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## Abstract

Six- to 7-year-olds ($N$ = 130) participated in classroom activities four times. The children were interviewed about the final occurrence (target event) either a week or a month later, during which half of the event items were inaccurately described. Half of these suggestions were consistent with the theme of the detail across the occurrences (e.g., always sat on a kind of floor mat) or were inconsistent (e.g., sat on a chair). When memory for the target event was tested a day later, children falsely recognized fewer inconsistent than consistent suggestions, especially compared to a control group of children who experienced the event just one time. Further, the longer delay reduced accuracy only for consistent suggestions. Source-monitoring ability was strongly and positively related to resistance to suggestions, and encouraging children to identify the source of false suggestions allowed them to retract a significant proportion of their reports of inconsistent, but not consistent, suggestions. The results suggest that the gist consistency of suggestions determines whether event repetition increases or decreases suggestibility.


Keywords: eyewitness memory, suggestibility, repeated events, source monitoring, schema

# The consistency of false suggestions moderates children's reports of a single instance of a repeated event: Predicting increases and decreases in suggestibility

After decades of careful research, there is now a broad knowledge base on the capabilities and vulnerabilities of child witnesses (see Gordon, Baker-Ward, & Ornstein, 2001, for a review). Because a sizeable proportion of child witnesses allege multiple crimes, it is unfortunate that most of the research has studied children's eyewitness memories for isolated events. Children's memories of repeated events are quantitatively and qualitatively different to memories of events experienced just one time (Fivush, 1984; Fivush, Kuebli, & Clubb, 1992; Kuebli & Fivush, 1994; Powell & Thomson, 1996; see review by Hudson, Fivush & Kuebli, 1992). Repeated experience, for example, can wipe out age differences in suggestibility (Powell, Roberts, Ceci, & Hembrooke, 1999). Hence, there is a major omission in our knowledge of the processes affecting children's testimony and scientists are limited in their ability to provide the legal profession with empirically-based conclusions about children's memories of repeated experiences.

An especially important issue is children's suggestibility after repeated experiences. Compared to reports from children who have experienced an event one time, event repetition makes children highly resistant to suggestions about details that were identical in each occurrence of the event (Connolly & Lindsay, 2001; Powell et al., 1999). It is not yet clear, however, how event repetition affects reactions to suggestions about details that *vary* each time (e.g., a child abuse victim could be abused at different times and in different places). Repetition of items that vary in each occurrence has been shown to increase suggestibility (Connolly & Lindsay, 2001, Powell & Roberts, 2002), to decrease suggestibility (Powell, Roberts, & Thomson, 2000), and to have no discernible effect on suggestibility (Powell & Roberts, 2002;

Powell, Roberts, Ceci, & Hembrooke, 1999). Thus far, researchers have identified post-event factors that determine the direction of event-repetition effects on suggestibility. Event repetition is more likely to increase children's suggestibility when, for example, the suggestions are explicitly linked to the occurrence that is later the target of the memory test, rather than linked generally to the series of events (Powell et al., 2000). It is probable, however, that qualities of the event representation itself impact suggestibility, and so we investigated whether the consistency of suggestions to the gist of experienced details affected levels of suggestibility. Specifically, we tested the hypothesis that children would be more suggestible when the suggestions were consistent with the gist of experienced details than when they were gist-inconsistent, and that this effect would be stronger in children with prior experience of the event than those with no prior experience.

A second aim of the investigation was to determine the relation between source-monitoring skills and suggestibility after repeated experiences. Specifically, we tested whether source-monitoring instructions enabled children to retract their false reports, and expected that such instructions would be more successful in retracting reports of gist-inconsistent than gist-consistent suggestions. We begin by discussing memory representations of repeated experiences.

*The consistency effect*

Children can have remarkably good memories of routine events (see Davidson, 1996; Roberts & Powell, 2001). Like adults, children have the capacity to store large amounts of knowledge in schemata, or knowledge structures that contain typical elements of a given entity, such as people, objects, places, and events (Fivush, 1984; Nelson, 1986; Schank & Abelson, 1977). In adults, recognition memory for details that are atypical or inconsistent with a script are recognized more than details that are typical or consistent with a script, known as the *typicality*

or *consistency effect* (e.g., Erdfelder & Bredenkamp, 1998; Greenberg, Westcott, & Bailey, 1998; Lampinen, Copeland, & Neuschatz, 2001; Neuschatz, Lampinen, Preston, Hawkins, & Toglia, 2002; Pezdek, Whetstone, Reynolds, Askari, & Dougherty, 1989).

Although there is a reliable body of knowledge on the consistency effect in adults' memories, the consistency effect has only been documented in children's memories on just a few occasions (Davidson & Hoe, 1993; Farrar & Boyer-Pennington, 1999). Models of script development in children such as the script-confirmation-deployment model (Farrar & Goodman, 1992) suggest that, once a script has been established (i.e., the 'script-deployment phase'), atypical details are episodically encoded whereas there is no need to store such detailed information about typical details because these are already represented in the script. Recognition cues provide an exact match to the episodic trace thus rendering more accurate recognition of atypical than typical details. Thus, one can speculate that children may remember atypical details and thus reject false suggestions about them, but be less likely to remember the exact details of items that were typical of a script, and consequently be misled by false suggestions about typical details.

*The consistency effect and suggestibility*

Predictions about how the consistency effect may impact children's suggestibility can also be made from fuzzy-trace theory (Reyna & Brainerd, 1995). According to fuzzy-trace theory, event memories are dually represented as both verbatim details that comprise the exact surface form of details (e.g., sat in the seat next to the bathroom) and gist representations containing the general sense of what happened (e.g., ate at McDonald's). False memories occur in one of two ways (see Brainerd, Reyna, & Forrest, 2002). First, a verbatim representation from a different event may be retrieved (e.g., recall that sat next to the window); second, gist traces

may be retrieved that lead to a feeling of familiarity when gist-consistent, but false, details are presented (e.g., ate at Burger King). False memories of the first kind have been amply demonstrated in studies of repeated-event memories (e.g., Connolly & Lindsay, 2001; Hudson, 1990; Powell & Roberts, 2002; Powell et al., 1999). False memories of the second kind are of interest in the current study. According to fuzzy-trace theory, false-but-gist-consistent memory errors should be most likely when the gist representation is strong. Because gist representations may be strengthened by the repetition of similar events, fuzzy-trace theory predicts that children will be more resistant to gist-inconsistent suggestions than gist-consistent suggestions after repeated experiences.

In a recent study, 7-year-olds participated twice or four times in a standard event (interacting with a wizard) and then participated once in a similar event that deviated from the standard event (Farrar & Boyer-Pennington, 1999) Some deviations were typical or script-consistent (e.g., finger painting) and the rest were atypical or script-inconsistent (e.g., having a snack). The 7-year-olds recalled more of the script-inconsistent deviations than the script-consistent deviations. These results replicate Davidson's and Hoe's (1993) study demonstrating the consistency effect in children's story recall. Additionally, Farrar and Boyer-Pennington found that 4-year-olds were also able to separate memories of scripted from deviant details when the standard event was simplified and argued that this enabled the 4-year-olds to form a script even though their cognitive resources were more limited than the older children. Thus, the pattern of results was similar in these different age groups. There are many examples of younger children remembering the details of repeated events as well as older children, in contrast to the age differences found when children recall an event that they have experienced just one time (Connolly & Lindsay, 2001; Hudson, 1990; Powell et al., 1999). Thus, both empirical evidence

and contemporary theories of repeated-event memories suggest that age *per se* is not the crucial variable in consistency effects, but rather the repetition of experiences that allows gist extraction.

Farrar and Boyer-Pennington (1999) were interested in children's memories of details that were actually experienced, whereas the current investigation focuses on children's false memories of details that were *never* experienced. Also, Farrar and Boyer-Pennington (1999) studied memories of a single deviation occurrence, and so we still do not understand the mechanisms involved in memories of a single instance of a repeated event that consists of details that vary *each time* the event is experienced. This is a crucial difference because memory of a single variation after prior experiences is quite good, whereas children are highly confused when recalling a specific instance of a detail that is different each time children experience the event (e.g., Connolly & Lindsay, 2001; Powell et al., 1999). Powell and colleagues, for example, observed a success rate of just 25% when children were asked to describe a specific instance of a variable detail, and this error rate did not differ between 3- to 5-year-olds and 6- to 8-year-olds (see Table 4, Powell et al., 1999). Hence, it is not yet clear how the consistency of suggestions contributes to the production of false memories of a single instance of a repeated, variable event.

The results of one other study are also relevant to the current investigation. Ornstein and his colleagues highlighted the role of prior knowledge of medical examinations in 4- and 6-year-olds' ability to resist suggestions about actions that never occurred during a specific examination (Ornstein, Merritt, Baker-Ward, Furtado, Gordon, & Principe, 1998). When asked about features that were not present during the examination, Ornstein et al. found that the children were better able to correctly deny the atypical suggestions (e.g., measure head circumference) than the typical suggestions (e.g., check weight). The Ornstein et al. (1998) study addressed the role that prior knowledge, rather than prior *experience*, played in children's false-memory creation of

consistent and inconsistent suggestions. Thus, the children's knowledge of medical examinations was not experimentally created and children may have acquired their knowledge through books, television, classroom learning, and so on, in addition to their own experiences.

In the current study, then, we directly investigated whether the consistency of suggestions to details that were repeated across a series of occurrences affected children's resistance to those suggestions. Although we expected that all children would be more resistant to script-inconsistent suggestions than to script-consistent suggestions, we expected that children with prior experience would show a magnified effect compared to those with no prior experience. Specifically, we expected that children with prior experience would be more resistant to script-inconsistent suggestions than children with a single experience. Repetition should create stronger gist representations making inconsistent items stand out (c.f., the von Restorff effect, Koffka, 1935) and thus increasing resistance to them.

As a supplementary investigation, we tested the parameters of the expected effect by testing children's memories after a week or after a month, expecting that the effects would be greater after a month. Several studies with adults have documented higher levels of false alarms for script-consistent features when memory is tested after a delay rather than immediately after (Greenberg et al., 1998; Lampinen et al., 2001; Neuschatz et al., 2002). These findings make sense according to schema-plus-correction models that conceptualize tags linking atypical details to the memory representation. Over time, the tags are forgotten but the script is stable. Hence, after a delay, typical features seem more familiar or plausible than atypical features. According to fuzzy-trace theory, verbatim memories disintegrate faster than gist memories and so fuzzy-trace theory also predicts that the consistency effect would be greater after a delay (see Brainerd & Poole, 1997).

*Source monitoring and suggestibility*

The second main aim of the investigation was to assess whether source-monitoring skills contributed to children's suggestibility after repeated experiences. To see whether children genuinely believed that the false details had taken place during the target occurrence, a source-monitoring test was administered that required children to attribute the source of details to the target occurrence or the interviewer who had provided the false suggestions. We expected that resistance to suggestions and source monitoring would be positively correlated, and that children in the repeated-experience condition would inaccurately attribute more of the false-consistent than false-inconsistent suggestions to the target occurrence. One of the mechanisms of fuzzy-trace theory is "phantom recollection" (Brainerd, Wright, Reyna, & Mojardin, 2001), a process describing how details can be confabulated leading to false-but-gist-consistent false memories that actually contain verbatim details. Such confabulation is most likely when a) the gist trace is especially strong, and b) the false suggestion is a particularly good match for the gist trace. Such conditions are fulfilled when repeated experiences of an event have strengthened the gist trace and highly gist-consistent suggestions are offered. Hence, children with repeated experience may retrieve verbatim details and mistakenly assume that they actually observed those details.

The presence of a relationship between children's source monitoring and suggestibility for script-consistent and script-inconsistent items would be promising for forensic interviewing techniques. In some studies, orienting children to source helped them 'retract' their false reports (e.g., Leichtman & Ceci, 1995; Poole & Lindsay, 2001). Poole and Lindsay (2001), for example, induced false reports of never-experienced science demonstrations and found that, when children were asked to discriminate whether the fictitious demonstration occurred for real or in a story, the 8-year-olds retracted 67% of their false reports. Thus, we also investigated whether a source-

monitoring test would help children retract their false reports. We expected that retraction rates would be higher for script-inconsistent false memories than script-consistent false memories because more episodic information about source would be encoded for the former items. This latter prediction stems from schema theories of memory supporting a 'cognitive economy' mechanism (e.g., Farrar & Goodman, 1992; Schank, 1999). Specifically, consistent details need not be stored episodically because memories can be reconstructed from the schema, whereas inconsistent details that are not part of a schema need to be episodically encoded. Further, although schemata allowed the efficient encoding of gist in a study with adults, perceptual encoding was inhibited when script-consistent items were presented (Von Hippel, Jonides, Hilton, & Narayan, 1993). Such perceptual information may include contextual details that can later be retrieved and used to specify source. Thus, we expected that episodic information pertaining to script-inconsistent items may be better encoded, stored, and thus made available for source attribution than episodic information about consistent items.

## Method

### *Design*

Children aged 6 and 7 years participated in four occurrences of a scripted event and were given a biasing interview during which the interviewer gave false descriptions that were consistent or inconsistent with the theme of the details that had been set up over the four occurrences. Memory for the last occurrence (the "target") was tested at a memory interview either a week or a month after the target occurrence and the interviewer probed both the true and false descriptions of the target details. In addition, data were gathered from a control group of children who experienced the event just one time. Hence, the study comprised a 2 (Experience: single, repeat) x 2 (Delay: 1-week, 4-week) between-subjects experimental design. Two-thirds of

the participants were also given a source-monitoring interview immediately after the memory interview.

*Participants*

One-hundred and thirty children (64 girls) aged between 6 years, 0 months to 7 years, 8 months ($M$ = 6 years, 8 months; $SD$ = 4.11 months) participated in the study. The children were recruited from schools in the [city] area and their parents gave informed consent. Children participated in the event in groups of 20-28 and the groups were randomly assigned to experience and delay condition with the constraint that the cells were approximately equal in the mean age in months and gender distribution.

*Materials and procedure*

*The events.*

The activity was carried out either once or on four different days over a two-week period in the children's schools and was administered by a trained research assistant (RA) to groups of 20-28 children (though only children whose parents gave informed consent participated in the interviews). Teachers were instructed not to talk with the children about the activities or to inform them that they would later be interviewed. No person other than the children's teacher, the RA, and the children were present in the room during the activities.

The to-be-remembered event was a scripted 30-minute activity that was modeled on that used by Powell and Thomson (1996) in their study showing scripted memories in young children. The event was labelled for the children as the "Deakin Activities" (see Table 1). The activity comprised 16 target items embedded in several activities: physical exercise, listening to a story, doing a puzzle, getting a surprise, and relaxing. Each of the 16 target items differed across the four occurrences and was related to a theme (e.g., children always sat on something at floor

level – cardboard, rubber mat, white sheet, newspaper; Item #1, Table 1). (For clarity, we will use item #1 as an example throughout the Method section.) Four item sets were created that each contained instantiations from four different groups (e.g., one group experienced items from the columns labelled C, D, B, and E) and the items were presented in different orders in each set.

The target occurrence was tagged for children in the repeated-experience condition by introducing a change in the fourth and final occurrence. Either a new research assistant (RA) led the events, one who was different to the RA who administered the previous three occurrences (at least 10 characteristics distinguished the two RAs, e.g., different hair color), or an object that was always present in the activities was changed (a badge or a necklace). The way the target event was tagged was counterbalanced across the different Experience x Delay cells but note that this was not an experimental manipulation and the results did not differ based on which tag was used. The RA and objects were also used in the event in the single-experience conditions, but obviously their presence did not tag a change.

*The biasing interview.*

Either one or four weeks after the only or last occurrence, an unfamiliar RA carried out the biasing interview. The interviewer explained that she was not present during the target event and needed to find out what happened that day. The children were asked to focus on either "the day you wore the badge/necklace" or "the day that [RA/RA2's name] did the Deakin activities", as appropriate. First, a free narrative account was elicited with prompts such as "What happened next" and "What else can you tell me about the Deakin Activities the day you…?" The free narrative provided a check that all children could remember the activities. The RA then explained that she had to ask some more questions and that the child should answer them as best s/he can, even if the detail had been described earlier.

The 16 questions that followed were in the form of "presuppositional questions" (Roberts, Lamb, & Sternberg, 1999) that are known to effectively elicit suggestibility effects. In 8 of the 16 questions, an item from the target event was inaccurately described but was still plausible. Of these eight false suggestions, four were consistent with the theme of the item (*false-consistent* details, e.g., if the child sat on a garbage bag, the interviewer would ask "I heard that the leader brought you something to sit on the day you wore the badge to the Deakin Activities. What color was the *newspaper* you sat on that day?", i.e., something that was at floor level), and the rest were inconsistent with the theme (*false-inconsistent* details; e.g., "What color was the *wooden chair* you sat on that day?"; i.e., an item that was not at floor level). The remaining eight questions probed accurate descriptions of items from the target event (*true* details, e.g., "What colour was the *garbage bag* you sat on that day?"). The assignment of items to true, false-consistent, and false-inconsistent status was counterbalanced across the four item sets.

The 16 questions were asked in random order, and then the RA explained that she had to go through to check that she had all of the child's answers. The interviewer replayed back to the child each of the 16 questions and the child's corresponding answers, thus securing commitment to the false suggestions.

*The memory interview.*

The following day, the same interviewer conducted the memory interview to see what the children remembered about the target event. After a brief period of rapport building, the interviewer explained that she had lost the child's answers and so had to ask about the activity again. She tagged the target event for the children (i.e., using the object or person change), and asked two pre-test questions, one for which the correct answer was 'yes' and one for which the correct answer was 'no'. All children correctly answered 'no' to the second question thus

ensuring that children understood that they could say ‘no’ to a question. The RA then tested memory with one of two sets of yes/no questions (see below), administered in random order. Following this, she explained that she wanted to be sure she had understood things properly and so she needed to ask about some other things that might have happened. The second set of 16 yes/no questions was then administered.

Two sets of 16 yes/no questions were needed in the memory interview because each of the 16 target items had two corresponding questions – one probing the detail that was actually presented in the target event (*true* detail; e.g., asking “Did you sit on a *garbage bag*?” when the child actually did) and one probing a false suggestion (either *false-consistent* [e.g., asking “Did you sit on *newspaper*?”] or *false-inconsistent* [e.g., asking “Did you sit on a *wooden chair*?”). Children were asked questions about all of the details that were described in the biasing interview (recall that eight were true, four were false-consistent, and four were false-inconsistent details). The alternate version of each detail was also probed at the memory interview: for items described as false-consistent or false-inconsistent at the biasing interview, the true version was probed; for items accurately described at the biasing interview, false-consistent suggestions were presented for half of them and false-inconsistent suggestions for the remainder.

The order in which the true and false instantiations of each item were probed was counterbalanced, and the 16 questions in each set were administered in random order to each child. Thus, there was a maximum possible score of 16 correct ‘yes’ responses for the true-detail questions (eight questions contained the true details at both the biasing and memory interview, eight questions contained the true detail at the memory interview only); a maximum score of eight correct ‘no’ responses for questions about false-consistent details (four questions contained false-consistent details at the biasing interview and memory interview; four contained the false

description at the memory interview only); and a maximum score of eight correct 'no' responses for questions about false-inconsistent details (four questions contained false-inconsistent details at the biasing interview and memory interview; the remainder contained the false description at the memory interview only). One researcher coded all transcripts and a second researcher who was not otherwise involved in the study coded 20%. Interrater reliability, calculated as agreements/ (agreements + disagreements), was 98%. Discrepancies were resolved and the codes assigned by the principal coder were used in all analyses.

*The source-monitoring interview.*

The source-monitoring interview was carried out by the same interviewer immediately after the memory interview, and given to all children in the single-experience conditions and, due to resource constraints, half of the children in the repeated-experience condition.[1] The interviewer explained that she was still a little confused and needed to find out whether the child actually saw certain details. The interviewer questioned the children about four false-consistent and four false-inconsistent details (these items had been falsely described at the biasing interview). The interviewer gave a false description (e.g., the *newspaper*, when the child actually sat on a garbage bag) and asked "Did you *see* the newspaper that day or did I only *tell* you about the newspaper?" ('see' and 'tell' options were alternated). The true descriptions of each of the items were also probed (e.g., "Did you sit on the *garbage bag*? Did you *see* the garbage bag or did I only *tell* you about the garbage bag?") resulting in a 16-item test. The order in which the true and false details were presented was counterbalanced. The child was then thanked and escorted back to the regular classroom.

Responses were coded as accurate if children identified the target event as the source of true items and the interviewer as the source of false-consistent and false-inconsistent items. Inter-

rater percent agreement was at least 98% across all response types.

## Results

There are three sections to the results. In the first section, children's responses to the memory interview are presented broken down by how the items were described at the biasing interview). In the second section, the source-monitoring interview responses are presented. Finally, we present analyses showing children's retraction of false reports.

### *Responses at the memory interview*

#### *Items that were inaccurately described at the biasing interview.*

A 2 (experience: single, repeated) x 2 (delay: 1-week, 1-month) x 2 (biasing interview suggestion: false-consistent, false-inconsistent) x 2 (detail: true, false) analysis of variance (ANOVA) was run on the number of correct responses to the yes/no questions. Biasing interview suggestion and detail were within-subjects variables. The false suggestions at the memory interview were identical to the false suggestions at the biasing interview (e.g., a false-consistent item in the biasing interview was also false-consistent at the memory interview), and so the variable 'detail' contained just two levels (true, false). The means and standard deviations are presented in Table 2.

There was a main effect of biasing interview suggestion because responses to questions about items that were false-inconsistent at the biasing interview ($M$ = 5.86, $SD$ = 1.71) were more accurate than those that were false-consistent ($M$ = 5.54, $SD$ = 1.73), $F(1, 126) = 4.66$, $p < .05$. There were also main effects of delay, $F(1, 122) = 9.95$, $p < .01$, and detail, $F(1, 122) = 35.57$, $p < .001$. Overall, children interviewed after a week ($M$ = 12.22, $SD$ = 2.74) were more accurate than those interviewed after a month ($M$ = 10.61, $SD$ = 3.09), and there were more accurate answers given to questions about items that were accurately ($M$ = 6.28, $SD$ = 1.59) than

inaccurately described at the memory interview ($M$ = 5.12, $SD$ = 2.14).

The main effect of experience approached significance, $F(1, 122) = 2.87$, $p = .09$, but there was a significant 3-way interaction between experience, delay, and detail, $F(1, 122) = 6.71$, $p = .01$. The interaction occurred because of the combined negative effects of prior experience and a long delay. When questioned a week after the target event, children in both the single-experience, $t(34) = 2.25$, $p = .03$, and the repeated-experience, $t(28) = 3.34$, $p < .01$, conditions gave more accurate responses to questions about true details than false details (Single experience: $M$s = 6.54, 5.97 and $SD$s = 1.62, 1.54; Repeated-experience: $M$s = 6.72, 5.14 and $SD$s = 1.22, 2.33, for true and false details, respectively). At a month, however, although children in the single-experience condition continued to show greater accuracy when answering questions about true than false details ($M$s = 6.43, 4.69 and $SD$s = 1.33, 1.91 for true and false details, respectively), $t(34) = 5.67$, $p < .001$, children in the repeated-experience condition did not ($M$s = 5.39, 4.65 and $SD$s = 1.84, 2.54 for true and false details, respectively), $t(30) = 1.45$, $p = .16$.

*Items that were accurately described at the biasing interview.*

As there were eight true items and four each of the false-consistent and false-inconsistent suggestions, the mean for the true items was divided by two to enable comparison across items. A 2 (experience: single, repeated) x 2 (delay: 1-week, 1-month) x 3 (detail: true, false-consistent, false-inconsistent) analysis of variance (ANOVA) was run on the correct responses (see above) and detail was within-subjects. There is no biasing interview variable because all items were accurately described at the biasing interview, and there are now three levels of the variable 'detail' because each item from the biasing interview could be described in one of three ways at the memory interview (true, false-consistent, false-inconsistent). The means and standard deviations are presented in Table 3.

There was a main effect of detail because there were fewer accurate responses to questions containing false-consistent details ($M$ = 3.42, $SD$ = 0.80) than to questions containing either false-inconsistent ($M$ = 3.75, $SD$ = 0.61) or true details ($M$ = 3.78, $SD$ = 0.49), $F(2, 252) = 17.87$, $p < .001$. The predicted Detail x Experience interaction was significant, $F(2, 252) = 3.87$, $p < .05$. Children in the repeated-experience condition ($M$ = 3.87, $SD$ = 0.43) were more resistant to questions probing false-inconsistent items than were children in the single-experience condition ($M$ = 3.66, $SD$ = 0.72), $t(128) = -1.97$, $p < .05$. However, there were no effects of experience on responses to questions about true or false-consistent details (see means in Table 3), $ts(128) < 1.50$, $ps > .15$.

In sum, responses at the memory interview showed that children were more resistant to inconsistent suggestions than consistent suggestions regardless of whether the suggestions were offered at the biasing interview (when the suggestions were presupposed as being true) or at the memory interview (when yes/no questions were asked about the presence of the suggested details). The consistency effect was more pronounced for children with repeated than a single experience.

*Responses at the source-monitoring interview*

To see whether there was a consistency effect in children's source monitoring and also to see whether this was moderated by the amount of experience children had with the event, a 2 (experience: single, repeat) x 2 (delay: 1 week, 1 month) x 2 (biasing interview suggestion: false-consistent, false-inconsistent) x 2 (detail: true, false) ANOVA was run on the number of correct responses to the "see/tell" questions, with repeated-measures on the last two independent variables. The means and standard deviations are presented in Table 4.

There were main effects of biasing-interview suggestion, $F(1, 95) = 10.49$, $p < .01$, and delay, $F(1, 95) = 5.68$, $p < .02$. As expected, there were more correct responses to questions about false-inconsistent ($M = 6.56$, $SD = 1.44$) than false-consistent biasing interview items ($M = 5.80$, $SD = 1.73$), and more correct responses when the source-monitoring interview occurred a week ($M = 13.02$, $SD = 1.78$) rather than a month ($M = 11.73$, $SD = 3.11$) after the target event.

There was an interaction between biasing-interview and detail, $F(1, 95) = 4.60$, $p < .05$, that was qualified by an interaction between biasing interview, detail, and experience, $F(1, 95) = 9.58$, $p < .01$. Follow-up tests on the Biasing interview x Detail interaction revealed no significant effects, although the pattern of means suggests that accurate source identification depended on the consistency of the suggestion at the biasing interview. Specifically, when true details were probed, accuracy was greatest when the false suggestion at the biasing interview was inconsistent with the theme and lowest when the suggestion has been consistent with the theme (*M*s = 3.28, 2.85 and *SD*s = 0.83, 0.99, respectively). The mean for items that were described as false-inconsistent at both the biasing and source-monitoring interviews was 3.27 ($SD = 0.91$); false-consistent at both interviews, $M = 2.95$ ($SD = 0.97$). Analyses exploring the Biasing interview x Detail interaction separately for each experience condition confirmed that this pattern was evident in the responses of children in the repeated condition, $F(1, 28) = 8.60$, $p < .01$, but not the single condition, $F(1, 69) < 1.00$, *ns* (see Table 4 for the full set of means).

Next, to see whether there was an overall positive relationship between resistance to suggestibility and source monitoring, correlations were computed between correct responses at the memory interview and correct responses at the source-monitoring interview ($N = 99$). First, the number of correct responses during the memory interview about *false-consistent* items (i.e., correct rejections) were correlated with the number of correct source-monitoring responses about

*false-consistent* items and there was a significant positive relationship both before and after controlling age in months, *r*s = .57, *p*s < .001. Second, the number of correct responses about *false-inconsistent* items were correlated with the number of correct source-monitoring responses to *false-inconsistent* items and again there was a strong and significant positive relationship both before and after controlling age in months, *r*s = .69, *p*s < .001.

In sum, responses at the source-monitoring interview showed a positive relation between monitoring the source of suggestions and resistance to those suggestions. Children were as able to identify the source of false-inconsistent suggestions as true details that were actually in the event, but had difficulty identifying the source of false-consistent suggestions. Children with repeated experience were worse than children in the single-experience condition at identifying that target details were present during the event.

*Retraction Analyses*

To see whether the source-monitoring interview was helpful in encouraging children to retract their false reports, responses to items in the memory interview were compared with children's claims in the source-monitoring interview that they had actually *seen* the corresponding items in the target event. Source identification of false alarms in the memory interview was tracked first, followed by analyses on children's accurate recognition (i.e., hits). All proportional scores reported below were calculated separately for false-consistent and false-inconsistent items, and the means are presented in Table 5. In each analysis, the proportional scores were entered into a 2 (experience: single, repeated) x 2 (biasing-interview suggestion: false-consistent, false-inconsistent) ANOVA with repeated-measures on the latter variable.

*Retraction of false alarms made in the memory interview.*

First, proportional scores were calculated to see whether the false alarms at the memory interview reflected a genuine belief that children had actually seen those items in the target event. The number of false alarms to the items at the memory interview (i.e., inaccurate recognition of false suggestions) was the denominator, and the number of times that children inaccurately claimed to have *seen* the corresponding items was the numerator. Hence, a large proportion indicates poor source monitoring.[2] There was a main effect of biasing-interview suggestion because children were more likely to inaccurately claim that they had seen the false-consistent ($M$ = .60, $SD$ = .46) than false-inconsistent suggestions ($M$ = .35, $SD$ = .42) in the target event, $F(1, 32) = 4.40$, $p < .05$. Inversely, children were able to say that 40% of the false-consistent suggestions and 65% of the false-inconsistent suggestions were provided by the biasing interviewer despite falsely recognizing these items previously. See the first and third columns of Table 5 to see the means separately for each experience condition.

Next, proportional scores were computed to see whether children could accurately remember seeing items in the target event despite previously inaccurately recognizing false descriptions of those items (i.e., these are responses to source-monitoring questions containing true details). In contrast to the above proportional scores, the numerator was the number of times children accurately claimed to have seen the corresponding true items in the target event. As can be seen in the second and fourth columns in Table 5, the high scores show that children still remembered seeing the actual items from the target event despite their previous false reports about those items. There was a main effect of experience, $F(1, 27) = 4.55$, $p < .05$, because children in the single-experience condition ($M$ = .98, $SD$ = .06) had more accurate source-monitoring scores than children in the repeated-experience condition ($M$ = .81, $SD$ = .35). Source-monitoring accuracy did not differ as a function of the consistency of the suggestion.

Thus, even though children falsely recognized misleading suggestions in the memory interview, they retracted a substantial proportion of their false reports. Further, children reinstated a large proportion of their memories of items that were in the target event when explicitly asked whether they had seen these items in the target event.

*Retraction of hits in the memory interview.*

Although the above analyses show that children could retract some of their earlier false reports, it is important to know whether children also retracted their accurate reports, that is, were overly stringent in their false-memory editing. As above, proportional scores were calculated; the denominators here, however, were the number of correct recognitions of true items at the memory interview.

First, we examined children's tendency to claim to have *seen* false-consistent and false-inconsistent details despite having previously accurately recognized the corresponding true versions of these items at the memory interview. Thus, a high proportion reflects poor source monitoring. There was a main effect of biasing interview because children inaccurately claimed seeing more false-consistent ($M$ = .40, $SD$ = .42) than false-inconsistent items ($M$ = .25, $SD$ = .39), $F(1, 84) = 4.01$, $p < .05$. Overall, children made source-monitoring errors for about a third of the items despite accurately recognizing the target items earlier in the study. Inversely, children were able to accurately identify that the biasing interviewer had provided 60% of the false-consistent and 75% of the false-inconsistent suggestions. See columns 5 and 7 of Table 5 for means separated by condition.

Finally, we examined whether children accurately remembering *seeing* target items when they had accurately recognized these items at the memory interview. There was a main effect of experience, $F(1,89) = 4.07$, $p < .05$, that was qualified by a Biasing interview x Experience

interaction, $F(1, 89) = 6.67$, $p = .01$. Children in the single-experience condition accurately remembered seeing items from the target event ($M = .91$, $SD = .22$) more than children in the repeated-experience condition did ($M = .83$, $SD = .28$), though the interaction showed that this was true for responses to the false-consistent items only, $t(92) = 3.43$, $p = .001$. Experience did not affect source monitoring for items that were designated as false-inconsistent at the biasing interview, $t(92) = -0.46$, $p > .50$. See columns 6 and 8 of Table 5 for other means.

In sum, the retraction analyses showed that children were able to retract false reports (i.e., say that they had not actually seen the false items despite previously falsely recognizing them), but could do so for inconsistent items more than consistent items. Children made some source-monitoring errors for items that they had previously accurately recognized, but they did this more when confronted with false-consistent than false-inconsistent suggestions. Nevertheless, true-report retraction occurred substantially less frequently than false-report retraction but only when the biasing interview suggestions were inconsistent with the theme of the detail (children retracted 40% of both their false and true reports with respect to false-consistent items, but retracted 65% of their false reports and just 25% of their true reports with respect to false-inconsistent items). Overall, children with repeated experience were more confused about the source of true and false items than children who had experienced the event just one time.

## Discussion

Children and adults remember script-inconsistent information better than script-consistent information (e.g., Davidson & Hoe, 1993; Farrar & Goodman, 1999; Neuschatz et al., 2002; Pezdek et al., 1989). We investigated whether the consistency of suggestions to details in a repeated event might affect children's suggestibility when asked about a single instance of the

event. The evidence shows that children were clearly more resistant to suggestions that were script-inconsistent than those that were script-consistent. The effect was observed both when the recognition test probed the suggestions from the biasing interview, and when the suggestions were presented for the first time at test. Further, children continued to cling to their false reports of consistent suggestions more than they clung to false reports of inconsistent suggestions. These results extend previous research by showing how the consistency of false suggestions to a repeated event can lead to both increases and decreases in children's suggestibility when questioned about a particular instance of a repeated event. In addition, these results show that children's source-monitoring skills varied depending on the consistency of suggested details. Children were better able to identify the interviewer as the source of inconsistent suggestions, and thus retract earlier false reports, than they were at identifying her as the source of consistent suggestions; the children, especially those with prior event experience, seemed to genuinely believe that many of the false-consistent suggestions actually occurred during the target event.

Why might children be more suggestible when confronted with script-consistent than script-inconsistent suggestions? According to fuzzy-trace theory (e.g., Reyna & Brainerd, 1995), false memories can occur when false-but-gist-consistent options are presented (Brainerd et al., 2002). False memories are thus more likely when false suggestions are gist-consistent than when they are gist-inconsistent. Acceptance of false-but-gist-consistent suggestions may occur because these suggestions give rise to a feeling of familiarity which is mistaken for a memory of an experienced detail. The script-confirmation-deployment model (Farrar & Goodman, 1992) offers an alternative explanation: More information-processing resources are directed toward encoding script-inconsistent than script-consistent details. Although this process explains how memories of *presented* script-inconsistent details are more accurate than script-consistent details, in the

current study, the script-inconsistent *suggestions* may have attracted attention and, thus, the item may have been clearly and episodically tagged in memory as an instance of a false suggestion. This episodic encoding may later have prevented children from accepting the script-inconsistent items because they could retrieve the episodic information associated with the first presentation of the suggestion (i.e., by recalling the interviewer making the suggestion). The results of the source-monitoring test support this explanation because the source of script-inconsistent items was identified more often than the source of script-consistent items.

As anticipated on the basis of fuzzy-trace and script theories, the magnitude of the effects depended on how much prior experience children had with the event. We expected that children with repeated experience would show enhanced resistance to false-inconsistent suggestions when compared to children with no prior experience and the results from the recognition test supported this hypothesis. The finding that the consistency of the suggestion can moderate the effects of experience is a novel finding that may explain why repetition increased suggestibility in some studies (e.g., Connolly & Lindsay, 2001; Powell & Roberts, 2002, yes/no condition) but not in others (e.g., Powell et al., 1999). When the consistency of the suggestion is ignored, children with repeated experience in the current study falsely recognized *more* details than did children with no prior experience. Hence, at first glance, the results appeared to have replicated studies showing increases in suggestibility following repetition (Connolly & Lindsay, 2001; Powell & Roberts, 2002). However, children with repeated experience were better than those with no prior experience at rejecting false-inconsistent suggestions when these suggestions were presented for the first time at test, though experience did not affect recognition after exposure to script-consistent suggestions. Thus, the effects of prior experience on suggestibility are moderated by the consistency of the suggestions to the target details. Whether repetition increases

suggestibility may be partly dependent on the thematic consistency of the individual variants across a series of occurrences and the consistency of the suggestions to the theme. Further research could focus on identifying the factors and conditions that affect suggestibility after repeated experiences rather than pondering whether repetition simply increases suggestibility.

We had expected that the effect of consistency would be more pronounced after a delay, but this was not supported. The lack of an interaction is unlikely to be the result of a Type I error because other, predictable effects of retention interval were observed (i.e., recognition and source monitoring were more accurate when children were interviewed a week than a month after the target occurrence, replicating much previous work, e.g., Powell & Thomson, 1996; Powell et al., 1999). Rather, consistency probably did not interact with retention interval because the "short" delay in the current study was actually longer than that used in previous studies reporting increases in false recognition of script-consistent details over time (e.g., Greenberg et al., 1998; Lampinen et al., 2001; Neuschatz et al., 2002; Ornstein et al., 1998). In these studies, recognition was tested within 24 hours of the target event, whereas the children in the short delay condition of the current study were tested after a week. Hence, any effects of highly-consistent suggestions may already have occurred by the time we tested the children. The 1-week and 1-month delays in the current study were chosen for ecological validity because most incidents of abuse reported by child witnesses occur more than 24 hours before they are interviewed. It would be interesting, however, to study the magnitude of the consistency effect at very short delays to enable generalization to cases when immediate interviews are possible.

We expected that the effect of consistency in recognition would be closely tied to children's source monitoring of the experienced and suggested details. Indeed, there were strong correlations between the recognition and source-monitoring scores for both script-consistent and

script-inconsistent items. Specifically, correct acceptance of experienced details and correct rejection of suggestions were associated with accurate identification of details as originating in the target occurrence and biasing interview, respectively. Hence, false recognitions of suggested details reflected beliefs that the details had been genuinely witnessed during the target occurrence. The relation between source monitoring and suggestibility has been theorized for some time (e.g., Lindsay & Johnson, 1989), but the current findings contribute to the growing body of literature providing direct empirical evidence of the relation (e.g., Giles, Gopnik, & Heyman, 2002; Leichtman, Morse, Dixon, & Spiegel, 2000; Poole & Lindsay, 2001; Thierry & Spence, 2002). It would be interesting to investigate whether children's beliefs that the suggested details were experienced during the target occurrence were accompanied by recollective experiences, as would be expected from "phantom recollection" (Brainerd et al., 2001; Neuschatz et al., 2003). Replicating the current study using a recall rather than a recognition test would indicate whether children were actually retrieving false episodic details, and also clarify the generalizability of the results to a variety of question formats.

The source-monitoring results suggest that the familiarity mechanism in fuzzy-trace theory (e.g., Reyna & Brainerd, 1995) explains false memories of gist-consistent items well, but not gist-inconsistent items. Gist-consistent items seem familiar to children and they misattribute the familiar feeling to prior contact with the item in the target event; in the current study, children's explicit claims that they had *seen* gist-consistent items support this idea. Gist-inconsistent items would also be familiar to children in the current study, however, because the suggestions were repeated at the biasing, memory, and source-monitoring interviews, and yet children were sometimes able to correctly attribute the familiarity to the interviews rather than the target event (65% of these items were correctly attributed to the interviewers). Thus, children

seemed to have encoded source-specifying information for gist-inconsistent items better than source information for gist-consistent items. Thus, fuzzy-trace theory explains the initial resistance to gist-inconsistent suggestions (as does script theory, e.g., Farrar & Goodman, 1992). The current results, however, highlight that specific source-monitoring processes may need to be incorporated into these theoretical models to explain resistance to gist-inconsistent items over time. Perhaps the presentation of gist-inconsistent items was so salient that children were motivated to encode source-specifying information at the time of presentation; false memories invoked by feelings of familiarity could be resisted later on by retrieval of the source-specifying information associated with gist-inconsistent suggestions.

Several lines of evidence in the current study suggest that the gist-consistent suggestions actually interfered with children's memories of the final occurrence in the series. Children with prior experience were no better at recognizing details from the occurrence than they were at resisting false suggestions, at least when tested after a month. When children were asked to identify the source of details, children with prior experience were more accurate at attributing the false-consistent suggestions to the interviewer than they were at attributing the experienced detail to the target occurrence. Thus it is plausible that, following repeated experiences, the script-consistent suggestions retroactively interfered with children's memories of the target details preventing them from identifying the details that they had actually witnessed (Belli, Windschitl, McCarthy, & Winfrey, 1992; Chandler, 1991). Although children acquiesced to the inconsistent suggestions at the biasing interview, these suggestions had fewer long-lasting effects on their reports than did the consistent suggestions. Support for this assertion also comes from the retraction analyses which showed that children could retract false reports or reinstate true memories for inconsistent items more than they could for consistent items.

It would be interesting to further study the parameters of the consistency effect in eyewitness memories across a variety of ages given differences in gist or script extraction (Brainerd et al., 2002). Although there are few studies on children's suggestibility after repeated experiences, the effects that have been demonstrated do not seem to be dependent on age *per se*. As the patterns of effects in older (e.g., aged 6-8) and younger (e.g., aged 3-5) children are virtually identical (e.g., see Connolly & Lindsay, 2001; Powell et al., 1999), differences may lie in the magnitude of the effects (e.g. older children are usually more accurate than younger children).[3] Research in developmental differences may advance through investigation of the factors likely to moderate event-repetition effects on suggestibility, factors that are associated with age. Such factors may include the development of source-monitoring skills, resistance to interference, the complexity of the event, and the amount of experience needed for children of different ages to develop scripts. Further, it would be important to better understand how the nature of the inconsistency may increase or decrease children's resistance to suggestibility and how this interacts with age and interview technique. Age differences are more typically found in recall of repeated events, rather than recognition, and atypical actions that disrupt the event are better recalled than atypical actions that are irrelevant to the goal of the event (e.g., Hudson, 1998).

In sum, the results of the present study show that 6- to 7-year-old children are more resistant to script-inconsistent than script-consistent suggestions. This effect is magnified when gist traces of events are likely strong, such as after repeated experiences. These results clarify discrepancies in the literature regarding the effects of repetition on children's suggestibility and indicate that prior experience increases suggestibility to gist-consistent suggestions, but reduces suggestibility to gist-inconsistent suggestions. Further, consistent suggestions may interfere with

memories of the actual events reducing the possibility of reinstatement. From a practical perspective, child witnesses alleging multiple abuse and who appear to draw on a script (e.g., by talking in the present/future tense as in “he will lock the door” or “she leaves me in the bedroom”) may be at increased risk of creating false memories after exposure to gist-consistent suggestions. When presented with gist-inconsistent suggestions that are nevertheless plausible, however, children may be able to resist the suggestions and even retract them if given the opportunity to identify the source of the suggestion. The results suggest that it may be worthwhile to develop the source-identification procedures for use by forensic interviewers. Overall, these results suggest that forensic interviewers should be especially cautious about suggesting details that may have occurred in other instances of abuse (i.e., that are consistent with the gist or script of the abuse) when questioning about a specific instance.

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## Footnotes

[1]Specifically, children in the repeated-experience whose target event was tagged by a change in an object (badge or necklace) were given the source-monitoring interview. To see whether the way the target event was tagged affected source monitoring, a 2 (tag: object, person) independent samples t-test was conducted on the source-monitoring scores and there was no effect, $t(97) = -0.89$, $p = .37$. In addition, the analyses of the memory-interview responses (i.e., using data from all the children in the repeated-experience condition) were repeated using data from only those children who also provided source-monitoring interview responses, and the findings were identical. Because there was no evidence, then, that there was any difference in the children who did and did not provide source-monitoring interview responses, analyses on the memory interview comprise the full sample, and all source-monitoring interview data was included in the source-monitoring interview analyses so as not to restrict sample size.

[2]Proportional scores can only be calculated for children who made at least one error and so the degrees of freedom differ in the following analyses. So as not to restrict sample sizes in the analyses, all proportions were collapsed across the variable of delay after independent t-tests showed that there were no differences in proportional scores provided at the 1-week and 1-month delays.

[3]The analyses reported in the current study were repeated controlling for age in months and the effects remained statistically significant.

*Table 1*

*The pool of items in the event.*

| No. | Item | Instantiation | | | | | |
|---|---|---|---|---|---|---|---|
| | | A | B | C | D | E | F |
| 1. | Children's seat | cardboard | rubber mat | garbage bag | white sheet | newspaper | pillow |
| 2. | Cloak of leader | red | yellow | white | blue | green | black |
| 3. | Koala's name | Boo | Kip | Pop | Stan | Jo | Lee |
| 4. | Noisy animal | kangaroo | goanna | kookaburra | dingo | wombat | possum |
| 5. | Warm-up activity | run | wiggle fingers | touch toes | jump | dance | sit-ups |
| 6. | Source of story | garbage bin at [university] | leader wrote on [university] instruction | Posted by [university] person | Library at [university] | present under tree from [university] friend | [university] bookshop |
| 7. | Content of story | horse | lucky rabbit | fly | Supercat | elephant | worm |
| 8. | Child who holds up pictures | Child A | Child B | Child C | Child D | Child E | Child F |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 9. | Utensil to note who child is | pencil | crayon | chalk | marker | lipstick | paint |
| 10. | Puzzle | waving a wand | playing guitar | balancing balls | juggling | walking on tightrope | bicycling |
| 11. | Music/scene for resting | beach | kites | birds | rain | park | circus |
| 12. | Part of body is relaxed | legs | nose | stomach | arms | ears | chin |
| 13. | Method of getting refreshed | baby wipe | lip gloss | hand cream | face spray | cool drink | ice pack |
| 14. | Theme of sticker | rocket | rainbow | star | flag | sun | aeroplane |
| 15. | Container with stickers | box | purse | envelope | jar | basket | metal tin |
| 16. | Next stop | to movie | walking a dog | visiting friend in hospital | birthday party | going on holiday | shop for some new clothes |

*Table 2*

*The Memory Interview: Mean accurate responses to questions about items that were falsely described at the Biasing Interview.*

| Description in biasing interview | False-Consistent items | | False-Inconsistent items | |
|---|---|---|---|---|
| Description in memory interview | True | False Consistent | True | False Inconsistent |
| Condition | | | | |
| Single-Experience | | | | |
| 1 week (N = 35) | 3.26 (0.89) | 2.83 (0.92) | 3.29 (0.93) | 3.14 (0.88) |
| 4 week (N = 35) | 3.03 (0.89) | 2.23 (1.17) | 3.40 (0.85) | 2.46 (1.04) |
| Total (N = 70) | 3.14 (0.89) | 2.53 (1.09) | 3.34 (0.88) | 2.80 (1.02) |
| Repeat-Experience | | | | |
| 1 week (N = 29) | 3.21 (0.90) | 2.55 (1.18) | 3.52 (0.74) | 2.59 (1.40) |
| 4 week (N = 31) | 2.68 (1.11) | 2.35 (1.25) | 2.71 (1.04) | 2.29 (1.51) |
| Total (N = 60) | 2.93 (1.04) | 2.45 (1.21) | 3.10 (0.97) | 2.43 (1.46) |

*Notes*. Standard deviations are in parentheses; All scores out of 4.

*Table 3*

*The Memory Interview: Mean accurate responses to questions about items that were accurately described at the Biasing Interview.*

| Description in memory interview | True[a] | False Consistent | False Inconsistent |
|---|---|---|---|
| Condition | | | |
| Single | | | |
| 1 week (N = 35) | 3.86 (0.68) | 3.46 (0.85) | 3.69 (0.80) |
| 4 week (N = 35) | 3.83 (0.36) | 3.37 (0.73) | 3.63 (0.65) |
| Total (N = 70) | 3.84 (0.54) | 3.41 (0.79) | 3.66 (0.72) |
| Repeat | | | |
| 1 week (N = 29) | 3.76 (0.57) | 3.59 (0.73) | 3.93 (0.26) |
| 4 week (N = 31) | 3.68 (0.39) | 3.26 (0.86) | 3.81 (0.54) |
| Total (N = 60) | 3.72 (0.49) | 3.42 (0.81) | 3.87 (0.43) |

*Notes.* Standard deviations in parentheses; [a]There were eight true items and so the scores were divided by 2 to enable comparison across item scores; All other scores were out of 4.

*Table 4*

*The Source-Monitoring Interview: Mean accurate responses to questions about items that were falsely described at the Biasing Interview.*

| Description in biasing interview | False Consistent items | | False Inconsistent items | |
|---|---|---|---|---|
| Description in source-monitoring interview | True | False Consistent | True | False Inconsistent |
| Condition | | | | |
| Single | | | | |
| 1 week (N = 35) | 3.11 (1.00) | 3.00 (0.77) | 3.46 (0.66) | 3.51 (0.70) |
| 4 week (N = 35) | 2.74 (1.12) | 2.63 (1.22) | 3.20 (0.90) | 3.14 (0.77) |
| Total (N = 70) | 2.93 (1.00) | 2.81 (1.03) | 3.33 (0.79) | 3.33 (0.76) |
| Repeat | | | | |
| 1 week (N = 13) | 2.92 (0.95) | 3.23 (0.60) | 3.38 (0.65) | 3.31 (1.030 |
| 4 week (N = 16) | 2.44 (0.96) | 3.31 (0.87) | 3.00 (1.10) | 3.00 (1.37) |
| Total (N = 29) | 2.66 (0.97) | 3.28 (0.75) | 3.17 (0.93) | 3.14 (1.22) |

*Notes*. Standard deviations are in parentheses; All scores out of 4.

*Table 5*

*The Source-Monitoring Interview: The proportion of items that children claimed they had actually seen in the target event as a function of suggestibility in the Memory Interview.*

| Memory Interview response | False alarms (i.e., false suggestions were inaccurately recognized) | | | | Hits (i.e., true descriptions were accurately recognized) | | | |
|---|---|---|---|---|---|---|---|---|
| Biasing-interview description | False-consistent | | False-inconsistent | | False-consistent | | False-inconsistent | |
| Source-monitoring Interview description | False-consistent | True | False-inconsistent | True | False-consistent | True | False-inconsistent | True |
| Single-experience | .66 (.45) | .97 (.13) | .41 (.45) | 1.00 (.00) | .40 (.39) | .94 (.16) | .22 (.35) | .88 (.28) |
| Repeated-experience | .50 (.48) | .85 (.32) | .25 (.34) | .77 (.39) | .39 (.48) | .75 (.36) | .32 (.46) | .92 (.19) |

*Notes*. Standard deviations are in parentheses.