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A field study of adult witness interviewing practices in a Canadian police organization

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Purpose. The current study examined witness interviewing practices in a Canadian police organization. The effect of interviewer, interviewee, and interview characteristics on those practices was also examined.

Method. Ninety witness interviews from a Canadian police organization were coded for the following interviewing practices: types of questions asked (i.e. open-ended, probing, closed-ended, clarification, multiple, leading, opinion/statement, and re-asked), the number of interruptions, percentage of words spoken by interviewer, type of pre-interview instructions (consequential vs. generic), and whether or not a free narrative was requested (and when requested during the interview). Characteristics pertaining to the interviewer (e.g. primary interviewer's age), interviewee (e.g. witness gender), and interview (e.g. crime type) were also coded.

Results. Results showed that closed-ended and probing questions were the most widely asked questions, and that open-ended questions were asked relatively in-frequently. It was also found that the 80–20 talking rule was violated in 89% of the interviews, interviewers rarely interrupted the witnesses, and free narratives were requested often. Overall, the effect of interviewer, interview, or interviewee characteristics on interviewing practices was minimal.

Conclusions. The finding that scientifically prescribed interviewing practices are employed rarely by Canadian police officers highlights a need for increased professional interviewing training. The finding that practices are largely unaffected by personal and situational factors suggests that such training would be equally beneficial for all types of interviewers, interviewees, and contexts.

It is well-known that the ability to obtain reliable and accurate information from eyewitnesses has evidential ramifications that impact the resolution of criminal investigations and any subsequent legal proceedings (e.g. Fisher, Geiselman, & Raymond, 1987; Geiselman & Fisher, 1989; Greenwood & Petersilia, 1975; Milne & Bull, 1999; Williamson, Milne, & Savage, 2009). Unfortunately, it is also well-known that police officers often do not receive the training necessary to conduct professional interviews and, without sustained supervision and feedback, any interviewing skills that are learned are likely to

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decline over time (e.g. Clarke & Milne, 2001; Clifford & George, 1996; Smith, Powell, & Lum, 2009). Concerns about an over-reliance on 'on the job' training is certainly reflected in the findings that poor interviewing practices tend to be the rule rather than the exception (Fisher *et al.*, 1987; Milne & Bull, 1999; Wright & Alison, 2004), and in reports suggesting that inadequate interviews play a role in miscarriages of justice (e.g. FPT Heads of Prosecutions Committee Working Group, 2004; Lamer, 2006; Williamson *et al.*, 2009).

Given the importance of police interviewing, one would expect that training on best interviewing practices would be commonplace in Canada. In reality, however, Canadian police officers are often provided with cursory training on how to conduct professional interviews with witnesses (Snook, Eastwood, Stinson, Tedeschini, & House, 2010).[1] Police recruits typically receive introductory lessons on interviewing during basic training. After a number of years on the job, some officers may receive advanced training on methods such as the cognitive interview. However, the type, amount, and quality of training being delivered to officers vary both within and between police organizations. Regular supervision and evaluation of these interviews also does not appear to be a standard practice. Such a state of affairs raises important questions about the quality of interviewing practices in Canada, and the effect that it is having on the administration of justice.

Unfortunately, findings from countless studies around the world have confirmed the prevalence of poor interviewing practices (e.g. Fisher & Schreiber, 2007; Fisher *et al.*, 1987; Milne & Bull, 1999; Williamson *et al.*, 2009; Wright & Alison, 2004), presumably due to the lack of training on how to conduct professional interviews. In particular, police interviewers have been shown to consistently make the following three mistakes:

(1) *Interrupting responses*. Research has shown that there is a tendency for interviewers to interrupt witnesses while they are providing a free narrative account (and other responses) of the observed event(s). For instance, Fisher *et al.*'s (1987) classic study of 11 police interviews conducted by experienced detectives showed that free narratives were interrupted, on average, 7.5 s after a witness started talking. Subsequent research has replicated this finding (e.g. McLean, 1992; McLean, 1995; Milne, Shaw, & Bull, 2007; Wright & Alison, 2004; but see Clarke & Milne, 2001, for exception). According to Fisher and Geiselman (1992), interrupting a response is a major source of distraction for interviewees because it breaks the concentration required for effective information retrieval, can cause interviewees to shorten their responses, and reduces the cognitive effort required by witnesses to provide a detailed account.

(2) *Over-talking during the interview*. Research has shown that interviewers tend to talk more than is required to conduct an interview (Fisher, 1995; Fisher *et al.*, 1987; Shepherd, 2007; see Clarke & Milne, 2001, for exception). For example, Wright and Alison (2004) found using a sample of 19 Canadian police interviews that interviewers tended to talk nearly 33% of the total talking time when interviewing adult witnesses. Similarly, Myklebust and Alison (2000) found that Norwegian officers tended to talk about 31% of the time when interviewing children. In contrast to these observed practices, it has been recommended that interviewers should follow an '80–20 rule' where the interviewee talks for about 80% of the

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[1] *This knowledge is based entirely upon conversations with officers across Canada. Empirical data on interview training and practices in Canada do not yet exist.*

interview (e.g. Shepherd, 2007). By violating this rule, the interviewer reduces the cognitive effort required from the interviewee and wastes time that the interviewee can use to provide information.

(3) *Asking unproductive questions*. Griffiths and Milne (2006) divided questions into productive and non-productive categories. Productive questions include (a) open-ended questions, (b) probing questions, and (c) appropriate closed-ended questions. Open-ended questions, such as those starting with *tell*, *explain*, or *describe*, help initiate recall about a particular topic (e.g. interviewee's whereabouts) and encourage longer and more accurate answers. Probing questions (e.g. who, what) can then be used to gather more details that were not revealed from the response to an open-ended question. Appropriate closed-ended questions can then be used to gather any additional information about the topic that was not gathered from the open-ended or probing questions. Unproductive questions include (a) inappropriate closed-ended questions, (b) leading questions, (c) multiple questions, (d) forced-choice questions, and (e) opinions or statements. Inappropriate closed-ended questions are simply those that require a yes/no answer and are asked at inappropriate times during the interview or do not follow logically from an open-ended or probing question. Leading questions are those that suggest an answer to a question (e.g. 'you witnessed the crime, right?', see Loftus, 1979; Smith & Ellsworth, 1987). Multiple questions involve asking more than one question at once (e.g. Where were you last night? Who were you with? When did you go out for the evening?). Forced-choice questions offer a limited number of responses from which to choose (e.g. 'Did you sell cocaine or marijuana?'). Lastly, opinions and statements simply involve putting a statement to an interviewee rather than asking a question (e.g. I am sure we will catch the offender). According to Griffiths and Milne (2006), unproductive questions result in less detailed and more incorrect responses than those obtained from productive questions.

Past field studies have demonstrated that police interviewers tend to use many unproductive questions and few productive questions. For example, Fisher *et al.* (1987) found that almost all of the questions asked in the interviews they examined were direct, short answer questions. They found that the average interview contained three open-ended questions and 26 direct, short answer questions. Clifford and George (1996) reported similar results, as they found that officers conducting a standard police interview asked over 70% more closed-ended questions than open-ended questions. Clarke and Milne's (2001) analysis of 70 interviews also showed that the majority of interviews were dominated with closed-ended questions. Although Clarke and Milne reported that open-ended questions were the second most frequent type of question asked, they also observed the use of many leading questions. More recently, Wright and Alison (2004) found that Canadian police officers asked more closed-ended, leading, and clarification questions than open-ended questions.

The goal of the current field study was to examine the nature of police interviewing practices within a Canadian police organization. In particular, our primary goal was to replicate Wright and Alison's (2004) research using a larger sample of interviews. With the exception of the Wright and Alison study and a study by Fisher *et al.* (1987), there are no empirical data regarding the extent to which scientifically prescribed interviewing practices (and conversely, poor interviewing practices) are employed by police officers in North America. Given the inadequate interview training provided to Canadian police officers, and assuming that Wright and Alison's results are replicated, we do not expect

that best interviewing practices will be observed frequently. A secondary goal was to examine the extent to which interviewing practices vary as a function of personal and situational factors. Smith *et al.*'s (2009) laboratory research suggests that interviewing practices are unlikely to be affected by interviewers, interviewees, and the context of the interview. Despite such a finding, it remains a potentially interesting issue to explore from a training perspective. Specifically, observation of differences in practices across officers, crime types, witness types, and so on could lead to training that would aid in the standardization of interview procedures.

Method

Sample

A convenience sample ($N = 90$) of police interviews with adult witnesses was obtained from a police organization in Atlantic Canada. The interviews ranged in date from 1998 to 2008. The types of crimes the witnesses were interviewed about were assault (63%), homicide (14%), sexual assault (13%), robbery (4%), and uttering threats (4%). Only one interviewer was in the interview room for 69 of the interviews (77%), and 70% of the primary interviewers were men. A total of 20 different officers comprised the sample. The mean age of the primary interviewers was 43.5 years ($SD = 3.1$, range: 34–48), and the average years of policing experience for the primary interviewers was 18.1 ($SD = 4.4$, range: 8–25). Approximately, 80% of the primary interviewers held the rank of constable, 17% were staff sergeants, 2% were sergeants, and 1% were inspectors. Sixteen (76%) of the 21 secondary interviewers were men. Ninety-five per cent of secondary interviewers held the rank of constable (95%), with the remaining 5% being staff sergeants.

The mean age of the witnesses was 30.7 ($N = 65$, $SD = 12.8$, range: 16–63). Half of the witnesses were women. In 90% of the interviews, the witness was not the victim of the crime in question. The witnesses and suspect(s) were most often friends (34%), followed by acquaintances (28%), strangers (22%), and family members (3%). The relationship between witnesses and suspects was unknown in approximately 12% of the interviews.

Procedure

The interviews were transcribed by clerical staff at the police organization and provided on compact disks. The following variables were coded:

(1) *Interview, interviewer, and interviewee characteristics*. Date of the interview, type of crime under investigation, number of individuals present during the interview, number of interviewers, primary interviewer's gender, primary interviewer's rank (i.e. constable, sergeant, staff sergeant, or inspector), secondary interviewer's gender, secondary interviewer's rank, witness' gender, witness' age (calculated from date of birth), whether or not the witness was the victim, and the relationship between the witness and suspect (i.e. friend, family, acquaintance, stranger, or unknown). Information pertaining to the primary interviewer's age and the number of years of policing experience was provided by the police organization (calculated from date of birth and date of hire, respectively).

(2) *Primary interviewer's interviewing approach*. The following nine question types were coded: open-ended questions, closed-ended questions, probing questions, leading questions, forced-choice questions, opinion questions, multiple questions,

re-asked questions, and clarification questions. Each question asked in an interview was classified as one of the nine question types.

We also coded whether or not a free narrative was requested. Other dependent variables were the total word count of interview, total word count of interviewer(s), and total word count of interviewee. The percentage of words in the transcript attributed to the interviewing officer was calculated by dividing the total words spoken by the interviewer by the total word count of the interviews. The average number of words in a response, number of interruptions, and whether or not a consequential instruction (i.e. the consequences of providing false information) was read to the witness were also coded (see Appendix for a copy of the content dictionary).

Inter-rater reliability

Reliability of the coding was assessed by having an independent researcher code a random sample of 10% of the interviews. The independent coder was provided with a 1-h training session that covered the practical aspects of coding the transcripts, the structure and content of the coding guide, and the content dictionary. In addition, the coder observed the second author code two transcripts and practiced on two additional transcripts before conducting the actual coding. Any confusions pertaining to the task were resolved before inter-rater reliability commenced. The agreement of coding regarding whether or not a particular unit of discourse constituted a question, measured using Yeaton and Wortman's (1993) statistic, was 97.5%.[2] Agreement on the type of question asked was 78%.[3] There was 100% agreement for all other variables coded in this study.

Percentages and confidence intervals

As the current research was concerned primarily with practical rather than statistical significance (Kirk, 1996), the statistical estimates (e.g. averages, percentages) and their associated 95% confidence intervals (CIs) was emphasized. Confidence intervals contain all the information provided by null hypothesis significance testing and, instead of making a dichotomous yes/no decision about differences between groups, they give a range of values within which the true difference is likely to lie (see Cumming & Finch, 2005; Gendreau & Smith, 2007; Kirk, 1996). Only those comparisons where the 95% CIs did not overlap are mentioned below (equivalent of $p \leq .01$; see Cumming & Finch, 2005).

Results

Question type

The results showed that, on average, 34.5% of all questions asked in an interview were closed-ended ($SD = 10.1$, CI [32.4, 36.6]) and 32% were probing ($SD = 11.4$, CI [29.7, 34.4]). Clarification-based questions accounted for 15.8% of questions asked ($SD = 7.5$,

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[2] *Cohen's kappa coefficient was not used because the assumption of equal distribution in responses was violated.*

[3] *For the scoring of question types, agreement had a kappa coefficient of .83.*

CI [14.2, 17.3]). Open-ended questions comprised 5.8% of all questions asked ($SD = 3.0$, CI [5.2, 6.5]). Multiple questions ($M = 4.6\%$, $SD = 3.2$, CI [4.0, 5.3]), re-asked questions ($M = 3.2\%$, $SD = 3.3$, CI [2.5, 3.9]), forced-choice questions ($M = 2.3\%$, $SD = 2.2$, CI [1.8, 2.7]), leading questions ($M = 1.5\%$, $SD = 2.1$, CI [1.1, 2.0]), and opinion/statements ($M = 0.20\%$, $SD = 1.2$, CI [0, 0.5]) were used rather infrequently.

The mean percentage of questions asked (for each of the nine questions) as a function of interview, interviewer, and interviewee characteristics was also examined. The results showed that interviews with witnesses of uttering threats were asked fewer closed-ended questions ($M = 12.0\%$, CI [0, 31.7]) than witnesses of sexual assaults ($M = 38.6\%$, CI [33.2, 44.0]) and assaults ($M = 35.6\%$, CI [33.2, 38.0]). Witnesses associated with homicide investigations were asked more multiple questions ($M = 7.2\%$, CI [4.9, 9.5]) than witnesses associated with sexual assault ($M = 2.7\%$, CI [1.1, 4.2]) investigations.

The relationships between the number of questions asked (for each type of question) and primary interviewer's age, primary interviewer's years of experience, and witness age was also examined. A Bonferroni correction was implemented to control the Type I error rate associated with conducting 27 correlations ($\alpha = .002$). There was a significant negative relationship between the number of open-ended questions asked and years of experience ($r = -.36$). That is, more experienced officers tended to ask fewer open-ended questions than relatively less experienced officers. All other correlation coefficients were non-significant (all $rs < .20$).

Percentage of words spoken

On average, 36% (CI [33, 39]) of the words spoken in an interview were attributed to the primary interviewer. The total number of words spoken by the primary interviewer was greater than the total number of words spoken by the witness in approximately 16% of the interviews. The 80–20 talking rule was violated in 89% of the interviews. The percentage of words spoken by the primary interviewer was greater for interviews concerning assaults ($M = 39.3\%$, CI [35.8, 42.9]) than homicides ($M = 29.5\%$, CI [23.2, 35.7]). The percentage of words spoken by the primary interviewer was related negatively to primary interviewer's age ($r = -.30$, $p = .00$) but unrelated to years of policing experience ($r = -.09$, $p = .42$) and unrelated to the age of the witness ($r = -.05$, $p = .70$).

Interrupting the witness

The mean number of interruptions per interview was 4.1 ($SD = 3.9$, CI [3.3, 5.0]). The mean number of interruptions varied substantially according to crime type. Specifically, there were significantly fewer interruptions, on average, for uttering threats ($M = 1.3$, CI [0.0, 2.8]) than there were for homicide ($M = 5.4$, CI [3.0, 7.7]) and assault ($M = 4.4$, CI [3.2, 5.5]) investigations. The number of interruptions was correlated positively with the length of the interview ($r = .47$, $p = .00$). The mean number of interruptions was unrelated to the primary interviewer's age ($r = .19$, $p = .07$), the primary interviewer's years of policing experience ($r = -.11$, $p = .31$), and witness age ($r = .05$, $p = .67$).

Type of instructions

Interviewees were given consequential pre-interview instructions (i.e. warned about the consequences of providing false information) in 12% of the interviews ($N = 11$). The average length of responses was smaller for interviews where consequential instructions

were given ($M = 14.3$, $SD = 4.5$, CI [11.3, 17.4]) than for those interviews where the warning was not read to interviewees ($M = 25.8$, $SD = 18.0$, CI [21.8, 29.9]). The consequential warning was only given in assault cases and was only delivered by constables. The extent to which consequential instructions were read to witnesses before the interview began was related to both the primary interviewer's years of experience ($r = -.55$, $p = .00$) and the age of the witness ($r = -.33$, $p = .01$). That is, more experienced officers tended not to read the consequential instructions as much as their less experienced counterparts and older witnesses were warned more often about giving false information than younger witnesses. The use of a consequential instruction was unrelated to the primary interviewer's age ($r = .14$, $p = .18$).

Requesting a free narrative

A free narrative was requested in 73% ($N = 66$) of the interviews. Of those interviews where a free narrative was requested, it was almost always (96%, $N = 63$) done at the beginning of the interview. The use of the free narrative only varied as a function of the interviewer's gender; women asked witnesses to provide a free narrative less often than men (56 vs. 81%, respectively). The use of a free narrative was related to years of policing experience ($r = .42$, $p = .00$), as those with more policing experience tended to request free narratives more often than those with less policing experience. Requesting a free narrative was unrelated to the primary interviewer's age ($r = -.21$, $p = .05$) and unrelated to the age of the witness ($r = .22$, $p = .08$).

Discussion

The current study examined witness interviewing practices of a sample of Canadian police officers and the effect of interviewer, interviewee, and interview characteristics upon those practices. We found that interviewing practices tended to be invariant across different interviewers, interviews, and interviewees. Perhaps most importantly, we found that interviewers tended to conduct 'standard police interviews' and made the same fundamental mistakes documented in other field studies. On the one hand, the observation of these mistakes is somewhat disappointing given the extensive amount of research devoted to improving police interviewing practices (Clifford & George, 1996; Fisher, 1995; Geiselman, Fisher, MacKinnon, & Holland, 1985; Köhnken, Milne, Memon, & Bull, 1999). On the other hand, these findings are somewhat predictable because of the inadequate investigative interviewing training afforded to Canadian police officers. In general, our results indicate that Canadian police agencies should invest in evidence-based training that will allow their members to conduct effective interviews.

Consistent with previous findings (e.g. Fisher *et al.*, 1987; George, 1991 as cited in Fisher & Geiselman, 1992; Myklebust & Alison, 2000; Wright & Alison, 2004), officers rarely asked open-ended questions. Specifically, about 6% of questions asked across all interviews were open-ended. This finding suggests that interviewers obtained less information than what was possibly available from the witnesses. It is difficult to determine, however, if the observed percentage is inordinately low (or reasonable) because there is no set benchmark for an acceptable percentage of open-ended questions that should be observed in a professional interview. Based on our understanding of professional interviewing (e.g. cognitive interview), we estimate that between 20 and 30% of all questions asked should be open-ended (see George, 1991, for post

cognitive interviewing percentages, as cited in Fisher, McCauley, & Geiselman, 1994, see Table 12.3; Griffiths & Milne, 2006, Figure 9.7, for some indication of the percentage expected from suspect interviews). Deriving benchmarks from an analysis of professional interviews would certainly help guide interview training and facilitate assessment of interviews.

Notwithstanding the problems of estimating the percentage of question types that should be observed in an interview, we found that the percentage of closed-ended questions was relatively high (∼35%). As mentioned earlier, closed-ended questions are problematic because the elicited information is tied to the specific request and, as a result, no unsolicited information is generated (Fisher *et al.*, 1987). Consequently, information will not be gathered if the interviewer forgets to ask a relevant question. According to Fisher and colleagues, closed-ended questions result in the interviewer waiting only one second from the end of the previous answer to begin the next question, thus, causing the interviewer to engage in the active mental processing that should be undertaken by the witness. Although the use of transcripts prevented us from empirically testing this issue, we encourage future researchers to examine the amount of time between the answer provided by the witness and the next question posed by the interviewer so that the level of witness passivity associated with unproductive questions can be gauged.

It was also found that interviewing officers violated the 80–20 rule of talking in 89% of the interviews. The finding that interviewers talked roughly 36% of the time is slightly higher than Myklebust and Alison's (2000) finding that interviewers spoke 31% of the time, and Wright and Alison's (2004) finding that Canadian interviewers spoke, on average, slightly more than 30% of the time. Considering that the lower bound of the confidence interval on our estimate is around 33%, we echo Wright and Alison's concern that such a percentage of speaking can cause interviewers to be less effective at getting witnesses to dictate the pace and structure of their recollections, and ultimately, potentially reduce the amount of information that is retrieved.

Our findings also suggest that the use of warnings (in the form of legal consequences of providing false testimony) may have a detrimental effect on the amount of information obtained from witnesses. In particular, we found that the average length of responses were significantly shorter in interviews where consequential instructions were given. According to Myklebust and Alison (2000), the use of consequential pre-interview instructions may hinder the development of rapport between the interviewer and witness (also see Collins, Lincoln, & Frank, 2002). Witnesses may become anxious about the interviewing process and concerned over what they are expected to report. Poor rapport can also lead to interviewee passivity and foster poor communication (Fisher & Geiselman, 1992; Wright & Alison, 2004). We agree with Wright and Alison's argument that such warnings are essential but that efforts should be made to minimize their length, apparent complexity, and severe style. One possibility may be to have one officer inform the witness of the legal consequences of providing a false statement, obstructing justice, withholding evidence, and so on and allow another officer to perform the interview in a different room. In this situation, the witness would still receive the necessary instructions but there would presumably be a better opportunity for rapport development as the witness may not be as intimated by the officer conducting the actual interview.

Good interviewing practices were also observed. For instance, nearly one-third of the questions asked were probing in nature. Although we did not explore the logical sequence of questions asked to determine if the probing questions followed from open-ended questions (see Fisher & Geiselman, 1992), the fact that probing questions were used relatively frequently is promising because they are generally considered to be an

appropriate type of question to ask during interviews (Griffiths & Milne, 2006). Similar to Clifford and George's (1996) findings, the officers tended to avoid providing opinions and statements and asking forced-choice, multiple, re-asked, and leading questions. The avoidance of such inappropriate questions should help prevent answers being suggested and hindering the amount of information that is recalled. It was also found that most officers requested a free narrative and did so at the beginning of the interview. Notwithstanding the fact that it is more difficult to measure or observe interruptions with transcripts, interviewers seemed to interrupt witnesses rarely. Overall, it is encouraging that many of the interviewing officers in the current sample appear to be aware of these important interviewing practices.

The effect of interviewer, interview, and interviewee characteristics was minimal. Across all of the dependent variables, crime type had the greatest effect upon interviewing practices. Specifically, the proportion of closed-ended and multiple questions asked, as well as the percentage of words spoken and number of interruptions, all varied between some of the crime types. Although the reason for these variations is not entirely clear, we suspect it might simply be an artifact of the relatively small (and unequal) sample sizes for most of the crime types. It is also possible that there may be something about certain types of crime that lead officers to ask certain types of questions. What it is about a particular crime type that influences the types of questions asked may be an interesting area of future research if our results were to be replicated.

Beyond crime type, we found five variations in interviewing practices as a result of interviewer, interview, and interviewee characteristics. Firstly, the amount of talking during an interview decreased with increasing age of the primary interviewer. Secondly, more experienced officers do not provide consequential warnings as much as their less experienced counterparts. Thirdly, older witnesses were provided with pre-interview warnings more than younger witnesses. Fourthly, more experienced officers tended to request a free narrative more than their less experienced counterparts. Lastly, female officers tended to request a free narrative less often than their male counterparts. As with the effect of crime type on practices, we do not have any theoretical explanation for these results. Replication of this research is required before any concrete conclusions (or training advice) can be drawn from these findings. As with crime types, a more concentrated exploration of the explanations for these observed relationships in interviewing practices would certainly be warranted if these results were replicated using larger sample sizes and from other jurisdictions.

There is no debating that police interviewing of witnesses is a key aspect of criminal investigations and prosecutions. The results of our field study showed that several best practices have yet to become commonplace when interviewing witnesses of criminal events for at least one police organization in Canada. It appears that the standard police interview continues to be the norm and is seemingly unaffected by personal and situational factors. Assuming that our results generalize to other police organizations in Canada, and we suspect they do because of the lack of training across the county, our findings highlight the need to train Canadian officers on scientifically supported interviewing practices such as the cognitive interview.

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Appendix: Content dictionary

Primary interviewer's interviewing approach

Open-ended question
Interviewer asks questions that are directed towards a specific event or occurrence (i.e. an argument) but allows for a full range of responses and cannot be answered with a simple yes or no, or other brief one-phrase reply (e.g. 'Tell me about the argument with your wife?').

Closed-ended question
Interviewer asks a question which can be answered with a 'yes', 'no', or with a phrase such as 'I don't know' or 'maybe' (e.g. 'Did he have an umbrella?').

Probing question
Interviewer asks a question defined as more intrusive and requiring a more specific answer, usually commencing with the active words 'who', 'what', 'why', 'where', 'when', or 'how' (e.g. 'What part of her body hit the ground first?').

Leading question
Interviewer asks a question that suggests an answer (e.g. 'Are you normally that aggressive after drinking?').

Forced-choice question
Interviewer asks a question that only offers the interviewee a limited number of possible responses (e.g. 'Did the suspect kick or punch the other woman?').

Opinion question
Interviewer poses an opinion or puts statements to an interviewee as opposed to asking a question (e.g. 'I think you assaulted the other person').

Multiple question
Interviewer asks several questions at once, without giving the witness a chance to respond to each question (e.g. 'How did you get there, what did you do inside and when did you first decide to steal the car?').

Re-asked question
Interviewer re-asks a question that the interviewee has already answered (this variable is not scored if the interviewer re-asks the question because the witness has not heard or understood the question the first time).

Clarification question
Interviewer repeats what the interviewee has said, but puts it in the form of a question. These can usually be answered with a 'yes' or a 'no' (e.g. Witness: John said he went to a movie. Interviewer: Okay, so John told you that he went to a movie? Witness: Yes, that's right.).

Free narrative
Whether or not a free narrative was requested from the witness (i.e. Tell me what happened between 7pm and 9pm tonight).

Was the free narrative requested at the beginning of the interview
Interviewer(s) requested a free narrative within the first 15 questions of the interview after which the questions are expected to become more specific and narrow in focus.

Word count
The total number of words spoken during the interview by each of the interviewer(s) and the witness was determined by counting each word using the Microsoft Word 2007 word count function.

Average number of words in responses
The total number of words spoken by the witness was divided by the total number of responses given by the witness during the entire interview.

Interruptions
The number of times a witness was interrupted mid-sentence. This variable is not scored if the interviewee interrupts with gestures of agreement (e.g. 'okay' or 'I see') and the interviewee proceeds with the same line of thought.

General or consequential instructions given
General instructions involve the interviewer informing the witness/victim about basic interviewing procedures (e.g. 'please state your name for the tape', 'I am going to ask you a few questions.'). Consequential instructions involve explaining legal rights and penalties associated with providing a false statement, fabricating evidence, misleading a police officer, and/or obstructing justice (i.e. reference made to Section 139 of the Canadian Criminal Code).