

Taking AIM: Advanced Interview Mapping for Child Forensic Interviewers

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Child forensic interview protocols universally agree that eliciting a detailed, free-narrative account of the child's experiences, in the child's own words, is best practice (Newlin et al., 2015; Powell & Snow, 2007). Despite this consensus across protocols and their affiliated training programs, in actual practice child forensic interviewers vary widely in their emphasis on free-narrative questioning strategies to elicit such accounts from the child. (See review and commentary by Lamb, 2016.)

Rather than adhering to the best practice standards taught in training, many interviewers revert within months to old habits like reliance on specific and closed questioning (Smith, Powell, & Linn, 2009). Interviewer drift from the use of open-ended narrative prompts to more specific question strategies typically leads to a less complete, potentially less accurate report of the child's experiences (Poole & Lamb, 1998). As a result, interviewer drift represents a threat to the validity of the investigative process. In addition, failure to follow best practice standards to elicit a structurally adequate and complete narrative can undermine the child's believability (Walker, 2013).

Experts have long recognized unconstrained narratives as the best source of information about children's experiences (Poole & Lamb, 1998). For example, in research on the accuracy of children's memory conducted in the early 1900's, Pear and Wyath (1914, p. 397) concluded that the evidence children provide is

“exceedingly reliable” when it is given in spontaneous accounts, at their own speed, unhampered by adult questions. More recent research has confirmed that the information children provide in free-narrative accounts is more accurate and detailed than the information provided in response to more direct or specific questions (e.g., Lamb, Hershkowitz, Sternberg, Boat, & Everson, 1996; Lamb, Orbach, Hershkowitz, Horowitz, & Abbott, 2007). It is best for interviewers to elicit free-narrative accounts: (a) using broad narrative invitations, (b) that encourage elaborate free recall responses, and (c) give the child the flexibility to report the information he/she remembers best (Powell & Snow, 2007). An example of such a free-narrative invitation is, “Start at the beginning and tell me everything you remember about your camping trip last weekend.”

By age five, most children can provide chronologically ordered accounts of their experiences (Powell & Snow, 2007). Because of the memory processing requirements of free-narrative recall, however, children typically need ongoing prompting (e.g., “What happened next?”) to persist in retrieving and reporting a complete narrative. Powell and Snow (2007) recommend delaying “wh” and other types of specific questions until after the child's free-narrative account is exhausted. Newlin and his colleagues (2015) offer similar advice: “Do not interrupt this narrative, as it is the primary purpose of the forensic interview” (p. 9). Poole and Lamb (1998) describe interviewers prematurely shifting from the free-narrative phase to more specific “wh” questioning as a common interviewer error.

Our experiences as trainers, peer reviewers, and expert witnesses are consistent with these findings. We have observed many interviewers abandon narrative questioning after a single narrative attempt, regardless of the child’s response. Given the consistent emphasis across interview protocols on obtaining uninterrupted free-narrative accounts, it seems likely that such interviewer errors may be further evidence of widespread interviewer drift among forensic interviewers.

Tool for Preventing Interviewer Drift

Advanced Interview Mapping (AIM) is a practical, easy-to-learn tool for use in peer and self-review to ensure interview quality and to prevent interviewer drift. We developed AIM as a method for assessing the degree to which interviewers adhere to good/best practice standards (e.g., Newlin et al., 2015; Faller, 2007; Powell & Snow, 2007) in attempting to elicit a detailed, free-narrative account of the child’s experiences. AIM offers a method for mapping questions during the Eliciting Account or Substantive phase of the interview on a visual diagram, tracking both the type and sequence of questions. As a result, AIM provides a unique methodology for objective appraisals of questioning strategies—regardless of the interview protocol used.

We have organized this paper into three sections. Section I provides a description of AIM methodology, including definitions for coding question types and instructions for interview mapping. In Section I, we also introduce the 4-Step Narrative Rubric as a guide for directing and evaluating question selection. Section II demonstrates the use of AIM in appraising two contrasting interview examples. In Section III, we propose AIM as a remedy for a number of limitations inherent in current peer review practice and as a resource for more productive interviewer self-evaluation.

I. How to Take AIM

Question Types

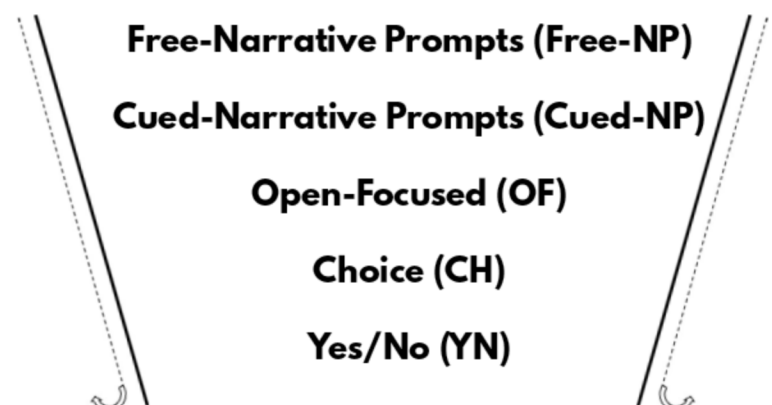
Advanced Interview Mapping (AIM) is based on the familiar “recycling funnel” conceptualization of the interview process. Questions are mapped on a funnel

diagram in sequential order by question number (Q#). More specific, less open, and less desirable questions are positioned lower on the funnel. The recycling feature is a visual reminder that interviewers should look for opportunities to recycle up to higher level, open-ended questions rather than finding themselves mired at the bottom of the funnel in a series of specific, close-ended questions.

AIM examines the use of five question types. Figure 1 illustrates the five question types in their ranked positions on the funnel diagram. The authors selected these question types because they represent the common range of question categories used in the Eliciting Account phase of forensic interviews. They also capture the range of relevant question types on two critical, overlapping dimensions: the degree of question specificity and the degree to which the interviewer rather than the child directs the memory search. Question types include:

Free-Narrative Prompts (Free-NP). Free-Narrative Prompts are the premium question type in the AIM typology. Free-NPs are open-ended requests for narrative information about an event or experience that the child previously mentioned (e.g., “Tell me everything you remember about the first time your stepbrother hurt your front privates.”) The Free-NP is unique among question types in that it offers the child an open invitation to provide a narrative description of any or all of the five elements of the target event: context; actions by each person present; verbal statements by each person; subjective responses of each person; and miscellaneous elements (e.g., use of pornography, presence of witnesses, occurrence of interruptions).

Figure 1. AIM Map



Free-NPs encourage the child to report the information the child considers to be salient and significant from free recall memory, without direction or cueing from the interviewer. As noted earlier, eliciting a detailed, free-narrative account of the child's experiences in the child's own words is a central objective across forensic interview protocols. Achieving this objective typically requires substantial reliance on free-narrative prompts. What a child reports from undirected free recall is typically the best remembered, most accurate information available to the child (Powell & Snow, 2007). With no interviewer interference in the memory search, the child may also be more likely to spontaneously report details unknown to the interviewer.

Eliciting a free-narrative account typically begins with a broad request for a detailed narrative, once a concerning target event has been identified. Examples of prototypical initial narrative prompts include:

“Start at the beginning and tell me everything that happened the day you stayed home from school because you were sick.”
“Tell me everything you remember about the time your mother spanked you for getting a bad report card.”

Powell and Snow (2007) have described three subtypes of free-narrative follow-ups that are useful for extending or expanding the initial free-narrative account. The first subtype includes open-ended breadth questions. These prompts encourage children to expand the list of activities or to report the next part of the event that occurred, without dictating what specific information is required. These prompts are also useful for encouraging the child to continue the narrative until they reach a clear end. Examples of open-ended breadth prompts include:

“What happened next?”
“What is the very next thing that happened after she yelled at you?”

The second subtype includes open-ended depth questions. These prompts involve a broad request for more detail or elaboration of an act or event that the

child has already reported in his/her free narrative. Examples include:

“You said he hit you with a belt. Tell me more about that.”
“You said he rubbed up against you in the pool. Tell me everything you remember about the time he rubbed against you in the pool.”

Note that these prompts are broad, giving the child substantial flexibility in the information he/she provides from memory.

The third subtype of free-narrative follow-up prompts includes minimal encouragers. These prompts involve repeating the child's last sentence or partial sentence to invite the child to continue his/her free narrative:

C: “Then he messed with my bottom.”
I: “Then he messed with your bottom.”

Cued-Narrative Prompts (Cued-NP). Cued-Narrative Prompts are open-ended narrative requests that involve some direction of the child's memory search. Cued-NPs are useful when the interviewer is seeking additional information about a specific component or element within the child's narrative account (e.g., “You said he showed you nasty movies. Tell me about the nasty movies.”) In contrast, Free-NPs broadly reference the child's narrative but give the child freedom to decide what additional information to supply (e.g., “You said he showed you nasty movies. Tell me more about that.”)

Table 1 provides three contrasting examples of Free- vs. Cued-NPs. In each example, the Free-NP offers the child the option of addressing all five event elements in his/her response, while the Cued-NP limits the child's focus to a single or small subset of event elements (e.g., “Tell me everything that happened.” vs. “Tell me everything he did.”)

While Free-NPs are the “premium” subtype, it is unlikely that a forensic interview would be composed completely of Free-NPs. Both subtypes of narrative prompts are valued tools in eliciting a detailed narrative account, and many children require questioning specificity in the form of Cued-NPs (or

Table 1. AIM Question Types

Question Type	Memory Type	Question Specificity	Examples
Free-Narrative Prompt (Free-NP)	Free Recall	Minimal	<ul style="list-style-type: none"> Start at the beginning and tell me everything that happened. You said he made you feel bad. Tell me more about that. You said he put his hand in your pajamas and rubbed your bottom. Tell me everything you remember about that.
Cued-Narrative Prompt (Cued-NP)	Free Recall	Mild	<ul style="list-style-type: none"> Start at the beginning and tell me everything he did. You said he made you feel bad. What do you mean, “he made you feel bad?” You said he put his hand in your pajamas and rubbed your bottom. Tell me all about him rubbing your bottom.
Open-Focused Question (OF)	Free Recall	Moderate	<ul style="list-style-type: none"> What is the first thing he did to you? How did he make you feel bad? Where on your bottom did he rub?
Choice Question (CH)	Recognition	High	<ul style="list-style-type: none"> Did that happen one time or more than one time? Were your shorts on or off or something else when that happened? Who spansks you the hardest: your dad or your stepdad?
Yes/No Question (Y/N)	Recognition	High	<ul style="list-style-type: none"> Did he want you to do something to him? Do you think your grandmother knew what was happening? Did somebody besides your brother ever break the rules about private parts?

even judicious Open-Focused questions) to facilitate memory search and retrieval.

Open-Focused questions (OF). Open-Focused questions are open-ended inquires that attempt to elicit information about specific aspects of the event previously described by child. They include who, where, when, how and most what questions. “Wh” questions are occasionally embedded in “Tell

me...” sentence constructs, but are still categorized as OF questions. Examples include “Tell me what he did.” and “Tell me how he hurt you.” Similarly, “wh” questions embedded in “I wonder...” sentence constructs are categorized as OF questions (e.g., “I wonder where your mother was when that happened.”)

As shown in Table 1, OF questions are scored as moderately specific in question type because they

direct the child's memory search to specific categories of information. As question specificity increases at the mid- to lower levels of the AIM diagram, so too the risk increases that children will feel pressure to respond, whether or not they are certain of the response.

A number of commentators recommend delaying "wh" questions until the end or at least late in the narrative account because premature introduction may undermine the narrative process (see review by Faller, 2007). Providing a sequential narrative may require significant effort on the child's part, and some children may require the support that selective OF questions offer. However, "wh" questions can serve as invitations to step out of the narrative mode and instead to rely on the interviewer to guide the memory search. "Wh" questions may also signal to the child that non-elaborative answers are acceptable in place of narrative responses. Moreover, as mentioned previously, interviewers tend to rely too heavily on OF phrasing to obtain information in an expedient manner.

"What" questions are a challenge to categorize. "What" questions designed to elicit short answers are generally scored as OF (e.g., "What did your stepdad spank you with?"). "What" questions designed to elicit longer answers, and particularly narrative responses, are typically categorized as either Free-or Cued-NPs. Examples of Free NPs include: "What happened next?" and "What else do you remember...?" as well as "Tell me what happened next" and "Tell me what else you remember." Each of these "what" questions function as non-specific, Free-NPs to extend the narrative. Another "what" exception includes "What do you mean?" questions that seek clarification/elaboration of a previous narrative statement by the child (e.g., "What do you mean, he dragged you from the bed?"). Because they limit the child's response options to a specific topic for elaboration, "What do you mean?" questions are scored as Cued-NPs.

Choice questions (CH). Choice questions are closed-ended questions that present a choice between a limited set of options. CH questions include an explicit or implied "or." CH questions have a specialized role to play in forensic interviews. They are most useful as follow-ups to salvage failed OF questions.

We have noted that OF questions direct the child's memory search to specific categories such as person, place, or subjective experience. Children sometimes decline to perform such memory searches because of limited search skills, attention or motivation. At other times, children lack the conceptual understanding or vocabulary to respond. A CH follow-up to a failed OF can provide an effective remedy to these limitations by partly directing the search process or by providing examples of optional response categories. An example:

- I: "How did you feel when you heard your stepdad say those things to your mother?" (OF)
C: "I don't know."
I: "Well, did you feel sad, mad, worried, disappointed, or some other feeling?" (CH)
C: "I felt kind of sad and disappointed because I thought he loved my mom."

A form of CH question that is sometimes overlooked involves the transformation of an open-ended OF question to a close-ended CH question by prematurely adding a list of choices (e.g., "How did that make you feel? Sad, mad, or some other feeling?"). As shown in Table 1, CH questions are rated as highly specific questions.

Yes/No Questions (YN). YN questions are close-ended questions that offer a yes/no choice. They typically present new information and ask the child to confirm or refute the information as true. By their nature, YN questions attempt to tightly focus the child's memory search. Table 1 ranks them as the most specific question of the five question types. Despite being classified with CH questions in the bottom tiers of the funnel diagram, YN questions serve a legitimate function in interviews for screening purposes (e.g., "Has anybody else besides your uncle hurt your pee-pee?") and for filling in gaps in the narrative (e.g., "I am confused about one thing. Did your sister ever see what he did?").

A highly recommended interview strategy is to recycle up the funnel following a "yes" or "yes" equivalent response (e.g., "sometimes," "maybe"), ideally to a "Tell me more about" narrative prompt. This is important in order to return the focus of the interview back to

eliciting a narrative account while restoring control of memory search processes to the child. Following a “yes” response with a subsequent NP can also serve as a “validity check” for the “yes” response.

I: “You said he tried to touch your pee-pee. Did he try to do anything else?” (YN)

C: “He tried to kiss it.”

I: “Tell me more about that.” (Free-NP)

It is important to note that children will sometimes provide a spontaneous and extensive elaboration to their “yes” or “no” response, rendering the recommended NP validity check for “yes” responses unnecessary. For example:

I: “Did he say anything about not telling?” (YN)

C: “Yes. He said it was our secret and we both would get in trouble if I told, so I never told until today.”

Leading and Suggestive Questions

The AIM system does not formally assess leading and suggestive questions. However, peer and self-review appraisals of interviewer performance should include them. It is important to make the distinction between questions that are “suggestive” and those that are “leading.” Definitions of leading and suggestive questions differ (Faller, 2007). We find the following distinction to be the most useful: Suggestive questions introduce new information without encouraging a particular response. For example, the question, “Did your mother tell you what to say?” introduces the notion that the mother may have told the child what to say, but the child can provide any response he/she chooses. Furthermore, even a “yes” response can be followed by a benign response such as, “She told me to tell the truth.” Leading questions strongly suggest that an event has occurred, and then encourage agreement. The encouragement may be direct in the form of a tag leading question (e.g., “Your mother told you what to say, didn’t she?”) or indirect through a presumptive question (e.g., “What did your mother tell you to say?” to child who has not reported any prompting by her mother).

It is also important to note that interviewers can appropriately use YN questions ranging from mildly

suggestive (“Did something happen to you?”) to moderately suggestive (“Did your uncle do something to you that you didn’t like?”) as screening questions within the forensic interview. Preplanning on exact wording based on the specific case history is highly recommended, and jurisdictions may differ on what question phrasing within a moderate range of suggestibility is allowed.

YN questions become increasingly suggestive and inappropriate as they become more specific and explicit in the details about substantive topics they introduce (e.g., “Did he want you to do something?” vs. “Did he make you rub his privates?”). YN questions can also become overly suggestive when used to test the interviewer’s theory about what occurred. This often involves posing a series of three or more YN questions in a row, with each “yes” response spawning another YN question. For example:

I: “Did he want you to do something?”

C: “Yes.”

I: “Did he want you to touch his private?”

C: “Yes.”

I: “Did he show you something on his phone to show you what to do?”

4-Step Narrative Rubric

Many forensic interviewers report that the most challenging and anxiety-provoking phase of the interview begins the moment the child makes a report of possible abuse. While the early phases of the interview (e.g., truth/lie, interview instructions, narrative practice) tend to be well-spelled out, many interviewers, especially novices, complain, “It feels like you are mostly on your own once the child discloses.”

The authors have developed a 4-Step Narrative Rubric to address such concerns. This rubric provides practical and easy-to-learn instructions specifically for the Eliciting Account phase of the interview. The 4-Step Rubric is designed to guide the interviewer in eliciting a rich, sequentially-ordered narrative while reducing interviewer uncertainty about question selection. The rubric also reflects good/best practice standards for use in assessing question strategies.

The 4-Step Rubric is best used to elicit accounts of

Table 2. 4-Step Narrative Rubric

1. Elicit Narrative. Use a broad Free-NP to elicit initial narrative (e.g., “Start at the beginning and tell me everything you remember about the time your cousin hurt your front private.”)
2. Push to the End. Use “What happened next?” Free-NPs to encourage extension of initial narrative to a clear ending (e.g., Interviewer: “What happened next?” Child: “Nothing, after that my cousin left.”)
3. Circle Back. Use Free- and Cued-NPs to circle back in sequential order to each key element of narrative for elaboration (e.g., “You said the first thing that happened was that your cousin came into your room without knocking. Tell me all about that.”)
4. Fill in the Gaps. Use OFs, CHs, and YNs to formulate more specific follow-up questions, as needed, to complete comprehensive account of event (e.g., “Did somebody else besides your little sister see what your cousin did?”)

single events, or accounts of specific isolated events if there are multiple incidents of abuse. However, the rubric can be adapted to obtaining script accounts if the child cannot isolate a specific event, simply by using script-based question phrasing (e.g., Start at the beginning and tell me everything that would usually happen...) (Free-NP). In short, the four steps include:

1. Elicit Narrative
2. Push to the End
3. Circle Back
4. Fill in the Gaps.

Table 2 describes the 4-Step Narrative Rubric in more detail, and Interview A Section II (below) models it.

Mapping Instructions

Overview. AIM practitioners typically map interviews from video or audio recordings or from written transcripts. With practice, practitioners can map most interviews from recordings with minimal repeat playback. The mapping process begins with the identification of one or more target events to be assessed during the Eliciting Account phase of the interview. Practitioners map each target event separately, from the first question or statement eliciting the initial account or description to the final question about the event. For each target event, the substantive questions the interviewer poses are numbered sequentially. Practitioners record each question number (Q#) on a funnel diagram in one of the five question categories. They do not map the child’s responses, but they do use the child’s verbal response to determine whether the Q# may require an

additional modifier (e.g., ‘/) for proper interpretation.

General Instructions

1. Various interview models may recommend different strategies to address multiple abuse events. Regardless of model used, the interviewer should identify whether the child is reporting a single event or multiple abusive events to avoid confusion and potential errors. Whether the child is reporting a single event or an isolated event among many, it is best to utilize AIM when a specific target event has been identified, and ideally labeled for future reference (e.g., “Let’s talk about the time it happened when your mom was in the hospital.”). For children who cannot isolate a specific event when multiple abuse incidents occurred, AIM can be adapted to script-based discussion of the target concern (e.g., “My uncle keeps touching my private parts when he watches me.”).
2. Once a target event (or target concern for script accounts) has been identified, begin mapping by scoring the initial eliciting question for the target event/concern as Q#1. The initial eliciting question is defined as the question, regardless of question type, that prompts the child to provide details (who, what, where) or to start the initial account of the target event/concern.
3. Number each question (Q#) in sequential order, starting with Q#1.
4. Categorize each question into one of the five question types and record the Q# for each question in the appropriate section within the

funnel diagram.

5. Do not get stuck in close calls between question types (e.g., Free-NP vs. Cued-NP). If the question type is unclear, categorize the question as the higher of the two likely choices and move on.
6. End the mapping with the last question asked specifically about the target event.
7. Use a separate funnel diagram to map any additional target events. Number the eliciting question for each target event as Q#1, unless line numbers from a written transcript are available and convenient to use.

Modifiers

1. For Free- or Cued-NPs: If the child fails to provide a relevant response of at least one sentence, place ‘/’ through the Q# of the NP to indicate an NP failure. Examples may include responses such as “I don’t know.” or “I don’t remember.” or “He just did it.”
2. For YN questions: If the child’s response is “yes” or its equivalent, put a circle around Q# to signal a “yes” response.

Advanced Modifiers

The following modifiers reflect advanced interview practice and can be added as reviewers begin to master basic AIM scoring:

1. For each target event, place the symbol “+” next to Q# of the eliciting question if it includes all three components of a three-part free-narrative request:
 - “Start at the beginning...” (a call for a sequential narrative)
 - “tell me everything...” (a call for a detailed narrative)
 - “that you remember / that happened...” (a call for a self-directed memory search).

If the interviewer pushes the initial descriptive account to a clear end using NPs, double underline the Q# of the last NP to signal the end of the initial account (e.g., Interviewer: “What happened next?” Child: “I fell asleep.”). Note that if the interviewer is following the 4-Step Narrative Rubric, this modifier signals the completion of Step 2, “Push to the End.”

Additional Instructions

1. Map all substantive questions about the specific target event. These include YN screening questions attempting to identify additional activities or elements within the same target event (e.g., “We have talked about your brother taking pictures of you when you were in the shower last Saturday night. Did he do anything else that night that made you feel uncomfortable?”).
2. Do not map screening questions attempting to isolate or identify different events, whether by the same or by a different perpetrator (e.g., “Did your brother try to take your picture while you were in the shower on a different day?”).
3. Do not map non-substantive utterances (e.g., “Are you thirsty?”) or verbal facilitators (e.g., “OK” and “Uh-huh.”).
4. Do not map questions or restatements of the child’s responses intended to check accuracy or understanding (e.g., “You said he grabbed you and hit you. Did I get that right?”)
5. Map only the last question, if the interviewer asks a series of questions without waiting for child’s response.
6. “Can you...?” is a common colloquialism added to questions that technically changes the root question, typically an NP, into a YN question. Ignore the “Can you” construct and score the root question unless child responds as a YN question.
7. Take note that the child’s elaboration of a “yes” response to a YN question may eliminate the need for a NP/OF follow up.

II. AIM Examples

We have provided two mapping examples. The examples involve the fictional case of 7-year-old twin brothers, Tom and Mike, who were likely sexually abused by an uncle on multiple camping trips. Tom was interviewed by Interviewer A; Mike was interviewed by Interviewer B. Each example includes a full AIM analysis comprised of three parts: Part One provides a transcript of the Eliciting Account phase of the interview. Part Two presents a completed AIM map. Part Three offers three approaches for scoring the AIM map to appraise interview quality.

Example: Tom / Interviewer A

Part one: Partial transcript.

Question / Response	QT	Comments
<p>I: "Tom, what did you come to talk with me about?"</p> <p>C: "My Uncle Ted. He used to be our favorite uncle, but not anymore. He started acting creepy whenever he takes us camping."</p>	--	Not mapped. Transition question to Eliciting Account phase.
<p>I: "What do you mean, 'acting creepy'?"</p> <p>C: "Well, whenever he takes me and my brother camping, he keeps trying to look at our privates."</p>	--	Not mapped. Attempt to isolate single target event.
<p>I: "Is there a time that your Uncle Ted was acting creepy that you remember the most?"</p> <p>C: "Well, the first time it happened was when Uncle Ted took us camping for our birthday. Me and Mike are twins so we have the same birthday. My uncle wanted to check us all over for ticks."</p>	--	Not mapped. Attempt to isolate single target event.
<p>1 I: "Start at the beginning and tell me everything you remember about the time Uncle Ted took you and Mike camping for your birthday and he wanted to check you all over for ticks."</p> <p>C: "It was Sunday afternoon and it was almost time to start packing our stuff to come home. Uncle Ted said he had to check us for ticks so we don't get Lyme Disease. We said ok because we didn't know what he meant."</p>	Free-NP	Eliciting question for first target event. Mapped as Q#1. Advanced Modifier: 3 part Free-NP request.
<p>2 I: "What happened then?"</p> <p>C: "He told us to go in the tent and take our clothes off."</p>	Free-NP	Free-NP follow up.
<p>3 I: "Then what happened?"</p> <p>C: "I don't remember very much."</p>	Free-NP	Free-NP follow up. Modifier: NP failure.
<p>4 I: "Tom, just tell me what you remember."</p> <p>C: "I don't like to talk about it."</p>	Free-NP	Free-NP follow up. Modifier: NP failure.
<p>5 I: "What did your uncle say about ticks?"</p> <p>C: "He said ticks hide in the bushes and jump on you when you walk by. Then, they suck your blood and give you really bad germs."</p>	OF	Resorting to more specific question after NP failures.
<p>6 I: "Did that scare you?"</p> <p>C: "It scared us a lot."</p>	YN	Modifier: "Yes" response

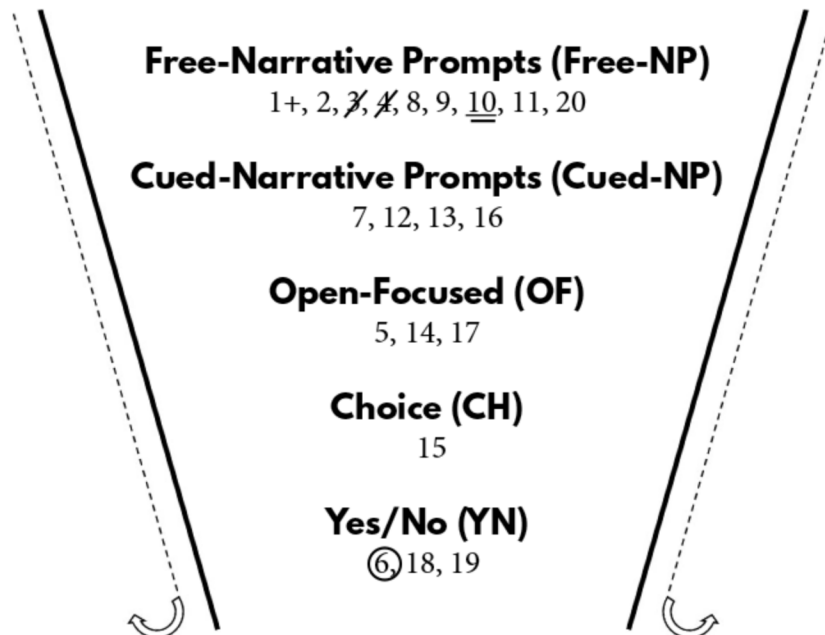
Example: Tom / Interviewer A continued

Question / Response	QT	Comments
<p>7 I: "What do you mean, 'it scared you a lot'?"</p> <p>C: "Mike started to cry. We took our clothes off real fast and we told Uncle Ted to hurry up and take the ticks off us."</p>	Cued-NP	Cued-NP follow up to "yes" response. NP "what" question exception seeking clarification of child's prior statement.
<p>8 I: "What happened after you and Mike took your clothes off real fast?"</p> <p>C: "He checked us all over with a flashlight. He made us get in different positions, like on our hands and knees, so he could check us better."</p>	Free-NP	Return to Free-NP.
<p>9 I: "What happened next?"</p> <p>C: "Uncle Ted found two ticks on me and a lot on Mike. He put lotion on us to kill the ticks."</p>	Free-NP	Free-NP follow up.
<p>10 I: "What happened next?"</p> <p>C: "Then it started raining so we had to pack the tent and leave early."</p>	Free-NP	Push to end of account. Advanced Modifier: End of initial account of event.
<p>11 I: "You said the first thing that happened was your uncle told you and Mike to go in the tent and take your clothes off. Tell me more about that."</p> <p>C: "We were kind of shy about taking our clothes off. But after Uncle Ted told us about ticks, we did everything he said."</p>	Free-NP	Circle back for elaboration/clarification. Broad focus on "that."
<p>12 I: "Then you said he checked you all over with a flashlight. Tell me more about him checking you all over."</p> <p>C: "Uncle Ted said ticks like to hide on your front private or in-between your butt cheeks. So mostly he looked there."</p>	Cued-NP	Circle back follow up. Narrow focus on Uncle Ted's actions.
<p>13 I: "Tell me all about your uncle finding two ticks on you."</p> <p>C: "He said he had to touch my front private so he could look at it better. That's when he saw two ticks biting me. I didn't see them, though. Then he rubbed lotion on my private to kill the ticks."</p>	Cued-NP	Circle back follow up. Narrow focus on uncle's actions.
<p>14 I: "How did it feel when he touched your private and applied lotion to it?"</p> <p>C: "I don't know."</p>	OF	Circle back/fill in gap follow up.
<p>15 I: "Did it hurt or feel uncomfortable? Or did it feel good or some other way?"</p> <p>C: "At first it felt uncomfortable because you're not supposed to let other people touch your private. Then it felt good and I kind of liked it."</p>	CH	Reverting to CH after OF failure.

Example: Tom / Interviewer A continued

Question / Response	QT	Comments
16 I: "Can you tell me more about your uncle finding a lot of ticks on Mike?" C: "They were mostly hiding in-between Mike's butt cheeks. Uncle Ted rubbed lotion all over Mike's butt to make sure none of them got away."	Cued-NP	Circle back follow up. "Can you" structure is ignored.
17 I: "What kind of lotion did your uncle use to kill the ticks?" C: "I don't remember, but it got spilled all over my sleeping bag."	OF	Fill-in-the-gap follow up.
18 I: "We've been talking about the time your uncle took you camping for your birthday. Did your uncle do anything else creepy on that trip that we haven't talked about?" C: Shakes head no.	YN	Specific question to fill in the gaps in account. Screening question for other concerning behavior during same target event.
19 I: "Did he want you to check him for ticks?" C: Shakes head no. "We had to leave when it started raining."	YN	Screening question for other concerning behavior during same target event.
20 I: "Earlier, you said that Uncle Ted used to be your favorite uncle but not anymore. Tell me more about that." C: "My parents said that what Uncle Ted did was inappropriate. They won't let us go camping with him anymore."	Free-NP	Fill-in-the-gap follow up.

Part two: AIM map, Interviewer A.



Part three: AIM appraisal, Interviewer A.

AIM offers three approaches for scoring the completed AIM map. These scoring alternatives vary in complexity and are designed for use in peer or self-review, either individually or in combination. The first and simplest approach involves an assessment of question selection using top, middle, and bottom tier rankings of question desirability. The second approach involves a visual inspection of the map to identify features of recommended practice. The third alternative is a formal scoring of the map to assess adherence to several, specific good/best practice standards. These three approaches are demonstrated below.

Tier counts.

- Top Tier (Free-NP + Cued-NP): 13
- Middle Tier (OF): 3
- Bottom Tier (CH + YN): 4

Comments: Interviewer A displayed strong skills in

Formal map scoring.

Good/Best Practice Standards	Success Level*	Comments
1) Interviewer uses Free-NP to request a free-narrative account early in sequence of questions (e.g., “Tell me everything...”).	2	Requested Free-NP at Q#1.
2) Interviewer relies heavily on NPs to elicit narrative account of target event (except in case of repeated NP failures).	2	11 of first 13 questions are NPs.
3) Interviewer retries NPs after initial NP failure.	2	Q#7 is an NP retry after Q# 3-4 NP failures.
4) Interviewer emphasizes use of Free-NPs over Cued-NPs early in questioning (i.e., Free-NPs emphasized in eliciting initial account).	2	7 of first 10 NPs are Free-NPs.
5) Interviewer delays use of specific questioning (OF, CH, & YN) until late in development of account (except in case of NP failure).	2	Q#5 is in response to NP failure on Q#4 #14 is first of series of OF and YN questions.
6) Interviewer emphasizes open questions (sum of Free- + Cued-NP + OF) over closed questions (sum of CH + YN).	2	13 NP + 3 OF = 16 1 CH + 3 YN = 4
7) Interviewer minimizes use of YNs to elicit account, with no YN string of 3 or more.	2	3 YNs out of 20 questions. No string of 3 YNs.

question selection with a clear emphasis on the use of Top Tier narrative prompts and minimal reliance on Middle and Bottom Tier questions.

Visual inspection of map.

- Top-heavy with 16 out of 20 questions mapped in the open-ended, upper half of map.
- Heavy emphasis on use of NPs, particularly when eliciting initial narratives of separate target events.
- Minor use of YNs, delayed until after initial narrative account.
- Recycled to NP after the only “yes” response.
- Use of more specific question types after two narrative failures.
- Retried narrative prompts after two initial narrative failures.

Comments: This interviewer exhibited strong skills in question selection to encourage a free narrative account with an impressive understanding of interviewer nuances (e.g., retrying NPs after NP failures).

Good/Best Practice Standards	Success Level*	Comments
8) Interviewer recycles to NP or OF after each “yes” response. (Unless spontaneously elaborated “yes” response.)	2	Recycled after the only “yes” response.
Advanced Practice Standards		
9) Interviewer uses three-part Free-NP to elicit initial account: <ul style="list-style-type: none"> • Start at beginning • Tell everything • That happened/That you remember 	2	Q#1 qualifies.
10) Interviewer uses NPs to push to clear end of initial narrative account of target event.	2	Clear end at Q#10.

***2 = Standard successfully met; 1 = Partially met; 0 = Not met; NA = Not applicable**

Comments. Interviewer A demonstrated impressive interview skills in this interview, successfully meeting 8 of 8 Good/Best Practice Standards and 2 of 2 Advanced Practice Standards. The interviewer identified a specific target event and followed the 4-Step Narrative Rubric. The interviewer was rewarded with a rich narrative that included a number of revelations about the subjective experiences of the child and his brother, enhancing victim credibility.

There are two minor points of constructive feedback for Interviewer A. First, Q#6 might have been better posed as an OF question (“How did that make you feel?”) rather than a YN question (“Did that make you scared?”). Also, in Q#14, the interviewer erred in substituting the phrase “applied lotion to” for the child’s phrase, “rubbed lotion on.”

Example: Mike / Interviewer B

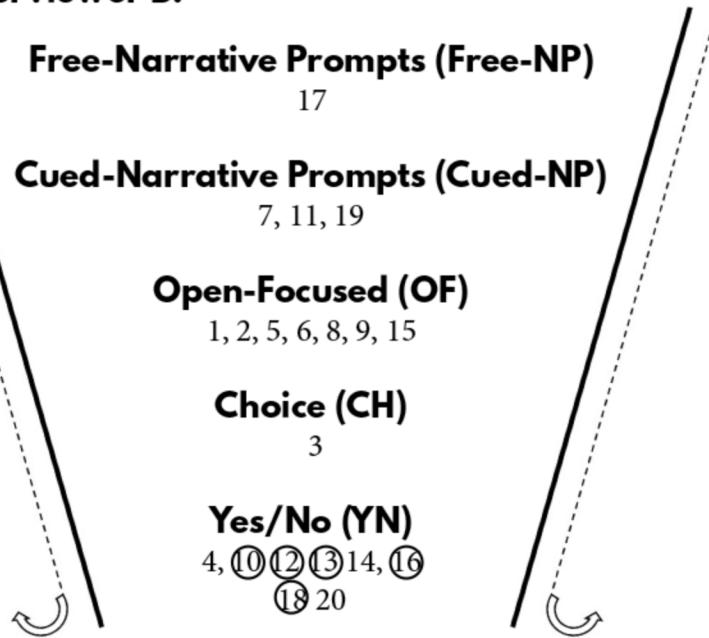
Part one: Partial transcript.

Question / Response	QT	Comments
I: “Who brought you to see me today?” C: “My mom and dad.”	--	Not mapped.
I: “How come they brought you to see me?” C: “Because my Uncle Ted did something.”	--	Not mapped.
1 I: “What did your uncle do?” C: “Whenever he took us camping, he would always check us for ticks and he did things he wasn’t supposed to do.”	OF	Initial eliciting question for first target event. Mapped as Q#1. Implies several concerning events.

Question / Response	QT	Comments
2 I: "Who did Uncle Ted do things to?" C: "Me and my brother, Tom."	OF	"Wh" question
3 I: "Where did he take you camping? Did you have a favorite place to go? Were you in the mountains, or at the beach, or at a lake somewhere?" C: "At Lake Lure. We went there a lot."	CH	Three questions asked (i.e., OF, YN, CH). Last question is coded.
4 I: "Did anyone else go camping with you?" C: "No, it was just me and my brother and Uncle Ted."	YN	"No" response.
5 I: "Tell me what your Uncle Ted did that he wasn't supposed to." C: "He told me and my brother to go in the tent and take our clothes off."	OF	OF disguised as NP. Focused on "what" of uncle's behavior (i.e., "What did your Uncle Ted do that he wasn't supposed to?")
6 I: "How come he wanted you to take your clothes off?" C: "Cause he said he needed to check us for ticks before we came home."	OF	"Why" question phrased as "How come?"
7 I: "Tell me everything he did after your clothes were off." C: "He checked us for ticks."	Cued-NP	Cued-NP follow up. Narrowly-focused request about "what he did"
8 I: "How did he do that?" C: "By looking at us with a flashlight."	OF	Specific OF focused on uncle's behavior.
9 I: "Where on your body did he check you?" C: "Everywhere."	OF	"Wh" question.
10 I: "Did he check your privates, too?" C: "Yes."	YN	Modifier: "Yes" response.
11 I: "Tell me everything he did when he checked your privates." C: "He made us stand in front of him without our clothes on. He looked at our privates with a flashlight."	Cued-NP	Cued-NP follow up. Narrow focus on uncle's actions.
12 I: "Did anything happen to your bottom?" C: Nods head "yes." "He said ticks like to hide there."	YN	Modifier: "Yes" response.

Question / Response	QT	Comments
13 I: "Did he make you bend over to check your bottom?" C: "I didn't want to but we had to."	YN	Modifier: "Yes" response.
14 I: "Did he try to put something in your bottom?" C: "No, he just checked it with a flashlight."	YN	String of 3 YNs possibly testing a theory rather than eliciting account in child's own words.
15 I: "How did it make you feel?" C: "I didn't like it. I was kind of scared."	OF	Assessing emotional response.
16 I: "Did anything else happen?" C: "We had to check him for ticks."	YN	Screening question. Modifier: "Yes" response.
17 I: "You said you had to check him for ticks. Tell me about that." C: "We checked him with a light, I mean his flashlight."	Free-NP	Free-NP follow up to "yes" response. Broad focus on "that."
(No Q#) I: "You checked him with his flashlight?" C: "Yes."		Not mapped. Restatement of child to check understanding.
18 I: "Did Uncle Ted want you to check his privates, too?" C: Nods head "yes."	YN	Modifier: "Yes" response.
19 I: "Tell me all about you and Tom checking Uncle Ted's privates for ticks." C: "We checked him for ticks just like he checked us."	Cued-NP	Cued-NP follow up to "yes" response. Narrow focus on actions of two boys.
20 I: "We have been talking about the time Uncle Ted took you and your brother camping at Lake Lure. Did he do anything else on that camping trip that he wasn't supposed to do?" C: "No."	YN	Screening question for other concerning actions during same target event.

Part two: AIM map, Interviewer B.



Part three: AIM appraisal, Interviewer B.

Examples of the three approaches for scoring the AIM map are provided below.

Tier counts.

- Top Tier (Free-NP + Cued-NP): 4
- Middle Tier (OF): 7
- Bottom Tier (CH + YN): 9

Comments: This interviewer’s heavy emphasis on Bottom Tier compared to Top Tier questions is problematic. On the positive side, open questions (Top + Middle Tier) did outnumber closed questions (Bottom Tier).

Visual inspection of map.

- Heavy emphasis on OF over NP.
- Heavy use of YNs.
- Very limited use of NPs, despite no occurrence of failed NPs to suggest child was limited in narrative ability.
- Some recycling of OF after 3 to 5 “yes” responses, though recycling to NPs would have likely elicited more information.

Comments: Interviewer B did not demonstrate the narrative interview skills required to elicit a detailed free-narrative account. The interviewer relied too heavily on OF and YN questions at the expense of NPs.

Good/Best Practice Standards	Success Level*	Comments
1) Interviewer uses Free-NP to request a free narrative account early in sequence of questions (e.g., “Tell me everything...”).	0	No NP until Q#7.
2) Interviewer relies heavily on NPs to elicit narrative account of target event (except in case of repeated NP failures).	0	OFs primarily used to elicit account despite no indication of NP failure.
3) Interviewer retries NPs after initial NP failure.	NA	No failed NPs noted.

Good/Best Practice Standards	Success Level*	Comments
4) Interviewer emphasizes use of Free-NPs over Cued-NPs early in questioning (i.e., Free-NPs emphasized in eliciting initial account).	0	Only 1 Free-NP out of 4 NPs.
5) Interviewer delays use of specific questioning (OF, CH, & YN) until late in development of account (except in case of NP failure).	0	Emphasis on OF and YN beginning with Q#1.
6) Interviewer emphasizes open questions (sum of Free- + Cued-NP + OF) over closed questions (sum of CH + YN).	1	4 NPs + 7 OFs = 11 1 CH + 8 YNs = 9
7) Interviewer minimizes use of YNs to elicit account, with no YN string of 3 or more.	0	Twice number of YNs as NPs (8 YNs, 4 NPs). 1 string of 3 YNs (Q#12-Q#14).
8) Interviewer recycles to NP or OF after each “yes” response. (Unless spontaneously elaborated “yes” response.)	1	Recycled to OF or NP after 3 of 5 “yes” responses (Q#10, #16, #18).
Advanced Practice Standards		
9) Interviewer uses three-part Free-NP to elicit initial account: <ul style="list-style-type: none">• Start at beginning• Tell everything• That happened/That you remember	0	Standard not met.
10) Interviewer uses NPs to push to clear end of initial narrative account of target event.	0	Standard not met.

Comments. Interviewer B did not successfully meet any of seven applicable good/best practice standards for eliciting a free-narrative account of the child’s experiences. While the child did provide significant amounts of information, AIM clearly shows the heavy reliance of OF and YN questions, in which the interviewer rather than the child directs the memory search. This may sometimes occur with new interviewers unfamiliar or inexperienced in obtaining narrative accounts, or even with more experienced interviewers who seek information from the child to fulfill their specific professional role.

Interview B highlights a common error in the authors’ training and peer review experience, in which the failure to elicit an initial narrative account through NPs cascades into the interviewer becoming “stuck” in OF and YN questioning. The interviewer’s heavy use of OFs and YNs limits the child’s memory search and response, resulting in the interviewer struggling to obtain a complete account. As a clear example, the interviewer starts to test hypotheses in the middle of the interview, marked by string of YN questions (Q#12-Q#14).

Adding the advanced practice standards to our analysis provides additional samples of the interviewer’s failure to use narrative interview strategies with a child who was likely capable of detailed narrative responses. Examples include failure to use a Free-NP, let alone a three-part Free-NP, to elicit an initial sequential account, and no attempt to use NPs to push to a clear end in the initial narrative account.

The interviewer also failed to isolate and label a single target event from the likely multitude of abusive events that occurred. As a result, the accounts of the two brothers appear contradictory about whether Uncle Ted had the boys check him for ticks, when they were likely describing different camping events.

Feedback for this interviewer may include several steps to return to best practices. The 4-Step Narrative Rubric outlined in Table 2 would solve multiple issues. The Narrative Rubric encourages the interviewer to obtain a full initial narrative through Free NPs, and then “circle back” using NP or limited OF. This simple step would likely delay and limit the need for multiple OF and YN questions, and would likely elicit critical information and corroborative details not otherwise known.

III. Why Take AIM?

Good training does not guarantee good interviewing. Without ongoing supervision and individualized feedback, many interviewers revert to bad habits over time, including overuse of specific and closed questioning (Lamb, Sternberg, Orbach, Esplin, & Mitchell, 2002). To prevent interviewer drift, supervision and feedback must be accurate, specific, and objective, as well as frequent enough to meet the needs of the individual interviewer (Cordisco Steele & National Children's Advocacy Center, 2018).

For many child forensic interviewers, supervision and feedback take the form of peer review with other forensic interviewers. Hypothetically, peer review provides a highly effective method for providing supportive and targeted feedback to interviewers. In reality, however, the peer review model has a number of inherent limitations that undercut its effectiveness in ensuring good practice and in preventing interviewer drift.

First, the accuracy, specificity, and objectivity of the feedback provided in peer review is dependent on the skill level of group members. Second, without explicit, agreed-upon criteria for making appraisals of interview quality, peer feedback is often too subjective or nonspecific to be helpful. Third, group dynamics or interpersonal relationships that deter group members from either giving or receiving constructive criticism may undermine the accuracy and objectivity of feedback. Fourth, time limitations may preclude individual group members from receiving the specific feedback and support they need. In its current form, therefore, it is likely that peer review often fails to deliver feedback that is accurate, specific, and objective.

Structured Assessment for Peer Review

The authors offer AIM as a remedy to limitations in current peer review practice. AIM provides a structured assessment for highlighting the strengths and weaknesses in questioning strategies. AIM also provides explicitly defined criteria for appraising interviewer performance based upon good/best practice standards (Newlin et al., 2015; Faller, 2007; Powell & Snow, 2007). As a result, AIM substantially increases the likelihood that peer review feedback will be accu-

rate, specific, and objective.

In addition, as a system for coding interviewer behavior, AIM is unique in emphasizing both the sequence of questions as well as counts of question types. This tracking of question sequencing permits a deeper examination of the interviewer's specific question choices. For example, at what point in the Eliciting Account phase did the interviewer decide to dip down the funnel into more specific questions? Did the decision result from one or more failed NPs? Or the end of a narrative account? Such analyses of question choices done supportively should accelerate skill development.

Resource for Self-Review

AIM may offer the added benefit of mitigating the cost and inconvenience of the oversight needed to prevent interviewer drift. The traditional peer review model of quarterly or even monthly review meetings likely provides too little monitoring of individual interviewers to be effective in addressing individual needs. Stolzenberg and Lyon (2015) describe a peer review model augmented with self-evaluation that may offer some guidance. To be productive, self-evaluation requires a structured tool like AIM to provide objective standards for the appraisal process. With practice, interviewers and reviewers can map the Eliciting Account phase of most interviews within an hour or so from video or audio recordings, with minimal repeat playback. As a result, weekly self-assessment using AIM mapping, ideally supplemented by independent mapping by a supervisor or peer interviewer, might be a realistic, cost-effective option for many interviewers.

We would like to highlight AIM's design flexibility as another notable feature. With relatively minor adjustments or additions to the mapping instructions, modifiers, or formal scoring criteria, AIM can accommodate virtually every child forensic interview protocol. For example, if a given interview protocol (or peer review group) emphasizes tracking the use of questions about the child's emotional state, one can add a subscript such as the letter 'e' as a modifier to the Q# of all such questions. Similarly, AIM can be adjusted to reflect new research or other advances in practice, as needed.

In conclusion, the authors offer AIM as a practical,

easy-to-learn tool for self-assessment and peer review. The authors posit that AIM improves current self- and peer review practice by providing standardized methodology irrespective of interview protocols. It provides a clear visual analysis of the extent to which the interviewer remains faithful to best practice. We hope that AIM can be used to improve the quality of child forensic interviews in multiple arenas and settings, which in turn can improve outcomes for children and their families.

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The authors have made the AIM Scoring Form available for readers to download and use. [Use this link to download](#) and print your own AIM tables and maps.

References

Taking AIM: Advanced Interview Mapping for Child Forensic Interviewers

- Cordisco Steele, L., & National Children's Advocacy Center. (2018). Continuous skill building for forensic interviewers: A research-to-practice summary. Huntsville, AL: National Children's Advocacy Center. Retrieved from <https://calio.org/resources/research-briefs-research-to-practice/research-to-practice/>
- Faller, K. (2007). *Interviewing children about sexual abuse*. New York: Oxford.
- Lamb, M. E. (2016). Difficulties translating research on forensic interview practices to practitioners. *American Psychologist, 71*, 710–718.
- Lamb, M. E., Hershkowitz, I., Sternberg, K., Boat, B., & Everson, M. (1996). Investigative interviews of alleged sexual abuse victims with and without anatomical dolls. *Child Abuse and Neglect, 20*, 1251–1259.
- Lamb, M. E., Orbach, Y., Hershkowitz, I., Horowitz, D., & Abbott, C. (2007). Does the type of prompt affect the accuracy of information provided by alleged victims of abuse in forensic interviews? *Applied Cognitive Psychology, 21*, 1117–1130.
- Lamb, M. E., Sternberg, K. J., Orbach, Y., Esplin, P. W., & Mitchell, S. (2002). Is ongoing feedback necessary to maintain the quality of investigative interviews with allegedly abused children? *Applied Developmental Science, 6*, 35–41, doi:10.1207/S1532480XADS0601_04.
- Newlin, C., Cordisco Steele, L., Chamberlin, A., Anderson, J., Kenniston, J., Russell, A., Stewart, H., & Vaughan-Eden, V. (2015). *Child forensic interviewing: Best practices*. Office of Juvenile Justice and Delinquency Prevention, US Department of Justice. Retrieved from <https://www.ojjdp.gov/pubs/248749.pdf>
- Pear, T., & Wyath, S. (1914). The testimony of normal and mentally defective children. *British Journal of Psychology, 3*, 388–419.
- Poole, D. A., & Lamb, M. E. (1998). *Investigative interviews of children: A guide for helping Professionals*. Washington, D.C.: American Psychological Association.
- Powell, M., & Snow, P. (2007). Guide to questioning children during the free-narrative phase of an investigative interview. *Australian Psychologist, 42*, 57–65.

References

- Smith, R., Powell, M. B., & Limm, J. (2009). The relationship between job status, interviewing experience, gender, and police officers' adherence to open-ended questions. *Legal and Criminological Psychology, 14*, 51–63.
- Stolzenberg, S. N., & Lyon, T. D. (2015). Repeated self- and peer review leads to continuous improvement in child interviewing performance. *Journal of Forensic Social Work, 5*, 20–28.
- Walker, A.G. (2013). *Handbook on Questioning Children: A Linguistic Perspective 3rd Edition*. Washington, DC: ABA Center on Children and the Law.

