation through scaffolding or guided participation. For example, participation in work and play in the home may lead to more reflective social and moral development (Dewey, 1910/1997; Piaget 1932/1965). Alongside this action-based learning, and transition to reflective morality, parents talk to children about morality in the context of chores (Fasulo, Loyd, &

⁵⁴ Although this 'action' approach to moral development is less prominent in moral psychology today, it is arguably a closer match to the seminal work of Jean Piaget, who distinguished children's interaction with one another from their thinking and reasoning about this interaction (Carpendale, 2000, 2009; Piaget, 1932/1965).

Padiglione, 2007), which may engender more reflective and symbolically mediated later developments⁵⁵.

A second sense to the question of where does everyday help go is that most children seem to become distinctly less interested in helping out parents, at least with activities such as washing dishes, or doing laundry. When children master certain tasks, they may no longer find them interesting. In contrast, parents might be able to continue to see children's active and willing involvement in more complex tasks (e.g., fixing a car or sewing).

Limitations and future directions

The present study had several limitations. Children between the ages of 18 and 24 months are in some ways at highly idiosyncratic levels of development. For example, some of the younger children in the study were already quite advanced verbally. Others had precocious hand-eye coordination. Others were not yet particularly competent walkers. These differences, particularly in physical mobility, may play a role in helping⁵⁶. On the one hand, children's physical competence can merely be looked at as a performance factor that masks underlying social cognition. However, they can also be looked at in the real-life context of collaborative activity, where children are collaborating with a more competent social other, who is helping the child help, rather than an

⁵⁵ Although most parents in the present study acknowledged, often with good humour, the challenges, and not always helpful results, of everyday help, they talked about their children's involvement in daily routines as helping, and spoke to their children using the term 'help' during the study. In pilot testing, a 3-year-old child referred to his own participation as 'help,' as he attempted to take part in hanging laundry with an experimenter. Rheingold (1982) notes similar utterances in her study. However, these utterances, even if made by children themselves, are not necessarily isomorphic to inner mental 'helping' structures present in the child (Bickhard, 2004). Indeed, given that children's everyday help is at times unhelpful, drawing a simple isomorphism between even utterances and action is difficult.

⁵⁶ For example, on one occasion, a child fell into the wicker book box as he opened the door. This attempt was coded as helping, as the child had opened the door at an appropriate time. However, the real-world helpfulness of such an act can be questioned.

experimenter 'holding back' their interaction with the child. Parental scaffolding offers children an opportunity to take on the role of a participant in these activities (Martin, 2006; see also Carpendale & Carpendale, 2010).

A second relevant issue is related to routines at home. As noted earlier, some of the, very few, children who helped during the individual action phase of the blanket task had similar routines at home. This type of detailed information was collected anecdotally, in discussion with parents, rather than systemically, through structured surveys or observation of routines at home. This seems particularly relevant to the acquisition of so-called emotion understanding (e.g., understanding shivering, crying, and so on), which may be related to children's understanding of significant gestures and symbols (e.g., learning to link shivering with getting a blanket; see Mead, 1934).

Parents were asked if their children participated in seven typical household chores (a list gathered during pilot testing): laundry, dishwashing, sweeping and vacuuming, cleaning up toys, gardening, cooking, and helping with groceries. Of interest to future research, the number of chores children took part in was correlated, at the zero-order level, with aggregate helping scores (i.e., the number of chores children helped an experimenter with)⁵⁷. In future studies, a more systematic look at children's routines and chores in the home may be in order, looking at a greater number of chores, and also, in the case of home-based studies, to what degree children participate.

The parents who participated in the parent-child tasks in this study were mothers. There is some indication from the surveys that children engage in different chores and routines with fathers as opposed to mothers (e.g., using tools). Perhaps fathers also have different interaction and scaffolding styles with children. The education level of parents was also considerably above average. Although this was comparable to other

⁵⁷ There was no correlation with a Benjamini-Hochberg (1995) correction for multiple correlations.

studies (Rheingold, 1982), yet should be considered in generalization of the findings to the larger population. Although Rogoff (2003) has found evidence of scaffolding, or what she calls guided participation, across cultures and classes, the structure of this guided participation may be different – and, in some cultures, perhaps even more involved (Rogoff, Mistry, Göncü, & Mosier, 1993)⁵⁸.

The external validity of the measure of action scaffolding can be questioned. Cleaning up in a lab is different than cleaning up at home. Furthermore, children were cleaning up objects that they had used to play ‘tea party’. Lillard (2007) reported some differences between parents’ ‘real’ activities with children (e.g., feeding), and pretend versions (e.g., pretending to drink from a toy block). However, in the present study, parents and children were actually cleaning up the room, even if they were not cleaning up a room in their own homes in the course of everyday activity. However, future studies should include more in-depth observation of parent and children’s routines at home.

Conclusion

Everyday help, or children’s persistent involvement in the work of adults, poses some interesting challenges to current views of moral and social development. The present study has confirmed prior findings that children help readily, actively involving themselves when other people encounter problems, and often do so without invitation. Furthermore, the present study found that parental scaffolding of everyday chores, and not scaffolding of social understanding, was related to children’s help for others, and to the tendency of children to ‘leap into’ helping situations.

⁵⁸ On a visit to Port-au-Prince, Haiti, in late 2009, I saw very young children involved in helping their parents in tasks such as carrying objects to market by balancing them on their head, cleaning carpets by hand, and so on. Anecdotes from Sister Mary Finnick (personal communication) from after the January 2010 earthquake tell of very young children (ages 3-4) involved in helping provide first aid to victims in a makeshift medical clinic in the Delmas neighbourhood.

As Rheingold (1982) remarked, the roots of children's everyday help may develop in children's exploration of the world with and through social others. Reconciling children's active involvement in the affairs of others and the important role of parents in shaping this involvement, with existing theories of social and moral development will be challenging, but not impossible. Adam Smith (1790/1976), the moral and economic philosopher, based his theory of sympathy on our interest "in the fortune of others" (p. 9). Smith's own work, and much of the subsequent literature on moral psychology has delved into uncovering the psychological mechanisms by which we understand others, without reference to the importance of shared activities. Perhaps the origins of helping lie in an intersection of interests: the child's interest in the activities of parents, and parents' interest in the fortune of their child.

APPENDICES

Appendix 1: Chore survey and representative examples

1. Does your child take part in any of the following activities at home? [Yes/No]

Laundry (Y / N)

Dishes (Y / N)

Sweeping/Vacuuming (Y / N)

Cleaning up toys (Y / N)

Gardening (Y / N)

Cooking (Y /N)

Groceries (Y /N)

List any other chores below:

Representative examples:

P2: Cleans up toys, turns lights on/off.

P10: Wiping and cleaning. Putting clothes away.

P18: Walking the dog.

P22: Any and all chores I do, she does.

P39: She likes to organize the books on the shelf.

2. Does your child ever get in the way of your activities (e.g., in the kitchen)?

Representative examples:

P11: Yes – wants to be held when I cook.

P12: When [I'm] vacuuming, she likes to stand in the way.

P27: Not really, only if she is sleepy or hungry.

P36: He constantly pulls on my leg for attention.

P55: She wants to type on the computer while I am typing.

How do you respond in these situations?

Representative examples:

P13: Turn on the TV, distract him, other parent plays with him.

P14: When I'm busy and in a hurry I usually try to redirect him to another activity.

If it's more leisurely I involve him in helping me in the cooking by for example peeling garlic (he is quite good at it and ... he enjoys it!).

P23: I usually let him to help if possible. If he can't or it is dangerous then I sit him in the kitchen counter to watch me.

P34: Sometimes I say "no" if I'm cooking, I don't feel comfortable if he gets too close to the stove. And sometimes I can let him help me sweeping, mopping, or even put the dishes away. It depends on the situation.

P52: I put him on the counter so he can watch or I let him put the spoon in his hand so he can stir.

3. What other sorts of helping have you seen your child do?

Representative examples:

P07: She often helps her brother with things he is doing or needs to do. For example, she'll get his hat and coat when it is time to leave. She carries his snack into school and hangs it on his hook.

P11: Taking bib/tray/plate to the table.

P23: Feeding others.

P30: She points out where it is dirty. The floors or couch. She will say 'uh oh dirty.'

P43: He often examines my scars or 'owies' and tries to rub them. He brings things to us, etc.

Appendix 2: Time with others survey

We are interested in getting some rough estimate of the number of hours your child spends interacting with other children and adults.

1. I am this child's: mother / father / other
2. How many adults are there in your household?
3. How often do your children see adult relatives or close family friends? (Daily / Weekly / Monthly / Yearly)
4. How many hours a day do you spend with your child?
5. How many hours a day does your spouse spend with your child?
6. How many children regularly live in your home? What are their ages?
7. Does your child attend daycare? If yes, how many hours per week do they spend in daycare?
8. On a typical day how many people does your child play and talk with for a half hour or more (not including daycare)? Adults ____ Older Children ____ Same Age Children ____ Younger Children ____

Appendix 3: Internal States Language Questionnaire (Bretherton & Beeghly, 1982)

Children understand many more words than they say. This is a list of words about feelings and experiences. Can you please go through the list below and mark those words that you have heard your child *use*.

- | | | |
|-------------|--------------------------------|----------------|
| See__ | Feel (good, bad, all right) __ | Need __ |
| Watch__ | To Be All Right __ | Have to__ |
| Hear__ | Better __ | Can__ |
| Listen __ | Good __ | Hard__ |
| Taste __ | O.K. __ | Know__ |
| Smell __ | Nice __ | Think__ |
| Feel __ | Like __ | Remember __ |
| Cold __ | Love __ | Forget __ |
| Freezing__ | Have a Good Time __ | Maybe __ |
| Hot __ | Surprised __ | May __ |
| Warm __ | Sad __ | Understand __ |
| Hurt __ | Angry __ | Pretend __ |
| Hungry __ | Mad __ | Dream __ |
| Starving __ | Scared __ | Real __ |
| Thirsty __ | Scary __ | Guess __ |
| Sleepy __ | Dirty __ | Mean __ |
| Sleep __ | Messy __ | Good __ |
| Asleep__ | Yucky __ | Bad __ |
| Tired__ | Bad __ | Naughty __ |
| Awake__ | Hug __ | Let __ |
| Wake up__ | Kiss __ | Supposed to __ |
| Sick __ | Laugh __ | Must __ |
| Happy __ | Smile __ | Should__ |
| Have Fun __ | Cry __ | |
| Funny __ | Want __ | |
| Proud __ | | |

What language does your child speak at home?

What other languages are spoken at home?

Appendix 4: Griffith empathy affective subscale (Dadds et al., 2008)

Please read each statement below and indicate the extent to which you agree or disagree. *Mark your answers by placing a cross on the appropriate point on the line.* Do not leave any statement unrated.

1. My child becomes sad when other children around him/her are sad.

Strongly disagree -4 -3 -2 -1 0 +1 +2 +3 +4 Strongly agree

2. My child gets upset when he/she sees another child being punished for being naughty.

Strongly disagree -4 -3 -2 -1 0 +1 +2 +3 +4 Strongly agree

3. My child seems to react to the moods of people around him/her.

Strongly disagree -4 -3 -2 -1 0 +1 +2 +3 +4 Strongly agree

4. My child gets upset when another person is acting upset.

Strongly disagree -4 -3 -2 -1 0 +1 +2 +3 +4 Strongly agree

5. Seeing another child who is crying makes my child cry or get upset.

Strongly disagree -4 -3 -2 -1 0 +1 +2 +3 +4 Strongly agree

6. Sad movies or TV shows make my child sad.

Strongly disagree -4 -3 -2 -1 0 +1 +2 +3 +4 Strongly agree

7. My child becomes nervous when other children around him/her are nervous.

Strongly disagree -4 -3 -2 -1 0 +1 +2 +3 +4 Strongly agree

8. My child acts happy when another person is acting happy.

Strongly disagree -4 -3 -2 -1 0 +1 +2 +3 +4 Strongly agree

9. My child can continue to feel okay even if people around are upset.

Strongly disagree -4 -3 -2 -1 0 +1 +2 +3 +4 Strongly agree

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