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Children’s Performance on Ground Rules Questions:
Implications for Forensic Interviewing

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Abstract

Ground rules, also called interview instructions, are included in investigative interviews with children around the world. These rules aim to manage the expectations of children who are typically unaccustomed to being questioned by adults who are naïve to the children's experiences. Although analog research has examined the efficacy of ground rules instruction, a systematic analysis of children's ability to respond appropriately to each of the rules has not been reported. In the current study, we scored the accuracy of children's (N = 501, 4 to 12 years) responses to five ground rules practice questions (for example, “What is my dog's name?”) and two questions that asked whether they would follow the rules, and then assigned inaccurate responses to one of several error categories. Few children answered every question correctly, but their performance on individual questions was encouraging. As expected, there were marked differences in children's understanding across ground rules questions (especially among the younger children), with “Don't guess” and “Tell the truth” rules being the easiest to comprehend. Together with evidence that ground rules instruction takes little time to deliver (typically 2 to 4 minutes) and is associated with improved accuracy in previous research, these findings support the use of ground rules in investigative interviews of children 4 years and older.

Keywords: ground rules, interview instructions, forensic interviewing, children
Children’s Performance on Ground Rules Questions: Implications for Forensic Interviewing

In everyday conversations, adults often question children about known or shared experiences and scaffold conversation in ways that give children’s stories structure and content (Wang, 2013). For example, adults encourage children to speculate in the face of difficult questions and typically provide prompts that signal which events and details should be reported (Principe, DiPuppo, & Gammel, 2013; Kelly & Bailey, 2013). During forensic interviews, this narrative history may limit children’s ability to navigate the demands of being sole informants about their experiences (Cordón, Saetermoe & Goodman, 2005; Hershkowitz, Lamb, Orbach, Katz, & Horowitz, 2012; Lamb & Brown, 2006). More so than adults, children tend to guess when the answer is unknown (Poole & White, 1993), respond to questions they do not understand (Pratt, 1990), and fail to correct interviewers who say something wrong (Hunt & Borgida, 2001). The extent to which children display these behaviors has been linked to numerous factors, including meta-cognitive awareness (Roebers & Schneider, 2005), verbal ability (Waterman & Blades, 2013), perceived situational demands (Howie & Dowd, 1996), and the assumption that interviewers already possess knowledge of target events (Lamb, Orbach, Warren, Esplin, & Hershkowitz, 2007; Mulder & Vrij, 1996; Waterman, Blades, & Spencer, 2004).

To prepare children for the unique challenges of a forensic interview, some interview guidelines include ground rules (also called interview instructions; see Achieving Best Evidence in Criminal Proceedings, Ministry of Justice, 2011; the National Institute of Child Health and Human Development [NICHD] Protocol, Lamb, Orbach, Hershkowitz, Esplin, & Horowitz, 2007). Ground rules can serve a number of functions, including (a) orienting children to the interview (i.e., explaining the interviewer’s role and the purpose of the interview; Roberts, Lamb
& Sternberg, 2004; Sternberg, Lamb, Davies, & Westcott, 2001; Teoh & Lamb, 2010), (b) assessing testimonial competence (that is, determining whether children can distinguish the truth from a lie and will promise to tell the truth; Evans & Lyon, 2012; Klemfuss & Ceci, 2012); (c) establishing conversational conventions to help prevent guessing, speculation, and misunderstandings (by instructing children to not guess and granting permission to correct the interviewer; Roebers, Moga, & Schneider, 2001); and (d) inoculating children against leading questions (Endres, Poggenpohl, & Erben, 1999; Saywitz & Moan-Hardie, 1994).

Research on the efficacy of ground rules has yielded mixed results, with instruction sometimes—but not always—improving the quality of children’s testimonies. Overall, ground rules prove more effective when children are given opportunities to practice responding to instructions (rather than simply hearing the rules; Gee, Gregory, Pipe, 1999; Krackow & Lynn, 2010; Nesbitt & Markham, 1999; Saywitz & Moan-Hardie, 1994). For example, Peterson and Grant (2001) manipulated whether children received simple instructions to say “I don’t know” prior to an interview about a previously-experienced event and found no effect of instruction on children’s response patterns to yes-no and multiple choice questions. Other studies have produced more encouraging results by explicitly training children to identify and refute misleading or unanswerable questions using context-based examples. For instance, Saywitz and Moan-Hardie (1994) significantly reduced children’s acquiescence to misleading questions by providing extensive preinterview instructions and practice (the children practiced answering misleading questions about a training video while receiving feedback from an assistant), and Saywitz, Snyder, and Nathanson (1999) found that similar strategies significantly increased the likelihood that children would signal when they did not understand incomprehensible and complex questions. (For reviews, see Lyon, 2010, and Saywitz, Camparo, & Romanoff, 2010.)
Despite some optimistic findings, there is considerable variability in the number, content, and placement of ground rules across interview protocols. In the NICHD protocol, for example, interviewers guide children through a series of practice questions and provide corrective feedback when necessary (“If I ask you a question and you don’t know the answer, say ‘I don’t know.’ For example, what is my sister’s name?”; see Lamb et al., 2007). The newly developed CornerHouse Forensic Interview Protocol™ includes “orienting messages” and instructions prior to substantive questioning (“If I get something wrong, you can tell me.”; Anderson, 2012, p. 4) but does not explicitly call for interviewers to deliver practice questions. Other protocols do not include a distinct ground rules phase at all. The RATACTM protocol (Anderson et al., 2010) and Step-Wise Interview Guidelines (Yuille, Cooper, & Hervé, 2009; a revision to the Step-Wise Interview; Yuille, 1990) do not require instructions but rather suggest that interviewers reinforce rules when children spontaneously admit lack of knowledge, correct interviewer mistakes, or indicate lack of understanding (for example, by saying “Good job. Thank you for telling me you don’t understand.”).

The rationale for down-playing or omitting ground rules instruction is fourfold. First is a belief that given children’s limited attention spans, time is better spent eliciting case relevant information (Anderson et al., 2010). Second, helping-professionals worry that an inability to answer ground rule questions could damage children’s credibility and call their testimonial competence into question (see Evans & Lyon, 2012; Klemfuss & Ceci, 2012). Third, as noted previously, research on the efficacy of ground rules has produced mixed results. Finally, skeptics have raised concerns that ground rules instruction is too abstract and includes practice questions that are not developmentally appropriate for young children (who find them difficult to answer when presented in a formal interview phase; Yuille et al., 2009). (See also Geddie, Beer,
Regarding this latter concern, research has yet to systematically map developmental trends in children’s ability to respond appropriately to common ground rule questions—which is arguably a prerequisite for efficacy. To explore this concern, we examined children’s ability to answer five practice questions representing frequently recommended and researched ground rules (Lamb et al., 2007; Brubacher, Poole, & Dickinson, 2014) and two questions that asked children to confirm they would use those rules during a subsequent interview. Importantly, interviewers gave some children additional instruction after incorrect answers, which allowed us to determine whether further training improved performance. Finally, we cataloged the types of errors commonly made by children and calculated the time it took interviewers to deliver these questions in a formal interview phase.

Method

Participants

During two eyewitness projects conducted in our laboratories, interviewers had delivered rapport-building questions, a practice interview (about a typical day at school), and a ground rules phase to each child prior to questions about the target events (Poole & Dickinson, 2011, 2014). For the current study, we revisited the interview transcripts from these projects to analyze how the children had responded to the ground rules questions. The first sample consisted of 218 children who were 5 to 12 years of age when they returned to our laboratories for a follow-up interview ($M_{age} = 8.78$ years) approximately 1 or 2 years after exposure to a target event (Poole & Dickinson, 2011). Ground rules instruction during their first laboratory experience was minimal, however, with interviewers asking only if they would tell the truth and would say when they did not understand (without practice questions). The second sample consisted of 283
children who were 4 to 9 years of age when they were interviewed for an in-progress eyewitness project \((M_{\text{age}} = 6.60\) years). Both samples included data collected at two research sites (one in a small Midwestern town and one in the New York metropolitan region). From the original transcript sets, we selected only interviews of children who spoke English in their homes.

The combined sample of 501 children (46.9% female) was predominantly Caucasian (82.9%), with 4.2% of the children identified by their parents as African American; 4.2% as Asian; and 8.6% as Native American, Pacific Islander, mixed race, or other (7.1% were ethnically Hispanic). In addition to English, 7.8% of families said that another language was also spoken in the home.

Procedure

Assistants for the first sample began each session by obtaining parental consent followed by child assent (for children less than 7 years) or consent (for children 7 years or older). They then escorted individual children into a room to experience a second eyewitness event immediately before the interview (see Poole & Dickinson, 2014). Assistants for the second sample began sessions by greeting children and escorting them into the interviewing room. (The consent process had been completed a week earlier, before the staged eyewitness event.) Forms for both samples included a family demographics questionnaire (completed by a parent) and debriefing consent forms that each child and parent signed after the interview.

Ground Rules Protocol

For both samples, interviewers \((N = 23)\) introduced themselves, delivered a rapport-building phase, and asked each child to describe a typical school day. Interviewers then transitioned to the ground rules phase ("Now that I know you better, I want to talk about some rules we have in this room. . .") and delivered seven questions regarding instructions (a) not to
guess, (b) to inform the interviewer when they did not understand a question and (c) when the interviewer said something wrong, and (d) to tell the truth. The wording of initial practice questions was identical across samples, and all interviewers were instructed to try to elicit correct answers by delivering additional explanations of ground rules when necessary. However, because some interviewers for the first sample found it difficult to improvise after wrong answers, particularly during “Don’t guess,” “Tell me when you don’t understand,” and “Tell me when I say something wrong” instruction, the interview protocol for the second sample included guidance about how to proceed after wrong answers to these questions, as described in Table 1.

Data Coding

The length of each ground rules phase was computed from time codes on the interview recordings. To score each child’s answers to individual questions, two assistants assigned letters that identified the content of the child’s first answer, last answer (if the first answer was not the desired response and the interviewer redelivered the question one or more times), and the number of follow-up prompts (not counting the initial question) delivered before the child’s final answer. The assistants ignored dialog in which interviewers delivered unauthorized leading questions to prompt a correct response (e.g., “So running is a lie, right?”) and scored children’s answers to the earlier authorized question.

The letter codes identified first and last answers as missing (when the interviewer skipped or inappropriately reworded the question), the desired response (for example, “I don’t know” in response to “What is my dog’s name?”), or some other response. Nine codes described these other responses: (a) no verbal or nonverbal response, (b) the child’s last response was a clarification question, (c) “yes” and (d) “no” responses when these were not the desired responses (e.g., Interviewer: “While we are talking today, will you tell me when you don’t
understand?” Child: “No.”), (e) “I don’t know,” (f) “I don’t understand” or “What/Huh?” (when this was not the desired response), (g) incorrect but answering the question (e.g., Interviewer: “For example, what is my dog’s name?” Child: “Buddy?”), (h) irrelevant (e.g., Interviewer: “Will you tell me when you don’t understand?” Child: “My brother picks, picks his boogers.”), and (i) other. Unlike irrelevant responses, “other” responses were clearly related to the question topic. For example, coders recorded “other” whenever children made a comment about a dog in response to “What’s my dog’s name?” and when they began narrating true events in response to “Will you tell me the truth today?”

Agreement for coding children’s first answers as the desired response or another response ranged from 95.3% to 99.4% for the individual ground rules questions, Cohen’s kappas = .89 to .98. Agreement for coding final answers (correct first answers and last answers following redelivery of questions) ranged from 93.7% to 99.2%, Cohen’s kappas = .73 to .92. Agreement for sorting undesired errors into the various error categories ranged from 87.8% to 97.0%, Cohen’s kappas = .82 to .97. Finally, agreement on the exact number of prompts required to elicit the final answer ranged from 96.4 to 99.6%, intraclass correlations = .83 to .99. Each disagreement was resolved by discussion after the coders jointly reread the transcript.

Accuracy Scoring

Children’s responses were computer rescored as accurate when they provided desired responses to the “Don’t guess” (any response meaning “I don’t know”), “Tell me when you don’t understand” (any response indicating the child did not understand, including “huh?” and “what?”), “Will you tell me when you don’t understand?” (yes), “Tell me when I say something wrong” (any answer indicating that the interviewer misspoke or that the child was not the erroneous age), and “Will you tell me the truth today?” (yes) prompts. The “true or not true
(truth)” question was scored two ways: Conservative scoring accepted only “true” or the equivalent, whereas lenient scoring accepted either “true” or “yes.” The “true or a lie (a lie)” question was also scored two ways: Conservative coding accepted only “a lie” or the equivalent, whereas lenient coding accepted either “a lie” or “no.”

**Results**

**Time to Deliver Ground Rules Instructions**

The duration of instruction ranged from 1.15 to 6.10 minutes, with 98% of interviews containing ground rules instruction lasting 4 minutes or less (M = 2.06 minutes, SD = .70). The duration of instruction shortened as age increased, r = -.49, p < .001.

**Performance on Individual Ground Rules**

Preliminary analyses. To evaluate whether performance on the individual questions was comparable across samples, we compared the percentages of 5- through 8-year-olds who answered each question accurately with separate binomial logistic regressions, controlling for age and sex. There were no significant differences across samples among children’s first responses to the seven questions (using the conservative scoring of truth/lie questions, p values adjusted using the False Discovery Rate method, Benjamini & Hockberg, 1995). Comparable analyses on the accuracy of final answers (which sometimes followed additional instruction from interviewers) yielded one significant difference: A higher percentage of children in the second sample correctly answered the “Tell me when I say something wrong” question (unadjusted p < .001). This finding was likely due to the fact that the interview protocol for the second sample told interviewers what to say when children erred. To simplify data presentation, we collapsed over samples to report performance on all questions except “Tell me when I say something wrong.”
Because preliminary analyses found age trends on some questions even among older children, we did not collapse over older age groups to describe children’s performance. For example, there was a significant correlation among children 8 and older between age and accuracy, controlling for sex, for first responses to the “Tell me when you don’t understand” question, $r = .16$, $p = .03$, and “I am sitting. Is that true or a lie?”, $r = .15$, $p = .03$.

Accuracy of first and final responses. Table 2 lists the accuracy of children’s first responses (i.e., the percentage of correct responses following the first delivery of each question; left column) and their final performance (i.e., accurate first responses combined with final responses after redelivery of questions; middle column). Because interviewers sometimes failed to deliver additional instruction after wrong answers (or asked unscored leading questions), we also computed the accuracy of children who either answered correctly in response to the first delivery of a question or received additional instruction and redelivery of the question after a wrong answer (right column). Point-biserial correlations at the bottom of each column report the strength of relationships between age and accuracy, controlling for sex. (Data from the two samples are presented separately for “Tell me when I say something wrong,” and performance on the truth/lie questions is reported for both the conservative and lenient scoring methods.)

From the right column of Table 2, notice that few children failed to say “I don’t know” after “Don’t guess” instructions, only the 4-year-olds erred more than 15% of the time in response to “Tell me when I say something wrong,” and performance was also above 90% for all age groups on questions that asked children to label statements as true or a lie. The 4- and 5-year-olds were confused by instructions to tell interviewers when they didn’t understand, but over 90% of the children in all age groups agreed to do so in response to “Will you tell me when you don’t understand?” Finally, only the 4-year-olds were frequently confused by “Will you tell
me the truth today?", although even the 5- to 8-year-olds often required additional explanation to comprehend this request.

We were curious whether more than two attempts to elicit correct answers paid off, especially for the younger children. Therefore, we examined whether accuracy remained near zero or improved for children who erred on the first and second delivery of the question (using the conservative scoring of truth/lie questions) but then received additional instruction. For the six questions with cases meeting these criteria (the number of such cases for each question is in parentheses), many children eventually passed the ground rule: Don’t guess (83.3% correct, n = 6), Tell me when you don’t understand (20.0%, n = 10), Will you tell me when you don’t understand? (77.8%, n = 9), Tell me when I say something wrong (65.2%, n = 23), True or not true (truth)? (50.0%, n = 2), and Will you tell me the truth today? (70.4%, n = 27). Furthermore, even the youngest children benefitted from more effort on the part of interviewers. For example, all three of the 4-year-olds who needed multiple tries to say “I don’t know” eventually did so, and 37.5% of the 8 4-year-olds who had difficulty correcting the interviewer eventually succeeded.

Typical Errors

The errors children produced provide insight into how they sometimes interpret ground rules, which can suggest better procedures for delivering instructions. To this end, Table 3 reports the percentage of errors in response to the first delivery of each question that represented the various error categories (top panel), along with the percentage of all first responses (accurate and inaccurate) representing each error category (bottom panel). Frequent errors were as follows:

Don’t guess. Children rarely guessed in response to this question (only 2.8% of the
current sample did), but inappropriate guessing was the most frequent type of error when interviewers asked about something the children did not know. “Other” responses were also a common type of error and typically involved comments about dogs (e.g., “I don’t have a dog”).

Tell me when you don’t understand. Children who erred most often answered “I don’t know” when interviewers used a word they did not understand (rather than correctly saying “I don’t understand”), but 40.0% of errors involved attempts to answer the question. “Will you tell me when you don’t understand?” tended to elicit no response or expressions of confusion from children who did not say “yes,” suggesting the need to test alternative versions of this question.

Tell me when I say something wrong. Among children who failed to grasp this ground rule, “How do you like being (wrong age) years old?” frequently elicited an answer (e.g., “Um… I don’t”) or simply “I don’t know.”

Tell the truth. Most children provided desired responses to the truth-lie discussion, but there was one recurring confusion: In response to “Will you tell me the truth today?”, many children (over a third of those who made errors) responded by narrating things that were true (e.g., “Hmm… You’re sitting”).

In sum, performance was good when interviewers delivered additional instruction after errors, with high pass rates among children 7 years and older on all questions (right column of Table 2). The 6-year-olds also did remarkably well, struggling only with “Tell me when you don’t understand” (errring on about 15% of these questions). The 4- and 5-year-olds performed noticeably poorer, but even this age group typically said “I don’t know” after instruction to do so, corrected interviewer mistakes, and correctly labeled statements as true or a lie. The most
challenging questions involved telling the interviewer when they did not understand a question (with the majority of 4-year-olds and almost 35% of 5-year-olds failing this ground rule even when interviewers gave them a second attempt) and, for the 4-year-olds, agreeing to tell the truth (with about 27% of failing to complete this request even with an additional prompt to do so).

Overall Performance of Children and Interviewers

The perception among some forensic interviewers that children have difficulty answering ground rules questions (e.g., Yuille et al., 2009) is not strongly supported by children's performance on the individual questions in Table 2. However, this perception may be based on children's ability to successfully complete an entire set of questions. Of course, the proportion of children who pass all ground rules questions will vary across different question sets and ways of wording these questions. Nonetheless, we can get a sense of what interviewers might face by looking at the percentage of children who passed every question. To provide this information, for each age group we computed the percentage of children in the second sample whose final answers correctly answered all questions, using the lenient coding of truth/lie questions and combining 8-year-olds with the few 9-year-olds. These percentages, from 4 to 8-9 years of age, were 7.1%, 29.4%, 50.9%, 54.2 and 61.0%, respectively. Thus despite the fact that the children as a group performed well on individual questions, individual children frequently erred on at least one.

For most questions and age groups, interviewer errors did not have a large impact on accuracy rates. (In Table 2, sample size differences between the leftmost and rightmost columns represent sessions in which interviewers did not deliver at least one prompt after a wrong answer.) Over all age groups, the percentage of sessions in the second sample in which interviewers should have prompted after the first incorrect answer but did not ranged from only
4% to 8% for “Don’t guess,” “Will you tell me when you don’t understand?,” “Tell me when I say something wrong,” “True or not true (truth)?” “True or a lie (lie)?” and “Will you tell me the truth today?” Interviewers made more mistakes delivering “Tell me when you don’t understand.” For this question, they moved on prematurely during 23% of sessions, with most mistakes (86%) occurring when children responded “I don’t know” and interviewers accepted that answer. (In the field, “I don’t understand” prompts interviewers to clarify questions, whereas “I don’t know” could lead to a loss of information.) Knowledge of this pattern, along with the other errors reported in Table 3, can be used to script future instructions that better help interviewers anticipate and respond to the typical answers children provide to ground rules questions.

Discussion

This study produced the first systematic characterization of developmental differences in children’s responses to five of the most frequently researched ground rule interview questions. Overall, the greatest differences were observed between the 4- and 5-year-olds and between these younger groups and children 6 years and older. Importantly, giving children additional opportunities to respond increased accurate responses and reduced the magnitude of the relationship between age and accuracy for all but the “Tell me when you don’t understand” rule. Although these results do not mean that children who receive additional training will demonstrate improved testimonial accuracy, opportunities to practice appear to enhance children’s understanding of the rules.

Performance on Individual Ground Rules

Examining performance on individual questions leads to a relatively optimistic impression of children’s abilities and demonstrates clear links between performance and the
cognitive complexity of the question. For example, over 80% of the youngest children in the sample answered the “Don’t guess” question accurately on the first attempt, with no other interview instruction producing such high accuracy. When children did err in response to this question, it was most often by guessing (e.g., a dog’s name), thereby providing interviewers with opportunities to correct this behavior. (Most children who initially erred—75%—correctly said “I don’t know” in response to interviewers’ second attempt at this question.) The fact that nearly all of the children in our sample answered correctly after more than one attempt supports the practice of instructing children to not guess. (See Gee et al., 1999, and Saywitz & Moan-Hardie, 1994, for instructions that reduce unwanted “I don’t know” responses.)

Following the “Don’t guess” practice question, the truth and lie questions were arguably the easiest for children to comprehend. The marked difference between the 4- and 5-year-olds, and again between 5-year-olds and older children, was evident for initial responses. After further attempts by some interviewers, however, at least 90% of all children could say what was true and what was a lie. This finding is not surprising given that most children can make the truth/lie distinction by 4 years of age (for a review, see Talwar & Crossman, 2012). That improvements were observed among younger children from the first to the last response is likely associated with their ability to comprehend the purpose of the questions, rather than earlier failures to distinguish between truth and lie (for further discussion of “identification” questions, see Evans & Lyon, 2012). Examining children’s errors reveals that, for the truth question, the bulk of their erroneous responses (60.7%) with conservative scoring were a result of saying “yes” to the question “I’m sitting right now, is that true or not true?”, and more than a quarter of the errors to the lie question were “no” responses (i.e., “You are running right now, is that true or a lie?”). Only 17% of the errors to the lie question were indications of confusion (i.e., “Huh?” or “I don’t
Despite good performance on the truth/lie questions, asking children if they would tell the truth failed to elicit a “yes” response from over a quarter of 4-year-olds, and some older children also did not reply appropriately. Evidently, children often interpreted the question as a request to say things that were true rather than a request to agree to tell the truth. For example, when one of the authors asked this question in an unrelated project, the child instantly (and self-consciously) admitted that a statement he had made minutes earlier had not been entirely accurate, and he proceeded to correct his previous statements. Although such linguistic confusions can be resolved by additional explanation, it would be helpful to identify the best way to elicit this promise. Lyon and Dorado (2008) found that “can you” questions (“Can you promise that you will tell me the truth?”) often elicited “yes” or “no” (rather than a narrative) and that using this question prior to an interview increased true disclosures of transgressions without increasing false disclosures. A subsequent study of children’s ability to comprehend the words commonly used to elicit an oath suggested a straightforward alternative: “Do you promise that you will tell the truth?” (Lyon & Evans, 2014).

Instructions about failures in comprehension and interviewer errors were challenging for children. When they erred on the “don’t understand” question (“Is my shirt gridelin?”), most of the time they said they did not know, thus failing to explicitly tell interviewers that a comprehension failure had occurred. In addition, 40% of errors were problematic from a forensic perspective (a “yes” or “no” response). “Tell me when I say something wrong” elicited an undesirable response just over one-third of the time. Again, “don’t know” (28.3%) and implicit indications of confusion (14.5%) were common, suggesting that children recognized the disruption in communication but had trouble verbalizing it (see Flavell, Speer, Green, & August,
1981, for other examples of implicit indications of comprehension failures). As we explain next, there are two likely reasons why these questions were the most developmentally-challenging of the set: (a) There are no obvious strategies for producing consistently accurate answers that bypass the need for a firm grasp of theory-of-mind along with continuous meta-cognitive monitoring, and (b) more advanced language skills are needed to understand and correctly respond to these questions.

Cognitive Development and the Ability to Understand Ground Rules

The basic theory-of-mind skills that are relevant to ground rules understanding (e.g., the awareness that knowledge and memories are gained via experience, and the understanding that others can hold different beliefs or perspectives than oneself; see Wellman & Liu, 2004, for task descriptions and developmental trajectories) develop between the ages of 4 and 6 years of age (Peterson, Wellman & Slaughter, 2012; Wellman & Liu, 2004). Correlations among performance on various theory-of-mind tasks and the ability to understand each of the ground rules have not been reported, but our findings of clear improvements between 4 and 6 years on many rules suggest that these should be positively related.

Responding appropriately to particularly difficult instructions, such as flagging errors made by the interviewer and explaining that a miscommunication has occurred, likely relies on more sophisticated metacognitive skills (Gee et al., 1999; Saywitz et al., 1999). In both situations, children must first attend to the erroneous or ambiguous component of the question, compare it to their memory or knowledge base, and then alert the interviewer to the problem; therefore, explicitly-controlled processing is required (Schneider & Pressley, 2013). Why, then, is the “Don’t guess” ground rule easier, given that it also requires that children reflect on the quality of their memories in order to decide whether questions can be answered on the basis of
There are two plausible reasons why this question was answered accurately in our sample and in other research (e.g., Endres et al., 1999; Moston, 1987). First, children can use a familiarity-based heuristic to reject a question when an answer does not come quickly to mind, even if they do not follow the rule strategically. Indeed, several experiments in which children were trained to say “don’t know” found that an increase in this response was coupled with both decreased errors and decreased accuracy (e.g., Gee et al., 1999; Saywitz & Moan-Hardie, 1994). The second reason involves question format. In our study, the “Don’t guess” practice question was posed in the “wh-” format, and children are more likely to provide accurate “don’t know” responses to these rather than yes/no questions (Waterman & Blades, 2011; Waterman, Blades, & Spencer, 2001).

The practice question for our “mistake” ground rule (“How do you like being [wrong age] years old?”) was also posed as a wh- question but evidenced poorer performance than the “Don’t guess” rule. Aside from the metacognitive challenges associated with the “mistake” rule, this rule may have been difficult due to linguistic complexity. “How” is among the last wh- words to be acquired (along with “when,” due to late development of temporal concepts; Ervin-Tripp 1970; Tyack & Ingram 1977). Indeed, our impression was that this question confused children more than the follow-up prompt did, which did not commence with “how” (“What did you do at the water park today?”). The initial question for this ground rule could also have been interpreted as a hypothetical question (i.e., “How would you like to be [older wrong age]?”) or an inquiry about the past (“How did you like being [younger wrong age]?”). This caveat further highlights the need for a careful and systematic analysis of the linguistic format of ground rules questions. It would be beneficial for future research to directly compare question formats for
each ground rule to determine which is most effective at (a) conveying the purpose of the question (and thus eliciting a correct response during the introductory phase) and (b) yielding greater benefit in the substantive phase of the interview.

Are Ground Rules Useful for Forensic Interviews?

Individuals who are unenthusiastic about ground rules may argue that well-trained interviewers avoid asking poor questions, rendering ground rules instruction unnecessary. Yet even interviews comprised of a high proportion of open-ended prompts also include specific questions (e.g., Sternberg et al. 2001), and it is often necessary to ask some specific questions of younger children (Hershkowitz et al., 2012), who are the most vulnerable to the negative effects of these questions.

Taken together, our results, along with evidence that ground rules practice questions can improve children’s testimonial accuracy (Cordón et al., 2005; Gee et al., 1999; Krackow & Lynn, 2010; Saywitz & Moan-Hardie, 1994; Saywitz et al., 1999), suggest that children are more likely to comprehend ground rules and keep them in mind when extra effort is made to ensure they can demonstrate competence. That is, simply telling children what to do is not particularly effective (Ellis, Powell, Thomson, & Jones, 2003), and even older children may not respond correctly to all rules on the first try.

Because ground rules instruction with follow-up practice can be delivered in just 2 to 4 minutes for most children, and scripting this interview phase reduces the burden on interviewers, we believe this is time well-spent. (See Lamb et al., 2007, for discussion of the value of scripted protocols.) Relatedly, when children are engaged in responding to practice rules (rather than just passively listening to them), additional opportunities for rapport-building are naturally created (Hershkowitz, 2011). Consistent with several protocols, we advise interviewers to take
advantage of opportunities to also reinforce ground rules later in the interview (e.g. Anderson, 2010; Yuille et al., 2009), as an interviewer in one of our projects recently did:

I: I see you understand what the truth is. It is important to tell me the truth—what really happened. Will you tell me the truth today?

C: I don't understand that. Like, tell you what happened today?

I: Yeah, so when I ask you questions in the interview will you say, will you tell the truth when you answer them?

C: Yes.

I: Okay, good. And thank you for telling me you didn't understand.

This example illustrates the logical problem with permitting interviewers to bypass an initial ground rules phase and only address concepts as they come up: Interviewers would never know when children did not know an answer or did not understand a question unless the children did something to raise a concern. Therefore, as long as the evidence shows that children benefit from initial instruction, and instruction takes a minimal amount of time (as we have shown), it makes sense to deliver a ground rules phase.

Conclusions

The techniques caregivers use to encourage children's emerging narratives (e.g., co-construction) are in direct contrast to the demands of a forensic interview. To empower children to respond accurately, most experts now recommend including a ground rules phase (e.g., Lamb et al, 2007; Saywitz et al., 2010). Further efficacy research is needed to resolve questions about the optimal number and placement of ground rules in interview protocols, and we hope that future best-practice standards include recommendations tailored for children of different ages and levels of cognitive ability. As a preliminary step toward stronger evidence-based practice,
our data provide the first characterization of developmental differences in children's ability to understand ground rules and highlight the importance of providing children with multiple practice opportunities when they display confusion about individual rules.
References


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