

How accurately do police officers identify the types of questions used in investigative interviews with child victims?*

Misun Yi[†]

Dongyang University

Michael E. Lamb

University of Cambridge

The present study examined the accuracy with which police officers identified the types of questions asked during investigative interviews with alleged child abuse victims. Factors affecting their accuracy were also explored. One hundred and twenty Korean police officers were asked to classify 50 questions into one of five categories (invitations, facilitators, directives, option-posing and suggestive prompts). The overall accuracy rate was 65.6%; invitations were correctly classified most often (85.5%) whereas suggestive questions were least accurately identified (42.3%). Police officers tended to overestimate their use of invitations by incorrectly identifying directive questions as invitations. Suggestive questions were mistakenly identified as option-posing questions (22.2%), directive questions (15.1%), and even invitations (5.6%). Being trained to use the NICHD Protocol was the only factor significantly predicting higher accuracy.

Key words : Open-ended question, identify the types of question, the NICHD Protocol, Korean police officers, Investigative interviews, Child sexual abuse

* 이 논문은 제1저자 이미선의 박사학위 논문 일부를 발췌 수정한 것임

† 교신저자 : 이미선, 동양대학교 경찰행정학과 조교수, 경북 영주시 풍기읍 동양대학교 다산관 5205호

E-mail: msy23@dyu.ac.kr.

Conducting investigative interviews with allegedly abused child victims is challenging. Because perpetrators of child sexual abuse very seldom create injuries or confess and the incidents themselves are rarely witnessed by other people, the testimony of alleged child victims is often the only possible source of information about the alleged incidents. Although children of all ages are able to describe what happened to them (see Goodman & Schwartz-Kenny, 1992; Lamb, Hershkowitz, Orbach, & Esplin, 2008; Lamb, Orbach, Warren, Esplin, & Hershkowitz, 2007 for reviews), the accuracy and informativeness of children's reports is profoundly affected by the interviewers' behaviors and the techniques used to elicit information, including the types of questions or prompts that interviewer ask.

Types of questions

Questioning type is one of the strongest predictors of the accuracy and informativeness of the accounts provided by child informants, including victim/witnesses. Open-ended prompts, defined as input-free utterances requesting free-recall responses (e. g. "Tell me everything about...") yield responses that are longer and more detailed than responses to directive, option-posing or suggestive questions (Davies, Westcott, & Horan, 2000; Dent & Stephenson, 1979; Hershkowitz, 2001; Lamb, Orbach, Sternberg, Esplin et al., 2002; Orbach et al., 2000;

Sternberg et al., 1997). In the forensic setting, responses to recall prompts are approximately three to five times more informative than responses to focused prompts (e. g., Lamb, Hershkowitz, Sternberg, Esplin, et al., 2006; Lamb, Orbach, Sternberg, Esplin et al., 2002; Sternberg et al., 1996; Sternberg, Lamb, Davies, & Westcott, 2001).

Moreover, although the accuracy of responses to different types of questions is difficult to explore in the field where it is not known what actually happened, some researchers have confirmed that responses to open-ended questions are more likely to be accurate than responses to focused questions (Lamb, Orbach, Hershkowitz, Horowitz, & Abbott, 2007; Lamb & Fauchier, 2000; Orbach & Lamb, 2001). In addition, because responses to input-free open-ended questions are not contaminated by information introduced by interviewers, they are also considered more reliable in court (Milne & Bull, 2002). Especially because children under 6 years of age are more vulnerable than older children to the possible risks associated with the use of focused and suggestive questions (Lamb, Hershkowitz, Sternberg, Esplin et al., 2006; Sternberg et al., 1996; Sternberg, Lamb, Davies, & Westcott, 2001), it is strongly recommended that interviewers should use open-ended questions whenever possible (e. g., Anderson et al., 2010; APSAC, 1990; Fisher & Geiselman, 1992; Home Office, 1992, 2007; Lamb, Sternberg, Orbach, Hershkowitz, & Esplin, 1999; Lamb, Orbach,

Hershkowitz, Esplin, & Horowitz, 2007; Saywitz & Camparo, 2014; Saywitz, Lyon & Goodman, 2011).

Suggestive questions are particularly problematic. These questions are stated in such a way that the interviewer strongly suggests what response is expected (e. g., “He forced you to do that, didn’t he?”) or assume information that has not been provided by the child (Lamb, Orbach, Sternberg, Hershkowitz & Horowitz, 2000). Since suggestive questions can decrease the accuracy of children’s accounts or even create false memories when investigators use many suggestive questions during their interviews (Cassel, Roebbers, & Bjorklund, 1996; Lamb & Fauchier, 2001), the reliability of the children’s statements is likely to be diminished (Milne & Bull, 2002).

Option-posing prompts, which only require yes or no answers or the selection among options provided by the interviewer, also impair the accuracy of children’s accounts because children may guess or thoughtlessly choose one of the options provided even when they do not understand the question (Lamb & Fauchier, 2001; Milne & Bull, 2002). In addition, children contradict themselves at a higher rate when option-posing questions are repeated (Bruck, Ceci & Hembrooke, 1998) while repeated exposure to yes/no question reduces children’s overall accuracy (Poole & White, 1991). Therefore, forced-choice questions should be avoided because of the risks they pose.

Questions used during the investigative interview

Given the benefits of using open-ended questions and the risks associated with the use of focused questions, most professional and expert guidelines have strongly recommended that forensic interviewers should ask open-ended questions that elicit uncontaminated information from the memories of alleged abuse victims (e. g., Anderson et al., 2010; APSAC, 1990; Fisher & Geiselman, 1992; Home Office, 1992, 2007; Lamb, et al, 2007; Saywitz & Camparo, 2014; Saywitz, et al., 2011). However, in many countries, police officers have underutilized the recommended question types in their investigative interviews with child witnesses.

Lamb and his colleagues (2008) examined the results of field studies conducted in four different countries: the USA, the UK, Sweden, and Israel. The results indicated that more than 80% of the questions asked were forced-choice or suggestive questions that could impair the accuracy and completeness of children’s statements. Specifically, Davies and Wilson (1997) reported that 28% of the British investigative interviewers they studied did not use open-ended questions at all when questioning alleged victims and that 48% of them allowed less than 2 minutes for children to answer open-ended questions. Investigative interviewers in England and Wales also relied heavily on option-posing prompts and seldom

used open-ended utterances to elicit information from children; almost 40% of the information obtained was elicited using option-posing questions (Sternberg, Lamb, Orbach, et al., 2001).

Cederborg et al. (2000) also found that Swedish investigators collected 53% of the information obtained using suggestive or misleading questions, with only 6% elicited using open-ended questions. In addition, improper questions continue to be asked even when investigators had been trained intensively (Aldridge & Cameron, 1999) and believed that they are adhering to investigative guidelines (Lamb et al., 2008; Powell et al., 2009; Yi, Lamb & Jo, 2015).

The NICHD Protocol

These findings prompted researchers at the U. S. National Institute of Child Health and Human Development (NICHD) to develop a structured investigative protocol, designed to translate academic findings into usable guidelines and to maximize the amount of information elicited from free recall memory (Lamb et al., 2008; Orbach et al., 2000). It covers all phases of the investigative interview including the introductory phase (e. g., introducing the participants and purpose of the interview and explaining the ground rules), the pre-substantive phase (e. g., rapport-building and episodic memory training), the substantive phase (exploring the possible events under

investigation), a break, and the closure phase.

During the substantive phase, the free recall phase begins with the first substantive invitation(e. g. “Tell me everything that happened from the beginning to the end as best you can remember.”). Interviewers continue to ask “Then what happened?” or “Tell me more about that” as often as needed until the child communicates that he/she provided a complete description of the alleged incident. If some central details of the allegation are still missing or unclear after exhausting the open-ended questions, the interviewer may need to ask direct questions.

Investigators used dramatically more of the recommended types of questions after being trained to use the NICHD Protocol (Lamb, Orbach, Sternberg, Aldridge, Pearson, Stewart, Esplin & Bowler, 2009; Sternberg, Lamb, Orbach, et al., 2001; Orbach et al., 2000; Cyr & Lamb, 2009), especially when their training included sessions in which they received feedback on their interviews (Lamb, Sternberg et al., 2002; Lamb, Sternberg, Orbach, Hershkowitz et al., 2002; Sternberg, Lamb, Orbach et al., 2001).

Police officers’ actual and perceived interview practice

Nevertheless, some interviewers perceive their interviews with alleged victims quite positively. La Rooy, Lamb and Memon (2011), for example,

asked 91 Scottish police officers to describe their interviews with alleged child victims. Most indicated that they always or almost always used specific wh- questions and fewer than half said that they always or almost always used open prompts when interviewing suspected victims. Furthermore, nearly all reported that they never or rarely asked leading or suggestive questions. In another study, Yi and her colleagues (2015) directly compared police officers' perceived and actual interview practices. In the study, Korean police officers were solicited for self evaluations of their interviews as well as assessments of their effectiveness and degree of adherence to the recommended interview guidance. Transcripts of actual interviews conducted by them were also analyzed. Police officers answered that they used invitation and directive questions the most and suggestive questions the least during their interviews, however, examination of their actual practices showed that the officers relied excessively on option-posing and directive questions, and asked only very few invitation-type questions during the substantive part of the interviews. One possible explanation for the discrepancy between actual and self-reported interviewing behavior might be that police officers do not understand the different types of questions very well, although this possibility has not been explored yet.

Purpose of the study

Without a doubt, an appropriate understanding of question type is necessary to ensure the integrity of the process of forensic interviewing of allegedly abused child victims. Because children's answers may be affected by the ways in which the questions have been asked, using appropriate types of questions, such as invitation and directive question is crucial to eliciting accurate and informative accounts from seemingly victimized children. It is true that an accurate understanding of question type would have to be acquired in order for an interviewer to use the recommended types of questions during interviews. Moreover, an accurate understanding of the types of questions is critical not only for the police officers who directly interview allegedly abused children, but also for all investigators involved in child sexual abuse cases. In many cases, a child's statement is the only evidence to prove what really happened during the incident. Sometimes, police officers investigating child sexual abuse cases have to make a judgement as to the credibility of a child's statements and determine the possibility of contamination of those statements for purpose of further investigation. Therefore, understanding what types of questions an interviewer should ask of an allegedly abused child victims is important in determining the possibility of contamination caused by the use of inappropriate interview techniques on the part of police

officers.

Although many studies have been focused on what types of questions investigative interviewers used during the child interviews, the questions of how accurately police officers could identify the types of questions used during such interviews has not been fully explored. In this study, we thus asked how well Korean police officers working on child sexual abuse cases actually recognized the different types of questions that should be asked and what types of questions they found most difficult to identify. Additionally, factors affecting an accurate understanding of question types are explored in order to provide suggestions as to how to improve the actual practices of police officers.

Therefore, the purposes of this study were: (1) to explore how well police officers could classify the types of questions asked in forensic interviews: and (2) to examine the factors affecting accuracy rates.

Method

Participants

Korean police officers attending training courses on Sexual Crime Investigations were asked to participate in the study. Such courses are annual workshops provided by the Korean Police Investigation Academy (KPIA), a

government institution designed to educate and train police officers. One hundred and twenty of 149 trainee police officers from all over the country agreed to participate in the research. Thirty-four (28.3%) were male and 86 (71.7%) were female. The participants ranged in age from 24 to 57 years, with a mean age of 35.06 ($SD = 7.04$). Of the 120 participants, rank-and-file police officers and senior police officers comprised 25.8% ($n = 31$); assistant inspectors, 32.5% ($n = 39$); and inspectors, 15.8% ($n = 19$). In regards to their official assignments, 57.5% ($n = 69$) worked in the Woman and Child division, 10.8% ($n = 13$) worked in the major crime division, and 31.7% ($n = 38$) worked in other police departments.

Procedures

The two-day workshops were designed to provide the police officers with training on use of the NICHD Protocol. At the beginning of the training, police officers were asked to complete a short demographic questionnaire (age, gender, working experience, length of service previous training). The workshop started with descriptions of psychological research on child development and its implications for investigative interviewing. Developmental factors associated with variations in children's abilities to describe their experiences and an introduction to the empirical literature providing a conceptual framework for understanding the NICHD

Protocol were also described in the first 3 hours.

For the purpose of the test, a written transcript of a forensic interview with an alleged child victim was distributed after description to the types of questions that could be asked in investigative interviews. The transcripts detailed an incident involving a nine-year-old girl sexually abused by a suspect encountered on her way home. Approximately 140 questions were asked to the interview, and the test focused on 50 of those questions. Participants were given the full transcript and an answer sheet and were asked to categorize each question into one of five classes: Invitation, facilitator, directive, option-posing, and suggestive. No time limit to complete the test but trainees were asked to complete the test on their own without discussion. Abbreviated definitions of the type of questions remained on the screen while they were answering so they could check definitions when necessary.

After the answer sheets had been collected, the instructor reviewed the types of questions asked and discussed possible alternatives to the questions that had been asked. The importance of using appropriate types of questions was explained using the results of relevant research, providing examples of proper and improper use, and ensuring practice analysing question types. The police officers then practiced using the appropriate types of questions in mock interviews with their peers. Some officers were given the opportunity to conduct interviews in front of

their peers, with feedback given by the instructor and other trainees. The training program continued to focus on the conceptual and empirical foundations for the each phase of the Protocol and ended with the opportunity to conduct a mock interview with one of their peers (see Yi, Jo & Lamb, 2017).

Analysis

In order to evaluate how accurately the police officers' identified each type of question, the transcript was firstly reviewed by the first author, who classified each of the questions using the five categories described above using the coding systems and definitions published by Lamb et al. (2007). The first author is a native Korean speaker who has conducted related research and has been trained to assess question types in both Korean and English transcripts. The target transcript was then translated into English by a bilingual researcher. Then the English questions were classified by an native English-speaker who had experience using the coding system. Questions that had the disagreement between the two were item 1, 32 and 41, with inter-rater reliability of .92 $p < .001$. They were reviewed and adjudicated by the second author. The questions and their categorization are presented in Table 1.

Table 1. Assessing knowledge of question types: The target questions and their correct classification

Item	Questions	Types	Reference
1	Why did you come here?	Invitation	It is open rather than limited
2	Ah okay, then did some middle-aged man or adult touch your body?	Option-posing	
3	Tell auntie what happened, please.	Invitation	
4	Tell me about it. Who touched you like that?	Directive	
5	Mm-hmm, (he) was going to buy (you) something yummy.	Facilitator	Following the child saying, "He called out and told me to come, saying that (he) was going to buy (me) something yummy."
6	Um, do you remember the date by any chance?	Directive	
7	Monday or Tuesday?	Option-posing	
8	Around what time was it, then?	Directive	
9	About 6 pm?	Option-posing	Followed by the child saying, "About 6 o'clock."
10	Where?	Directive	
11	Where did he follow you to, MS (name of the child)?	Directive	
12	Ah, the apartment that you live in?	Suggestive	After the child said, "Halfway through the first floor of the apartment."
13	Ok, so you met him in front of either building 103 or 104, and he said he would buy you something yummy and asked you to go with him?	Option-posing	
14	Which traffic light?	Directive	
15	Can you tell me more about the traffic light?	Invitation	
16	What did the man say to you at the traffic light, after he kept following you?	Suggestive	Followed by the child saying, "At the traffic light in front of the C nursery school."
17	Um, so can you tell me what happened after he followed (you)?	Invitation	
18	At that time, did you take the stairs or the lift?	Option-posing	
19	You were going up the stairs and what did the man do?	Directive	
20	Where, at which floor did he touch your body?	Directive	
21	Are you talking about the stairs between the second floor and the first floor?	Option-posing	
22	The man was going up from the first to the second floors, and then what happened afterwards?	Invitation	
23	Un, touched the chest and ...	Facilitator	After the child said, "Yes, (he) touched here, at the chest (placing hand on chest)."
24	Then what happened?	Invitation	
25	He kissed you as well? Here on the lips?	Suggestive	After the child said, "Um... kiss."

Table 1. Assessing knowledge of question types: The target questions and their correct classification (continue)

Item	Questions	Types	Reference
26	Kissed like this? When he kissed, did he give you a peck on the lips like this?	Suggestive	
27	Ah did you? Then the kiss didn't touch your lips?	Suggestive	
28	Can you please tell me about that in more detail?	Invitation	
29	So then, tell me what happened afterwards?	Invitation	
30	You said that he touched a lot of places. Can you tell me more about that?	Invitation	
31	Ah, he turned his body?	Suggestive	After the child said, "When he kissed, he turned his ..."
32	And what did that man do afterwards?	Invitation	
33	Ah you cried?	Facilitator	After the child said, "I cried at the time."
34	So if he saw (the granny) coming towards the apartment, do you mean in between the first and second floors or before going up the first floor?	Option-posing	After the child said, "No, when he saw her coming towards the apartment."
35	Then what does the man's face look like, MS?	Directive	
36	How tall do you think he is? Is (he) taller than (your) dad?	Option-posing	
37	You are not sure?	Facilitator	After the child said, "I'm not sure about that."
38	Ah what did the bag look like? How was he wearing the bag? Sideways like this or at the back?	Option-posing	
39	What colour do you think the bag was?	Directive	
40	Ah, he talked a bit oddly?	Facilitator	After the child said, "But when he talked to me he talked a bit oddly."
41	Do you remember anything like scars and spots on his face?	Option-posing	
42	Can you tell me more about after he ran away?	Invitation	
43	Where were they?	Directive	
44	Okay, tell me more about after you went home.	Invitation	
45	I see.	Facilitator	
46	Do you think you can remember a bit?	Facilitator	After the child said, "Um, remember, I think I can a bit..."
47	Never...	Facilitator	After the child said, "No, never."
48	Would you like us police officers to punish the man who touched your body, MS?	Option-posing	
49	When the man was touching your body, did he hit you?	Option-posing	
50	How did you feel when the man was touching your body and so on?	Directive	

Results

types

Preliminary analyses

When the police officers were asked about their interviewing experiences, 29 (26.9%) of the 108 police officers responded that they had interviewed alleged victims of child sexual abuse. The mean length of time that these 29 officers had been interviewing alleged victims ranged from one months to 96 months, with an average of 21.24 cases investigated ($SD = 21.78$). Ten of the 29 officers (35.5%) had previously been trained to use the NICHD Protocol, while 19 (65.5%) had had no training. On average, the 120 officers had been in their current assignment for 13.52 months ($SD = 14.03$, ranging from 1 month to 84 months) and the average total length of employment was 116.50 months ($SD = 89.04$, ranging from 4 months to 420 months).

Accuracy distinguishing among question

Table 2 shows the percentage of officers who correctly identified each type of question. The individual overall accuracy rates ranged from 42.3% to 85.5%, with a mean of 65.6 ($SD = 11.37$). Police officers identified invitations (85.4%) and facilitators (81.1%) quite accurately, but were less accurate identifying suggestive (42.3%) and option-posing (56.4%) questions. Directive questions were often misidentified as invitations (20.4%) while option-posing questions were misidentified as suggestive (21.7%) or directive (15.1%) questions. Moreover, suggestive questions were mistaken for option-posing questions (22.2%), directive questions (15.1%), and even invitations (5.6%). Collectively, these results suggested that police officers frequently misidentified question types.

The accuracy rates for individual items were also analysed (see Table 3). These accuracy rates ranged from 20.6% (Item 27) to 95.4% (Item 28.) Specifically, more than 90% of the police

Table 2. Correct and incorrect identification of question types (%)

		The actual types of question				
		Invitation	Directive	Option-posing	Suggestive	Facilitator
Identified by Police officers	Invitation	85.46	9.49	1.85	3.51	2.03
	Directive	20.42	63.57	8.10	7.27	3.02
	Option-posing	2.17	15.11	56.43	21.71	8.44
	Suggestive	5.55	18.23	22.15	42.31	14.88
	Facilitator	1.84	4.51	7.81	6.04	81.14

Table 3. Accuracy rate for each item

The lowest accuracy			The highest accuracy		
Items	Question type	Accuracy rate	Items	Question type	Accuracy rate
27	Suggestive	20.6	28	Invitation	95.4
31	Suggestive	25.9	17	Invitation	92.6
2	Option-posing	27.1	44	Invitation	92.6
9	Option-posing	27.8	45	Facilitator	92.6
41	Option-posing	28.7	47	Facilitator	92.6
16	Suggestive	32.4	3	Invitation	91.7
12	Suggestive	38.9	29	Invitation	91.7
49	Option-posing	39.8	42	Invitation	89.8
19	Directive	40.7	7	Option-posing	88.0
4	Directive	44.9	24	Invitation	86.1
48	Option-posing	45.4	15	Invitation	85.2
13	Option-posing	46.2	30	Invitation	83.3
50	Directive	48.1	34	Option-posing	83.3
35	Directive	55.6	33	Facilitator	81.5
6	Directive	60.7	18	Option-posing	80.6
21	Option-posing	63.0	38	Option-posing	80.6
10	Directive	66.7	22	Invitation	78.7
36	Option-posing	66.7	40	Facilitator	78.7
25	Suggestive	67.6	5	Facilitator	77.8
32	Invitation	67.6	8	Directive	77.8
11	Directive	68.2	37	Facilitator	77.8
26	Suggestive	68.5	39	Directive	77.8
1	Invitation	71.3	23	Facilitator	75.9
46	Facilitator	72.2	20	Directive	74.1
14	Directive	74.1	43	Directive	74.1

officers correctly classified the following questions: ‘Can you please tell me about that in more detail?’ (Item 28, invitation), ‘Can you tell me what happened after he followed you?’ (Item 17, invitation), ‘Okay, tell me more about after you went home’ (Item 44, invitation), ‘I see’;

(Item 45, facilitator), ‘Never...’ (Item 47, facilitator, which repeats the child’s previous word), ‘Tell auntie what happened please’ (Item 3, invitation) and ‘So then, tell me what happened afterwards’ (Item 29, invitation).

However, most police officers could not correctly identify the following utterances: ‘Then, the kiss didn’t touch your lips?’ (Item 27, suggestive), and ‘Ah, he turned his body?’ (Item 31, suggestive), in both of which the police officers presumed actions that were not disclosed by the child or ‘Ah okay, then did some middle-aged man or adult touch your body?’ (Item 2, option-posing), ‘About 6 pm?’ (Item 9, option-posing). They also misidentified the ‘Do you remember’ question; ‘Do you remember anything like scars and spots on his face?’ (Item 41, option-posing).

Factors affecting accuracy rates

Independent t-tests confirmed that there were significant differences in accuracy rate according to gender, previous interview experience, and

previous training. Females were more accurate than males (female: $M = 68.63$ $SD = 9.931$; male: $M = 58.14$, $SD = 11.438$, $t(106) = -4.670$, $p < .001$, $d = .979$). Also, those who had previously trained on the NICHD Protocol ($M = 77.40$, $SD = 8.679$) and had previous interview experience with allegedly abused child victims ($M = 77.40$, $SD = 6.931$) were more accurate than those who were not thus experienced ($M = 64.10$, $SD = 11.723$) or not trained ($M = 66.84$, $SD = 7.252$) (see Table 4).

In addition, to explore factors related to the accuracy rates, Pearson correlations were computed. Overall accuracy was significantly negatively correlated with age ($r = -.33$, $p = .001$), and total length of service ($r = -.27$, $p = .001$). However, there were no significant correlations with differences in rank among police personnel ($r = -.172$, $p = ns$) or the length of service in current work place ($r = .134$, $p = ns$).

Informed by the results of these analyses, the relationships between accuracy, sex, age, Total length of service and previous training

Table 4. Correlations between accuracy rates and other factors

		<i>n</i> (%)	<i>M</i> (<i>sd</i>)	<i>t</i>	<i>p</i>	<i>d</i>
Sex	male	34 (28.3)	58.14 (11.438)	-4.670	.001	.979
	female	86 (71.7)	68.63 (9.931)			
Previous Interview experience	yes	29 (26.9)	70.48 (8.679)	2.672	.009	.678
	no	79 (73.1)	64.10 (11.723)			
Previous Training experience	yes	10 (35.5)	77.40 (6.931)	3.782	.001	1.489
	no	19 (63.5)	66.84 (7.252)			

Table 5. Predicting accuracy rates

	B	β	T	Sig	VIF
(constant)	111.318		6.458	.000	
Sex	-1.387	-.056	-.347	.732	1.129
Age	-.721	-.496	-1.425	.167	5.244
Total length of service	.023	.215	.619	.541	5.190
Previous training	-10.102	.563	3.475	.002	1.136
$R^2 = .445$					

Note: Sex 1=male, 2=female; Total length of service=total length of service as a police officers; Previous training 1='yes', 2='no'

were assessed using a multiple linear regression which yielded a significant model, $R^2 = .445$, $F(4, 24) = 4.817$, $p = .005$. Only previous training experiences predicted accuracy rates, $\beta = .564$, $t(28) = 3.475$, $p = .002$ meaning that police officers who had been trained previously distinguished among the types of questions more accurately (see table 5).

Discussion

Given the benefits of using open-ended questions and the risks associated with the use of focused questions, it is critical for investigators to be able to identify each type of questions correctly, not only for promoting actual use of the appropriate questions during child interviews but also for evaluating the likelihood of possible contamination of children's statements caused by improper use of option-

posing and suggestive questions. Therefore, this study was conducted to confirm how well Korean police officers actually recognize the different types of questions and what types of questions they found most difficult to identify.

Korean police officers' overall accuracy rate was 65.6%; they were most accurate at identifying invitations (85.5%) and least accurate at identifying suggestive questions (42.3%). Directives questions were often misidentified as focused questions (36.8%) while option-posing were misidentified mostly as suggestive (21.71) but still directive questions (15.11%), and facilitators (14.88%). Although suggestive questions are problematic because they not only elicit inaccurate information (Cederborg et al., 2000; Orbach, & Lamb, 2000), but also can distort or create false memories (Register & Kihlstrom, 1988), the results showed that more than half of the police officers failed to identify suggestive questions correctly. In particular,

police officers presumed something about a suspect's actions which had not been disclosed by the children, with only approximately 20-25% of police officers correctly identifying those questions as suggestive. It is of course impossible for interviewers to use the recommended types of questions if they cannot recognize them. These results suggested that police officers' ability to identify types of questions was not very strong. The interviews of allegedly abused children might have been negatively affected by the use of inappropriate questions without the questioners knowing what type of questions they were asking, let alone evaluate the possibly incorrect accounts or any contamination caused by improper interview techniques.

Previous studies have showed that Korean police officers rarely used invitation, but instead relied excessively on focused questions (Yi et al., 2015, 2016, 2017). They did this despite understanding the usefulness of open-ended questions and, more importantly, believing that they were using open-ended questions most often (Yi et al., 2015). This results might provide one possible explanation of why Korean police officers interview practices were insufficient even though they believed they were adhering to the guidelines. However, in this study, only one fourth of the police officers involved had any experience in interviewing allegedly abused child victims, so it would be difficult to draw a conclusion and its possibility must be tested in further studies.

Remarkably, previous training in use of the NICHD Protocol was the only significant predictor of accuracy distinguishing among types of questions. Previous studies have suggested that the NICHD Protocol enhances the quality and quantity of information elicited from child victims, with forensic interviewers using more open-ended questions and fewer suggestive and option-posing when following the Protocol (e. g. Orbach et al., 2000; Lamb, Sternberg et al., 2002, Price & Robert, 2011; Yi et al., 2017). The present study again under scoring the possible benefits of the NICHD Protocol training on investigative interviewing practices.

Training and use of the NICHD Protocol by Korean police officers is now being extended nationwide. Since the first training programs were offered in 2011, courses are being provided regularly to police officers at the Korean National Police Investigation Academy (KNPA, 2013). Most police officers report that they have used the Protocol, but their actual practices may be aligned poorly with recommended practices (KNPA, 2013). Thus, supervision and feedback designed to raise awareness about actual practices are needed to promote adherence to the recommended interview technique.

Although this study has showed unique insight regarding question type usage, some limitations need to be acknowledged. First of all, some of the test questions were somewhat ambiguous, and could have been placed in more than one category. Further, use of a written

transcript exacerbated the problem, because officers could not use information that might have been provided by the questioner's intonation or non-verbal gestures. In addition, the participants were all Korean police officers, and we do not know whether the same findings would have been obtained in other countries or with other professionals (e.g., social workers, psychologists, etc.). Moreover, in this study, the types of questions were analyzed based on the coding system suggested by Lamb et al. (2006). However, there could be subtle differences in the definitions of each type of question among researchers, which also affect the results. Lastly, this study has confirmed the ability of police officers to correctly identify different types of questions, yet we do not know whether their knowledge of question types actually affects their actual use of each question in their interviewing practice. Further research is needed to determine whether accurate understanding of question types can help police officers improve their actual interviewing practices.

These limitations notwithstanding, the results clearly show that police officers have difficulty correctly identifying many types of questions. In addition, the study identified another benefit of training in use of the NICHD Protocol. Instruction in use of the NICHD Protocol appears to be an effective way of increasing interviewers' knowledge regarding question types and of enhancing their usage of recommended types of questions.

References

- Aldridge, J., & Cameron, S. (1999). Interviewing child witnesses: Questioning techniques and the role of training. *Applied Developmental Science*, 3, 136-147.
- American Professional Society on the Abuse of Children [APSAC]. (1990). *Guidelines for psychosocial evaluation of suspected sexual abuse in young children*. Chicago, IL: Author.
- Anderson, J., Ellefson, J., Lashely, J., Miller, A. L., Olinger, S., Russell, A., Stauffer, K., & Weigman, J. (2010). The CornerHouse Forensic Interview Protocol: RATAc, *The Thomas M. Cooley Journal of Practical and Clinical Law*. 193-331.
- Bruck, M., Ceci, S. J., & Hembrooke, H. (1998). Reliability and credibility of young children's reports: From research to policy and practice. *American Psychologist*, 53(2), 136.
- Cassel, W. S., Roebbers, C. E. M., & Bjorklund, D. F. (1996). Developmental Patterns of Eyewitness Responses to Repeated and Increasingly Suggestive Questions. *Journal of Experimental Child Psychology*, 61, 116-133.
- Cederborg, A. C., Orbach, Y., Sternberg, K. J., & Lamb, M. E. (2000). Investigative interviews of child witnesses in Sweden. *Child Abuse & Neglect*, 24, 1355-1361.
- Davies, G. M., Westcott, H. L., & Horan, N. (2000). The impact of questioning style on the content of investigative interviews with respected child sexual abuse victims. *Psychology, Crime, and the Law*, 6, 81-97.
- Davies, G. M., & Wilson, C. (1997).

- Implementation of the memorandum: An overview. In H. Westcott & J. Jones (Eds.), *Perspectives on the memorandum: Policy, practice and research in investigative interviewing* (pp. 1-12). Aldershot, England: Arena Publishers.
- Dent, H. R., & Stephenson, G. M. (1979). An experimental study of the effectiveness of different techniques of questioning child witnesses. *British Journal of Clinical Psychology*, 25, 13-17.
- Fisher, R. P., & Geiselman, R. E. (1992). *Memory-enhancing techniques for investigative interviewing: The cognitive interview*. Springfield, IF: Charles C. Thomas.
- Hershkowitz, I. (2001). Children's responses to open ended utterances in investigative interviews. *Legal and Criminological Psychology*, 6(1), 49-63.
- Home Office (1992). *Memorandum of good practice on video recorded interviews with child witnesses for criminal proceedings*. London: Author, with Department of Health.
- Home Office (2007). *Achieving best evidence in criminal proceedings (Revised)*. London: Author.
- Lamb, M. E., Hershkowitz, I., Orbach, Y., & Esplin, P. W. (2008). *Tell Me What Happened: Structured investigative interviews of child victims and witnesses*. Hoboken NJ and Chichester: Wiley.
- Lamb, M. E., & Fauchier, A. (2001). The Effects of Question Type on Self- contradictions by Children in the Course of Forensic Interview. *Applied Cognitive Psychology*, 15, 483-491.
- Lamb, M. E., Orbach, Y., Sternberg, K. J., Hershkowitz, I., & Horowitz, D. (2000). Accuracy of investigators' verbatim notes of their forensic interviews with alleged child abuse victims. *Law and Human Behavior*, 24(6), 699.
- Lamb, M. E., Orbach, Y., Hershkowitz, I., Esplin, P. W., & Horowitz, D. (2007). A structured forensic interview protocols improves the quality and informativeness of investigative interviews with children: A review of research using the NICHD Investigative Interview Protocol. *Child Abuse & Neglect*, 31, 1201-1231.
- Lamb, M. E., Orbach, Y., Sternberg, K. J., Esplin, P. W., & Hershkowitz, I. (2002). The effects of forensic interview practices on the quality of information provided by alleged victims of child abuse. In H. L. Westcott, G. M. Davies, & R. Bull (Eds.), *Children's testimony: A handbook of psychological research and forensic practices* (pp.131-145). Chichester, England: Wiley.
- Lamb, M. E., Orbach, Y., Sternberg, K. J., Aldridge, J., Pearson, S., Stewart, H. L., Esplin, P. W., & Bowler, L. (2009). Use of a structured investigative protocol enhances the quality of investigative interviews with alleged victims of child sexual abuse in Britain. *Applied cognitive psychology*, 23, 449- 467.
- 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.
- Lamb, M. E., Sternberg, K. J., Orbach, Y.,

- Hershkowitz, I., Horowitz, D., & Esplin, P. W. (2002). The Effects of Intensive Training and Ongoing Supervision on the Quality of Investigative Interviews With Alleged Sex Abuse Victims. *Applied Developmental Science*, 6, 114-125.
- Lamb, M. E., Sternberg, K. J., Orbach, Y., Hershkowitz, I., Horowitz, D., & Esplin, P. W. (1999). Forensic Interviews of Children. In A. Memon & R. Bull (Eds.), *Handbook of the psychology of interviewing* pp253-277. NY: Wiley.
- LaRooy, D., Lamb, M. E., & Memon, A. (2011). Forensic interviews with children in Scotland: A survey of interview practices among police. *Journal of Police Criminal Psychology*, 26(1), 26-34.
- Milne, B., & Bull, R. (2002). Interviewing victims of crime, including children and people with intellectual disabilities. In M. R. Kebell, & G. M. Davies, G. M. (Eds.), *Practical Psychology for Forensic Investigations and Prosecutions*. Chichester, UK: Wiley.
- Orbach, Y., Hershkowitz, I., Lamb, M. E., Sternberg, K. J., Esplin P. W., & Horowitz, D. (2000). Assessing the value of structured protocols for forensic interviews of alleged abuse victims. *Child Abuse & Neglect*, 24, 733-752.
- Orbach, Y., & Lamb, M. E. (2001). The relationship between within-interview contradictions and eliciting interviewer utterances. *Child abuse & neglect*, 25(3), 323-333.
- Poole, D. A., & White, L. T. (1991). Effects of question repetition on the eyewitness testimony of children and adults. *Developmental Psychology*, 27(6), 975.
- Saywitz, K. J. & Camparo, L. B. (2014). *Evidence-based Child Forensic Interviewing*. New York: Oxford University Press.
- Saywitz, K. J., Lyon, T. D., & Goodman, G. S. (2011). *Interviewing children*. In J.E.B. Myers (Ed.), *The APSAC handbook on child maltreatment* (3rd ed.; pp.337-360). Newbury Park, CA: Sage.
- Sternberg, K. J., Lamb, M. E., Hershkowitz, I., Esplin, P. W., Redlich, A., & Sunshine, N. (1996). The relation between investigative utterance types and the informativeness of child witnesses. *Journal of Applied Developmental Psychology*, 17, 439-451.
- Sternberg, K. J., Lamb, M. E., Hershkowitz, I., Yudilevitch, L., Orbach, Y., Esplin, P. W., & Hovav, M. (1997). Effects of introductory style on children's abilities to describe experiences of sexual abuse. *Child Abuse & Neglect*, 21, 1133-1146.
- Sternberg, K. J., Lamb, M. E., Davies, G. A., & Westcott, H. L. (2001). The Memorandum of Good Practice: Theory versus application. *Child Abuse & Neglect*, 25, 669-681.
- Sternberg, K. J., Lamb, M. E., Orbach, Y., Esplin, P. W., & Mitchell, S. (2001). Use of a structured investigative protocol enhances young children's responses to free recall prompts in the course of forensic interviews. *Journal of Applied Psychology*, 86, 997-1005.
- Yi, M., Jo, E., & Lamb, M. E. (2016). Effects of the NICHD Protocol Training on Child

- Investigative Interview Quality in Korean Police Officers. *Journal of Police and Criminal Psychology*, 31(2), 155-163. doi.org/10.1007/s11896-015-9170-9
- Yi, M. Jo. E. & Lamb, M. E. (2017). Assessing the effectiveness of the NICHD Protocol training focused on episodic memory training and rapport building: A study of Korean police officers. *Journal of Police and Criminal Psychology*, 32(4), 279-288. doi.org/10.1007/s11896-016-9220-y
- Yi, M., Lamb, M. E., & Jo. E. (2015). The Quality of Korean Police officers' Investigative Interviews with Alleged Sexual Abuse Victims as Revealed by Self-Report and Observation. *Journal of Police and Criminal Psychology*, 30(4), 274-281. doi.org/10.1007/s11896-014-9157-y
- 1차원고접수 : 2018. 02. 12.
심사통과접수 : 2018. 11. 06.
최종원고접수 : 2018. 11. 13.

한국 경찰관들은 아동 조사면담 시 사용되는 질문유형에 대해 얼마나 정확하게 이해하고 있을까?

이 미 선

동양대학교

Michael E. Lamb

University of Cambridge

본 연구는 한국 경찰관이 성폭력 피해아동 조사면담 시 사용 하는 질문유형에 대해 얼마나 정확하게 이해하고 있는지 확인하기 위해 실시되었다. 추가적으로 질문유형의 정확도에 영향을 미치는 요인에 대해 살펴보았다. 총 120명의 한국 경찰관들은 50개의 질문에 대해 다섯 가지의 질문유형(진술권유, 촉진어, 구체적 질문, 선택형 질문, 암시적 질문) 중 어느 질문에 해당하는지 답하였다. 연구결과, 전체 정확율은 65.6%로 나타났다. 진술 권유(85.5%)에 대한 정확도는 가장 높은 반면, 암시적 질문(42.3%)에 대한 정확도는 가장 낮은 것으로 나타났다. 경찰관들은 종종 구체적 질문을 진술권유로 잘못 구별하는 방식으로 진술권유에 대한 사용을 과대 추정하는 경향을 나타냈다. 암시적 질문의 경우, 선택형 질문으로 잘못 이해되는 경우가 22.2%이었으며, 구체적 질문으로 오해되는 경우는 15.1%이었다. 암시적 질문을 진술권유로 잘못 이해하는 경우도 5.6% 존재하였다. 이전 NICHD 조사면담 프로토콜에 대한 교육 경험은 더 높은 정확성을 예측할 수 있는 유일한 요인으로 나타났다.

주요어 : 개방형 질문, 질문유형 분류, NICHD 아동조사면담 프로토콜, 대한민국 경찰관, 성학대 아동 조사면담