

NOTE

**Children's judgements about intentionally and unintentionally broken promises\***

FAY K. MAAS AND LEONARD ABBEDUTO

*University of Wisconsin-Madison*

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ABSTRACT

Astington (1988) found that seven- to nine-year-olds often fail to distinguish between promises and predictions when judging the utterances of characters in simple stories. Instead, these children attend only to the outcome of the story (i.e. whether the promised event occurred) when deciding whether a promise has been made and, to a lesser extent, when deciding whether the speaker is responsible for the outcome. The purpose of the present study was to examine whether seven- to nine-year-olds (a) vary their judgements of responsibility according to the reason that the promised action was not completed, and (b) recognize that an unfulfilled promise is a promise regardless of whether the speaker's failure is unavoidable or intentional. Seven-year-olds, nine-year-olds, and adults were asked to make promise and responsibility judgements for two story types: stories in which the promiser intentionally failed to fulfil his or her promise and stories in which an unforeseen event prevented the promiser from fulfilling the promise. Participants at all ages assigned responsibility correctly across both story types. In making promise judgements, however, the seven-year-olds' decisions about promises reflected a misguided attention to the outcome of a promise or the obstacle to its fulfilment. The nine-year-olds recognized that an unfulfilled promise is a promise but only when there

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was a clear reason for the speaker's failure to fulfil his or her obligation. We suggest that children consider only sincere promises to be instances of promising and make inferences about speaker sincerity by looking to external factors in the communicative context.

#### INTRODUCTION

Despite the ubiquitousness of the word PROMISE in our everyday world, we know little about how children come to understand promises and the social obligations they entail. Examining children's understanding of promising is essential for understanding how they come to understand the relationship between their words and actions, what they know about commitment, and whether they are able to express their commitments through language. The purpose of the present study was twofold. First, we were interested in whether children understand that the reason that a speaker fails to keep his or her promise does not alter the fact that saying *I promise* creates an obligation to perform the promised action. Second, we were interested in whether children vary their judgements of responsibility according to the reason that a promised action was not fulfilled.

Utterances such as *I promise I will help you* commit the speaker to a future action. Searle (1969) proposed a set of felicity conditions on promises; that is, conditions necessary and sufficient for a successful act of promising. According to Searle, the OBLIGATION CONDITION is essential to successful promising. Searle defines the obligation condition as the speaker's understanding that the act of making a promise creates an obligation to perform the stated action. According to Searle, whether the speaker sincerely intends to perform the action does not alter the fact that an obligation has been made. Searle also proposes the CONTROLLABILITY CONDITION, according to which the speaker must have the ability to perform the promised action. Searle proposes other conditions but they are not relevant here. Implicit in Searle's analysis is the fact that a promise need not be fulfilled in order for it to be considered a successful act of promising, a notion that has been supported in several studies with adults (Gibbs & Delaney, 1987; Astington, 1988, 1990).

Astington (1988, 1990) examined children's understanding of Searle's (1969) controllability and obligation conditions on promising by asking them to judge target utterances in stories they heard. The targets were of the form *I will ... I promise* (e.g. *I will take you next week, I promise.*) The children made *promise judgements* (e.g. *What do you think: did John promise?*) and *responsibility judgements* (e.g. *Would you blame John because he said to Lisa, 'I will take you next week, I promise' and then he didn't take her next week?') about the target sentences. In the PREDICTION CONDITION, the speaker in the story promised an event outside his or her control – a violation of the controllability*

condition. In the PROMISE CONDITION, the speaker complied with all of Searle's felicity conditions on promising. The outcome of the story also varied, with the promised action coming about in the FULFILLED CONDITION but not in the UNFULFILLED CONDITION.

Astington found that only eleven- to thirteen-year-olds – the oldest group she tested – differentiated between promises and predictions in their judgements, thereby demonstrating an understanding of both the controllability and obligation conditions. In contrast, seven- and nine-year-olds displayed only a beginning understanding of promising. They had some awareness of the obligation condition because they correctly assigned responsibility for fulfilled and unfulfilled promises and unfulfilled predictions. When making promise judgements, however, seven- and nine-year-olds relied on the outcome of the story; that is, they judged that the targets in the fulfilled outcome stories were promises regardless of whether the story was a prediction or a promise, and they failed to judge that unfulfilled promises were promises. These results for the promise judgements suggest that seven- to nine-year-olds do not fully understand either the obligation or the controllability condition on promising. Astington's results have been found to hold across a variety of task conditions (Maas & Abbeduto, 1998).

The purpose of the present study was to explore the limits of young children's developing understanding of the obligation condition on promising. In Astington's study, the children were not told why the promiser had failed to keep the promise in the unfulfilled outcome stories, and thus, they may have inferred their own reasons for the speaker's failure. In fact, there are a variety of reasons that speakers might fail to follow through on their promises in our everyday experiences, and these variations can affect our judgements about promising. On the one hand, a promiser can intentionally break his or her promise. For example, a child may make a promise to play video games with a friend and later willfully neglect her obligation to do so. On the other hand, the fault for a broken promise may lie with some unforeseen event beyond the promiser's control. For example, a child may fail to meet a friend at the appointed time and place because of illness. This child cannot be held accountable in the same way as one who simply decides to play with someone else. At the same time however, a promise is still a promise regardless of why it has not been fulfilled. The child who says, *I promise I'll meet you at the park after dinner* has made a promise even if sickness prevents him or her from the rendezvous, although we would not hold him or her responsible for breaking the promise. We were interested in whether seven- to nine-year-olds deal effectively with such variations in the causes of broken promises. Do they vary their judgements of responsibility according to the reason that the promised action was not completed? Do they recognize that an unfulfilled promise is a promise regardless of whether the speaker's failure is unavoidable or intentional?

## METHOD

*Participants*

Two groups of children participated. The younger group consisted of nine males and seven females (mean age = 7;1, range = 6;9–7;4), and the older group consisted of eight males and eight females (mean age = 9;1, range = 8;6–9;4). According to teacher reports, all were fluent speakers of English, although five were not native English speakers.<sup>1</sup> Five children (three of whom were nine-year-olds) were Chinese-American; the remainder were Caucasian.

Sixteen adults also participated. The adults were enrolled in an undergraduate course in educational psychology and participated for course credit. The six males and ten females, whose ages ranged from 19;1 to 24;7 (mean age = 21;1), were all Caucasian, native English speakers.

*Procedure*

All participants were tested individually in a single 30-minute session. They were told that they would hear stories about children playing and talking together and that after each story, they would be asked questions about what had happened. The session began with one practice story to ensure that the task requirements were understood. The experimenter read all of the stories aloud in a single random order across all participants. After each story, the participant was asked COMPREHENSION and EXPERIMENTAL questions (described below). The experimenter made a written record of all responses. These were later checked for accuracy against an audiotape of the session.

*Materials*

*Experimental stories.* Eight stories were composed.<sup>2</sup> Each depicted an interaction between two child characters, one a boy and the other a girl. One character, the promiser, made a commitment to the other character, the promisee. The promiser's commitment was expressed by a target utterance of the form *I/we will ... I promise* (e.g. *We will erase the chalkboard when I come back, I promise*). The gender of the promiser was counterbalanced. Stories were 8 to 9 sentences in length. The target utterance was the fourth sentence in each story. An example of each story type is presented in Table 1.

[1] Native and non-native speakers did not differ in any obvious way in their responses on the experimental task.

[2] In pilot work, five-year-olds were asked to judge whether children in general would be able to perform each of the events involved in the experimental stories (Maas & Abbeduto, 1998). Because the notion of controllability is central to promising, only events that at least 75% of the five-year-olds judged to be controllable by children were used to create the stories.

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TABLE 1. *Examples of the experimental stories*

Condition	Experimental stories
Obstacle condition	Corrinda and Nevin are playing at the park. Corrinda said ‘Lets go play on the swings.’ Nevin said, ‘I will later. But now I have to go home for lunch.’ Then Nevin said, ‘We will play on the swings when I come back, I promise.’ After Nevin ate lunch, he felt so sick that he just had to lie down. Nevin didn’t come back to the park. Corrinda went to his house to find him. Nevin’s mom told Corrinda that Nevin was sick.
No Obstacle condition	Danny and Emily are at school helping their teacher. Danny said, ‘We should erase the chalkboard next.’ Emily said, ‘Yeah! But first I better put my homework in my locker.’ Then Emily Said, ‘We will erase the chalkboard when I come back, I promise.’ Emily went to her locker. It was such a nice day that Emily decided to go home so she could play. Emily didn’t come back to help Danny. Danny waited for Emily to come back. He saw Emily skipping down the sidewalk.

TABLE 2. *Experimental questions and their target responses for stories*

Condition	Question type	Correct answer
	Promise judgement questions	
Obstacle condition	Brett said, ‘I’ll help you rake the leaves when I come back, I promise.’ Do you think Brett made a promise to Sarah?	Yes
No Obstacle condition	Emily said, ‘We’ll erase the chalkboard when I come back, I promise.’ Do you think Emily made a promise to Danny?	Yes
	Responsibility judgement questions	
Obstacle condition	Would you blame Brett because he said, ‘I’ll help you rake the leaves when I come back, I promise’ and then he didn’t come back	No
No Obstacle condition	Would you blame Emily because she said ‘We will erase the chalk board when I come back, I promise’ and then she didn’t come back?	Yes

Half of the stories contained an obstacle that prevented the promiser from fulfilling his or her promise (i.e. the OBSTACLE condition). These obstacles involved the intervention of an authority figure (i.e. a parent or teacher) or an unforeseen event (i.e. an injury or illness). In the remaining stories there was no obstacle; instead, the promiser intentionally failed to keep the promise (i.e. the NO OBSTACLE condition).

The final sentence of the story varied across conditions. In the obstacle condition, the final sentence depicted the promisee being told by a third party (e.g. a parent) the reason that the promiser had failed to keep his or her

promise. In the no obstacle condition, the final sentence depicted the promisee observing the promiser engaged in some pleasurable, voluntary activity. This information was included to make clear that the promisee knew whether the promiser had intentionally or unintentionally broken the promise.

*Comprehension questions.* Participants were asked to answer comprehension questions prior to making their promise and responsibility judgements. These questions were designed to ascertain whether the children had processed crucial events and utterances in the story, including the target utterance, the outcome, the reason that the promiser had broken the promise, and the promisee's understanding of why the promise had been broken (e.g. *What did Melinda say to Joe? Did Joe know that Melinda was helping the teacher?*).

*Experimental questions.* Participants were asked two experimental questions at the conclusion of each story: a *promise judgement* question and a *responsibility judgement* question (Table 2). They also were asked to justify their responses to each question. Justifications for the promise judgement were elicited by asking *Why do you think that was/wasn't a promise?* Justifications for the responsibility judgement were elicited by asking *Why would/wouldn't you blame him/her for that?*

*Filler stories.* Four stories were included to add some variety to the task. Two of the filler stories were fulfilled promise stories; the other two were fulfilled prediction stories (i.e. the promiser promised something not under his or her control and the event fortuitously occurred). The length of the filler stories was seven to eight sentences, with the target utterance the fourth sentence in each story. These stories were shorter than the experimental stories because they did not require a sentence to explain why the promiser failed to keep his or her promise. Promise and responsibility judgements and justifications were sought after each filler story.<sup>3</sup>

### Scoring

*Experimental questions.* The correct response for the promise judgement question *Do you think X made a promise to Y?* was *yes* (or a variant such as *mm-hmm*). *No* and indeterminate responses (e.g. *maybe, I don't know*) were scored as incorrect (see Table 2). The correct response for the responsibility judgement question (i.e. *Would you blame X because he said '... I promise' and then [the outcome]?*) was *no* in the obstacle condition and *yes* in the no obstacle condition (see Table 2).

[3] Results for the filler stories replicated Astington's (1988) results for these types of stories and utterances.

Justifications for both the promise and responsibility judgement questions were categorized according to whether the participant mentioned (a) Searle's (1969) controllability condition (e.g. *Because she can't make the river flow*); (b) the outcome of the story (e.g. *Because she went home*); (c) the presence or absence of an obstacle (e.g. *Because he cut his hand and couldn't do it*); (d) the target utterance (e.g. *Because she said she promised*); (e) the promiser's intention (e.g. *Because she was gonna do it*); (f) the promiser's wants or needs (e.g. *Because she just changed her mind*); (g) the promisee's affect (e.g. *It wasn't nice to leave her waiting*); or as (h) other (e.g. *Because I think the bell rang and he couldn't go back*). A response was placed into more than one category if a participant cited multiple reasons.

A second rater independently coded justifications for four randomly selected participants from each age group. Cohen's kappa was computed to determine inter-rater agreement. For the promise judgement justifications, the mean kappa was 0.96 (range: 0.89–1.0). For the responsibility judgement justifications, the mean kappa was 0.97 (range: 0.92–1.0).

## RESULTS

### *Comprehension questions*

The mean percentage of correct responses to the comprehension questions was near ceiling for all age groups. The mean across questions was 92.7% for the seven-year-olds, 95.8% for the nine-year-olds, and 98.6% for adults. Thus, even the youngest participants were able to process the critical events and utterances of the stories.

### *Promise and responsibility judgements*

The mean number of *yes* responses is presented in Figure 1 as a function of obstacle condition and age for the promise judgement question. A (3) age  $\times$  (2) obstacle condition ANOVA was conducted on these data, with repeated measures on the final factor. This analysis yielded main effects for age ( $F [2, 45] = 40.85, p < 0.001$ ) and obstacle condition ( $F [1, 45] = 24.19, p < 0.001$ ), and a significant interaction between the two ( $F [2, 45] = 6.21, p < 0.004$ ). Simple effects tests ( $p < 0.05$ ) indicated that both the seven-year-olds and nine-year-olds, but not the adults, were more likely to judge the target sentence to be a promise in the obstacle condition than in the no obstacle condition. *Post hoc* contrasts (with familywise  $p < 0.05$ ) indicated that the nine-year-olds were more likely than the seven-year-olds to judge that an unfulfilled promise was a promise in both the obstacle and no obstacle condition. The nine-year-olds, however, were less likely than the adults to judge an unfulfilled promise as a promise in the no obstacle condition. It should be noted that there were no meaningful differences in performance on items in the first and second halves of the session for any age group,

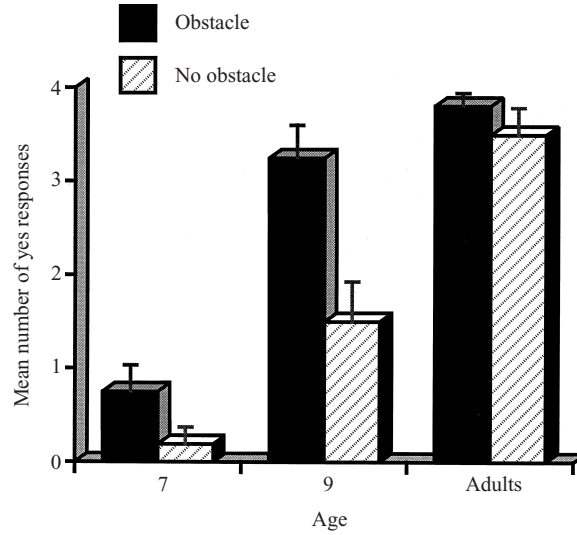


Fig. 1. Mean number of *yes* responses to the promise judgement question.

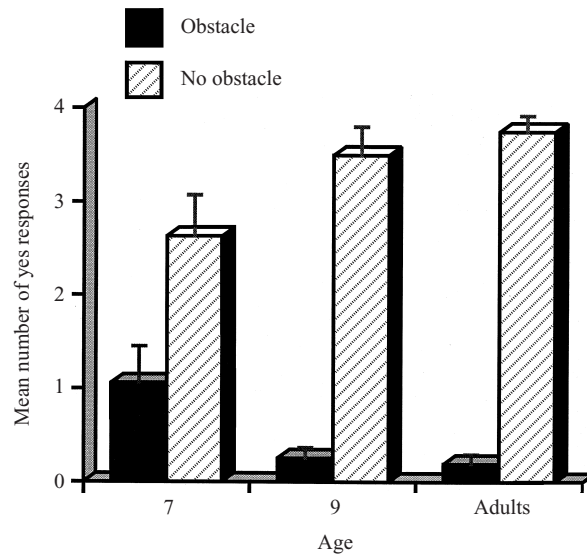


Fig. 2. Mean number of *yes* responses to the responsibility judgement question.

suggesting that neither the length of the session nor the order of the items affected the performance of even the youngest participants.

The mean number of *yes* responses for the responsibility judgement question is presented in Figure 2 as a function of obstacle condition and age.



A (3) age × (2) obstacle condition repeated measures ANOVA yielded a main effect of obstacle condition ( $F [1, 45] = 198.34, p < 0.001$ ) and a significant age × obstacle condition interaction ( $F [2, 45] = 9.82, p < 0.001$ ). Simple effects tests ( $p < 0.05$ ) indicated that all three groups of participants varied their responsibility judgements as a function of obstacle condition. Post hoc contrasts (with familywise  $p < 0.05$ ) indicated that the seven-year-olds were more likely than either the nine-year-olds or the adults to incorrectly claim that the promiser should be held responsible for a broken promise in the obstacle condition.

*Promise and responsibility justifications*

The question of interest regarding the participants' justifications for their promise and responsibility judgements was whether the preferred justification type varied as a function of age and obstacle condition. Table 3 shows

TABLE 3. Mean proportion (and standard deviation) for category of promise judgement justification

Age group	Justification type				
	Outcome	Target utterance	Control/knowledge	Obstacle present	Intention
Obstacle Condition					
Seven-year-olds	0.25 (0.36)	0.07 (0.17)	0.10 (0.24)	0.53 (0.39)	0.01 (0.06)
Nine-year-olds	0.01 (0.06)	0.28 (0.38)	0.34 (0.32)	0.51 (0.33)	0.29 (0.36)
Adults	0.00 (0.00)	0.34 (0.40)	0.18 (0.33)	0.20 (0.27)	0.42 (0.46)
	Outcome	Target utterance	Control/knowledge	Needs/wants	Intention
No obstacle condition					
Seven-year-olds	0.53 (0.38)	0.10 (0.25)	0.00 (0.00)	0.35 (0.38)	0.00 (0.00)
Nine-year-olds	0.46 (0.34)	0.32 (0.35)	0.00 (0.00)	0.28 (0.34)	0.07 (0.17)
Adults	0.07 (0.22)	0.39 (0.46)	0.18 (0.34)	0.18 (0.35)	0.29 (0.40)

$n = 16$  for each age group. Categories are not mutually exclusive.

the mean proportion of promise judgement justifications that fell in each of the categories by obstacle condition and age. For the promise judgement justifications in the obstacle condition, a (3) age × (5) justification category repeated measures ANOVA yielded a main effect of age ( $F [2, 45] = 5.04, p < 0.011$ ) and justification category ( $F [4, 180] = 5.85, p < 0.001$ ), and a significant age × justification category interaction ( $F [8, 180] = 4.18, p < 0.001$ ). Post hoc contrasts (with familywise  $p < 0.05$ ) indicated that the seven-year-olds were more likely than the nine-year-olds and adults to refer to the outcome. The nine-year-olds were more likely to refer to the obstacle than

TABLE 4. Mean proportion (and standard deviation) for each category of responsibility judgement justification

Age group	Justification type				
	Outcome	Target utterance	Control/knowledge	Obstacle present	Affect
Obstacle condition					
Seven-year-olds	0.09 (0.22)	0.07 (0.25)	0.25 (0.34)	0.54 (0.36)	0.01 (0.06)
Nine-year-olds	0.00 (0.00)	0.00 (0.00)	0.65 (0.39)	0.43 (0.39)	0.01 (0.06)
Adults	0.00 (0.00)	0.00 (0.00)	0.54 (0.36)	0.64 (0.30)	0.06 (0.19)
Age group	Outcome	Target utterance	Control/knowledge	Needs/wants	Affect
No Obstacle Condition					
Seven-year-olds	0.31 (0.29)	0.23 (0.32)	0.06 (0.14)	0.31 (0.34)	0.10 (0.18)
Nine-year-olds	0.42 (0.36)	0.42 (0.40)	0.00 (0.00)	0.34 (0.36)	0.23 (0.33)
Adults	0.20 (0.24)	0.23 (0.35)	0.06 (0.14)	0.42 (0.38)	0.32 (0.32)

$n = 16$  for each age group. Categories are not mutually exclusive.

were the adults, but were more likely to refer to the speaker's intention than were the seven-year-olds.

For the promise judgement justifications in the no obstacle condition, a (3) age  $\times$  (5) justification category repeated measures ANOVA yielded a main effect of justification category ( $F [4, 180] = 6.26, p < 0.001$ ) and a significant age  $\times$  justification category interaction ( $F [8, 180] = 4.07, p < 0.001$ ). *Post hoc* contrasts (with familywise  $p < 0.05$ ) indicated that both the seven- and nine-year-olds referred to outcome more often than did the adults, whereas the adults referred more often to control and intention than did the seven- and nine-year-olds.

In Table 4, we present the mean proportion of responsibility judgement justifications in each of the categories by obstacle condition and age. For the responsibility justifications in the obstacle condition, a (3) age  $\times$  (5) justification category repeated measures ANOVA yielded a main effect of justification category ( $F [4, 180] = 46.83, p < 0.001$ ) and a significant age  $\times$  justification category interaction ( $F [8, 180] = 3.14, p < 0.002$ ). *Post-hoc* contrasts (with familywise  $p < 0.05$ ) indicated that the nine-year-olds and adults were more likely than were the seven-year-olds to refer to the control/knowledge of the promiser. For the responsibility justifications in the no obstacle condition, there was no effect of age.

#### DISCUSSION

The adults in the present study performed in a manner consistent with Searle's (1969) framework and previous research on the adult concept of promising (Gibbs & Delaney, 1987; Astington, 1988, 1990). They recognized

that an utterance marked by the word *promise* was a promise regardless of whether an obstacle prevented its fulfilment or the promiser willfully violated the commitment. They also justified their promise judgements by referring to the promiser's intention or to the control involved in fulfilling the promise. Likewise, they differentially assigned blame to the speaker according to his or her willfulness in not fulfilling the obligation established by the promise. They justified these judgements of blame by referring to the speaker's inability to control the fulfilment of the promise when an obstacle prevented them from doing so. The correspondence between the adult results and the prediction of Searle's (1969) model demonstrates the appropriateness of the present task for assessing knowledge of promising.

The first goal of this study was to determine whether children would recognize that an unfulfilled promise is a promise regardless of whether the speaker's failure to fulfil the promise is unavoidable or intentional. The promise judgements of the seven-year-olds indicated that they failed to recognize this essential fact about promising. Instead, their justifications suggested that their decisions about promises reflected a misguided attention to the outcome of a promise and the obstacle to its fulfilment. This pattern parallels that for Astington's (1988) seven-year-olds: for these children, a promise is more than just something you say you will do – a promise must also include the performance of the specified action.

The nine-year-olds in the present study demonstrated an emerging but fragile understanding of promising. In their promise judgements, they were more likely than the seven-year-olds to conclude that an unfulfilled outcome did not change the fact that a promise had been made. In contrast to the adults, however, the nine-year-olds often denied that a speaker had promised if its unfulfilled outcome was not explainable by an explicitly stated obstacle. In justifying their promise judgements, the nine-year-olds also referred to irrelevant dimensions of the interaction, (e.g. the presence of an obstacle), although they, like adults, also correctly referred to the speaker's intention. In short, nine-year-olds recognize that an unfulfilled promise is a promise but only if there exists a clear reason for the speaker's failure to fulfil his or her obligation.

The second goal of the study was to determine whether children would vary their judgements of responsibility according to the reason that the promised action was not completed. The results parallel those of Astington (1988) in demonstrating that the ability to determine responsibility emerges earlier than the ability to recognize when a promise has been made. In our study, the seven-year-olds varied their responsibility judgements according to the reason that the promised action was not completed although they did so less consistently than the nine-year-olds, and the nine-year-olds were virtually indistinguishable from adults in both their responsibility judgements and justifications.

In general, our findings on the development of children's understanding of promises parallel those reported for the understanding of intentional deception. From the age of seven years, for example, children are able to distinguish deliberate actions from accidental actions in terms of their moral judgements (Armsby, 1971; Wimmer, Gruber & Perner, 1984, 1985; Mant & Perner, 1988; Bussey, 1992). Despite their good performance in judging whether another person's actions are intentional or unintentional, even nine-year-olds have difficulty making appropriate judgements about the type of speech act that was intended by the story character (Peterson, Peterson & Seeto, 1983; Wimmer, Gruber & Perner, 1984, 1985; Leekam, 1988; Strichartz & Burton, 1990; Peterson, 1995). Similarly, the seven-year-olds in our study made appropriate responsibility judgements, but even the nine-year-olds had difficulty making appropriate promise judgements in situations where the promiser intentionally broke his or her promise.

Why is making promise judgements so difficult for children? Astington (1988) suggested that young children are misled by outcome because their concept of a promise, unlike that of adults, includes the condition that the promised action is actually performed. In our study, however, the children did not rely solely on the outcome of the story when making their promised judgements. Instead, they also focused on the reason for the speaker's failure to perform the promised action. We propose, therefore, that what distinguishes children's concept of a promise from that of adults is that the former includes the condition that the speaker is sincere. Moreover, we believe that children make inferences about the speaker's sincerity by referring to various external factors in the communicative context, such as whether there is an obstacle to the performance of the promised action. In the absence of any such evidence, children simply assume that the speaker who fails to perform the promised action was insincere and thus, did not 'really' promise. In fact, these children may see these unfulfilled promises as lies rather than as broken promises in their everyday experiences. Future research should examine the developmental steps that children take in the process of recognizing that the speaker's sincerity is not a condition on successful promising.

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