



## **UWL REPOSITORY**

**repository.uwl.ac.uk**

When law enforcement interview witnesses and write their statements

Walsh, Dave, Areh, Igor, Minhas, Rashid ORCID: <https://orcid.org/0000-0002-1479-0985> and Menzies, Simon-Lewis (2022) When law enforcement interview witnesses and write their statements. Police Practice and Research. ISSN 1561-4263

<http://dx.doi.org/10.1080/15614263.2022.2116436>

This is the Accepted Version of the final output.

UWL repository link: <https://repository.uwl.ac.uk/id/eprint/9353/>

**Alternative formats:** If you require this document in an alternative format, please contact: [open.research@uwl.ac.uk](mailto:open.research@uwl.ac.uk)

### **Copyright:**

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

**Take down policy:** If you believe that this document breaches copyright, please contact us at [open.research@uwl.ac.uk](mailto:open.research@uwl.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.

**When law enforcement interview witnesses and write their statements.**

Dave Walsh, School of Law, De Montfort University<sup>1</sup>

Igor Areh, Faculty of Criminal Justice and Security, University of *Maribor*

Rashid Minhas, School of Human and Social Sciences, University of West London

Simon-Lewis Menzies, School of Science and Engineering, University of Dundee

**Abstract**

Eyewitness testimony is important to criminal investigations. Research has found that remembering is a process that can be distorted by various factors, such as how witnesses are interviewed. Further, prior research has also found that written statements taken by the investigator are not always accurate. The present study explored for what is believed the first time whether interviewing skills are associated with both how much correct verbal information is provided by witnesses *and* also the accuracy of written statements, using a sample of 30 interviews conducted by serving professional investigators. We found greater inaccuracies at each of these two phases when interviewers were assessed as being less skilled, when compared to interviews conducted by their more highly rated counterparts. Interviewing skills thus appear important when interviewers attempt to gain accurate information from witnesses, and when they generate accurate written statements. Implications for policies, practice, and for future research, are discussed.

**Keywords:** Investigative interviews, Eyewitness testimony, Written witness statements, Information/evidence distortions

---

<sup>1</sup> Contact: dave.walsh@dmu.ac.uk

## **Introduction**

The long-held understanding is that information obtained from witnesses to a crime is often of great importance in influencing the course of criminal investigations and their outcomes (Coupe and Griffiths, 1996; Kebbell and Milne, 1998). As such, it is not surprising that eyewitness memory has been relatively well researched, particularly concerning factors that may influence a witness's ability to communicate a comprehensive and reliable account about the crime event (see Meissner et al., 2007). Less is known, however, concerning the amount and accuracy of information gathered from witnesses and then transferred into their written statements. As such, the present exploratory study examines this matter from the details provided verbally by mock witnesses and that recorded manually in interviewer-generated statements that would (in practice) be produced for evidence in court.

In England and Wales, although interviews with certain witnesses (e.g., those identified as vulnerable, such as children) are now video-recorded, most witness statements continue to be manually written, and almost always composed by investigating officers employed in the range of law enforcement agencies in that country from their interviews with witnesses. No empirical or statistical data is known to exist as to how often manually written statements are undertaken in practice (or indeed how many interviews are audio or video recorded). However, from the first author's substantial prior professional experience, as well as his extensive academic expertise, such practices are known to be common place (much more so than audio or video recording of such interviews). This is in contrast to interviews with suspects in England and Wales, where all interviews are electronically recorded. A further difference is whereas police interviews with suspects are almost always undertaken in police stations, witness interviews might be carried out in a range of locations such as the workplace or in the home, where the technology to securely record such interviews is not regularly available. However,

distractions that can compromise the attention of both witness and interviewers often exist in such potentially problematic environments.

It is also known to the research team that witnesses rarely challenge that which has been written on the statement by investigators, and research has found that a witness statement can be a co-construction between the police and the witness rather than the witness exclusively generating their own account (Rock, 2001). As such, these written accounts are dependent upon police officers recalling accurately what witnesses have said, while making judgments as to what they believe is most relevant to the investigation (e.g., Brunel and Py, 2013; Griffiths et al., 2011; Kebbell and Wagstaff, 1996; Köhnken et al., 1994). These data selection and communication processes has meant that certain crime details recalled by witnesses are not always transcribed (or transcribed inaccurately) by the police (Griffiths et al., 2011; Westera, et al., 2013). Such embedded inaccuracies in witness statements may represent even greater obstacles in the investigator's search for the truth than the diminished reports itself. The present study, is the first (as far as we know) that examines together *both* how much the witness reports, and in turn, how much (and how accurately) such information is recorded in the interviewer-written witness statement.

Witness recall has been regularly found to be problematic in a plethora of studies (see Howe et al., 2018 for a recent review of memorial performance). While situational factors (such as the time and duration of a criminal incident) are beyond an investigators' control, other matters may be managed by them. However, investigative interviewers have not always been found effective at eliciting information from witnesses (Fisher and Schreiber, 2007; Launay and Py, 2015). Techniques that have been argued to enhance the amount of information provided by witnesses have been developed, such as the cognitive interview (or CI; Fisher and Geiselman, 1992), and Conversation Management (or CM; Shepherd and Griffiths, 2021; Vrij et al., 2017; Walsh and Bull, 2010). Unfortunately, they are only rarely integrated into police

training programs around the world (Fisher and Schreiber, 2007; Memon et al., 2010). As such, interviewers may be oblivious to the existence of useful tools available to them, or they are reluctant to use them because they are not properly trained in their use. Where such research has been conducted there is a tendency to examine either one or just a few interviewing skills (e.g., see Bowles and Sharman, 2014, whose review examined the effects of leading questions on witness reports). Only a few studies (e.g., Clarke and Milne, 2001; Griffiths et al., 2011) have examined interviewers' skill levels, when attempts are to gather comprehensive accounts from adult witnesses (that is, those thought most likely to witness a crime, see Clarke and Milne, 2001). Even when they have been trained, these authors found that investigators do not always undertake such witness interviews skilfully. Underlying the importance of interview skills to interview outcomes, Walsh and Bull (2010) found an association between interviewer skills and the comprehensiveness and quality of information elicited from interviewees.

The investigative interview is a complex social interaction during which an investigator is obligated to systematically search for the truth (Oxburgh and Dando, 2011). For retrieving information from co-operative witnesses or victims, the CI protocol is widely accepted as one that can enhance memory recall in terms of accuracy and detail quantity (Dando et al., 2009; Verkamp and Ginet, 2010). The CI protocol is composed of procedures and mnemonic instructions (Fisher et al., 2010). For example, rapport building, when developed and maintained, has been found to be associated with more complete and accurate information from interviewees (Walsh and Bull, 2012). Rapport building may include interviewers offering friendly greetings of the witness and explaining the interview purpose, while providing instructions to enable witnesses to understand what is expected of them (see Griffiths and Milne, 2010). Care should also be taken when questioning witnesses, since interviewers providing misleading information or suggestive questioning can lead to interviewees incorporating false details into their accounts (Dickson and Hargie, 2006; Wright et al., 2015).

Further, interviewers should ask questions that avoid short answers, and witnesses should be allowed to give their responses without interruption (Fisher and Geiselman, 1992). Witnesses should be advised to report everything since, as noted, they may withhold information, not realizing its investigative importance (Fisher et al., 2010).

The CI protocol, as noted, also includes mnemonic instructions, which are essentially, other fundamental and important techniques that have been found to improve memorial recall, such as ‘context reinstatement’, where the interviewer encourages the witness to mentally recreate the event in terms of reliving their original sensations, emotions, and cognitions (Tulving and Thompson, 1973). Yet another technique (change perspective) involves requesting the witness to recall the event from the emotional, sensory or cognitive perspectives experienced at the time of the event (Fisher et al., 2010). Finally, requesting the witness to recall the event in a different temporal order may help them to elicit previously overlooked details (Griffiths and Milne, 2010).

Although promising results for the CI have been found in the laboratory (see Memon, Meissner, and Fraser, 2010), field studies have found problems in its application in practice, such as those relating to investigators’ concerns with the time required to undertake the entire protocol (Davis et al., 2005; Milne and Bull, 1999). Additionally, it has been found that police officers’ application of the CI is often patchy, since some of its constituent procedural components are not always implemented, or insufficient instructions are given to the interviewee (Clarke and Milne, 2001; Dando et al., 2008; Kebbell et al., 1999; Wright and Alison, 2004). These findings may be associated with the assumption that police officers tend to favour techniques that they perceive as the most effective interviewing components (Milne and Bull, 1999). Problems also have been found to persist with questioning techniques, with the overuse of leading and closed question types (and the underuse of open questions) leading to incomplete and inaccurate information witness accounts (Griffiths et al., 2011; Oxburgh et

al., 2010; Powell et al., 2005). An adaptation of the CI protocol was explored by Dando et al. (2008), who found that witnesses (after being asked to draw a sketch map of what they had seen) reported significantly more accurate details than those witnesses who were asked either to report everything or undertake context re-instatement. Moreover, prior research (e.g., Griffiths et al., 2011; Walsh and Bull 2015) has found that asking appropriate questions (such as open ones), and avoiding inappropriate question types (such as leading or closed ones) is insufficient as a questioning strategy to gain maximum information. Simply put, the use of open questions and the avoidance of certain others as a strategy does not in itself guarantee the acquisition of a detailed and reliable verbal account from interviewees. That is, a skilled and appropriate questioning strategy involves commencing each sub-topic within an interview with an open question (prefixed by instructions such as ‘tell, explain or describe’), followed by (i) probing ones (who, what, when, where, why and how), and (ii) appropriate closed ones (used merely to confirm or clarify what has already been said by the interviewee). Such an appropriate questioning strategy is more likely to gain the comprehensive level of accurate details that is the prescribed goal of investigative interviewing see Shepherd and Griffiths, 2021 for a fuller description of skilled questioning strategies, and more widely, skilled investigative interviewing).

Studies have also found that when interviewers overlook the use of an opening questioning style (or are inattentive as to what the witness has said) inaccuracy occurs between what is manually recorded on witnesses’ statements compared to what witnesses stated in interviews (Hyman Gregory et al., 2011; Köhnken et al., 1994; Westera et al., 2013). Such omissions, which are potentially valuable to the investigation of the crime, may be due to investigators’ tendency to select specific information from interviews (which they believe is relevant), constructing their own meaning to develop an account (Wright and Alison, 2004). Kebbell and Wagstaff (1997) found in their survey that police officers stated that they had as

objectives, when undertaking witness interviews, namely to (i) identify the details pertaining to what happened; (ii) identify what, if any, crimes have been committed (and, if so, by whom); (iii) gather evidence that enables any potential false alibis and the like to be overcome; and (iv) determining the witness's credibility.

### **The present study**

Research conducted on investigative interviews with suspects has found a positive association between interviewer skill levels and the subsequent completeness of accounts given by interviewees (Walsh and Bull, 2010), however studies examining interviewing in practice are still rare; therefore, knowledge concerning effective interviewing still remains incomplete (Walsh and Bull, 2015). As such, in the present study, it is our hypothesis that when interviewers skilfully undertake various tactics and present exemplary behaviours (as assessed, for example, by Walsh and Bull, 2010;2012; 2015) there is an association with the gaining of more accurate verbal accounts from witnesses. Given that there have been no prior studies concerning skill levels of interviewers and their written statements, proxied for witnesses, we chose not to offer any hypothesis concerning such associations. In sum, the study examines any linkages between (i) accuracy of information recalled by witnesses; (ii) accuracy of information recorded by investigators in the written witness statements; and (iii) investigators' interviewing skills.

## **Method**

### **Participants and materials**

After receiving ethical approval from the first author's home university, over three days, we observed 35 mock witnesses being interviewed by professional investigators from a small UK law enforcement agency. These witnesses had earlier watched one of nine different videos of either simulated or actual crime scenes that had been randomly allocated to them and shown to them no more than two hours earlier before the interview took place. As this number of crime



scene videos were used over the three days, we better ensured no participants (whether interviewers or witnesses), possessed any prior knowledge of the crime scene with which they were to be involved in either role.

Each video was around 2 minutes 30 seconds in length and were sourced either from law enforcement training materials (n=6) or from YouTube clips<sup>2</sup>. A range of different simulated or actual crimes were involved including road rage, theft or violence against the person, gun crime, and a terrorist incident. All videos showed the scenes from a bystander's perspective, situated quite close to the incident, except for one of the video clips that was shown from the perspective of the helmet camera of a cyclist who was physically assaulted. The agency involved did not investigate those crimes involved in the stimuli materials.

The mock witnesses were colleagues largely drawn from the same agency as the investigators, being either specialist support or administrative staff based at the agency's headquarters (where both the training and the mock interviews also took place). In addition to these staff, four colleagues of the first author's home university also acted as witnesses. No mock witness, undertook their role more than once in the research. Witnesses were advised that they would each watch a randomly allocated short video clip, on a lap top, and that they would then be interviewed shortly afterwards about their recall of what they saw. While the four University colleagues were not known to the interviewers prior their interviews, the remaining interviews were conducted with those mock witnesses with whom they had (to one extent or another) existing working relationships.

Of the 35 interviews that were conducted with the witnesses, five were removed from the analysis due to (i) two interviews lasting less than eight minutes, found to be insufficient time to undertake meaningful analysis of the entire range of dimensions that were measured<sup>3</sup>;

---

<sup>2</sup> These materials can be requested from the first author

<sup>3</sup> By interview, we mean not just the account gathering phase (i.e., questions and answers), but that of its entirety from its commencement, involving (for example) introductions, stating interview purpose, and general rapport building, in addition to

(ii) two interviews being video-recorded only partially (due to equipment failure); and (iii) one of the investigators being unable to participate fully owing to unforeseen circumstances. 30 interviews were thus left for analysis. Eighteen in the final sample of thirty witnesses were females, and all witnesses were aged between 24-59 years old.

With regard to the interviewers, all were serving professionals in that agency. Twenty of those 30 personnel each advised that they had ten years or more investigative experience (also stating that they had each conducted over 200 witness interviews). Seven investigators stated that they each had between 5-9 years' experience (and had each conducted between 100-200 witness interviews), with a further two reported possessing between 3-5 years' experience each (who stated that they had each conducted between 50-100 witness interviews). The remaining colleague had between 1-2 years' experience, and had undertaken around 10-15 interviews with witnesses. All participants were adults known to be at least 30 years of age. Eleven of the interviewers in the final sample were female.

All of the investigators were known to have received witness training once earlier in their career, that included training in CM techniques and the CI protocol. It is quite possible that some had practised some of these techniques only very rarely. Field studies (e.g., Clarke and Milne, 2001; Griffiths and Milne, 2006; Kebbell et al., 1999; Walsh and Bull, 2010; Walsh et al., 2017) have found that officers do not always undertake tasks that they have been trained to undertake, particularly if they find that these techniques (in their own estimation) are of little or no value to the interview aims of information gathering (or are perceived as too demanding to undertake and are thus avoided). Since for many investigators their original training would have been delivered several years earlier, in the week prior to the study being conducted, each of them received a half-day refresher training concerning the conduct of witness interviews delivered by a highly experienced former police trainer. In brief, this training included

---

the interview closure (where the interviewer provides a final summary of the interview, advice may be given as to what happens next and asking if the interviewee if there is anything further needed to be mentioned).

instruction on certain techniques that are required to effectively undertake the CM approach, the CI protocol, effective note-taking, and reminders about the use of the ADVOKATE mnemonic<sup>4</sup>.

## Procedure

In the week following that refresher training, each participant then interviewed one of the mock witnesses, following their typical practices when interviewing. Whether witness or interviewer, they were asked not to discuss what they saw with anyone else during the exercise.

Each witness was interviewed on a solitary occasion. Participants had been instructed during their refresher training to make notes of what the witness said in the interview. All of them acknowledged in any event that they took notes when conducting witness interviews in the field. Further, the investigators stated that in their practice they tended to write manual statements for witnesses, unless they believed that a witness was vulnerable. In that case they would audio-record the interview. In the research, we ensured no mock witness would be viewed as vulnerable.

Each of the 30 interviews with each witness included for analysis took place within two hours after watching the crime scene video (each interview being video recorded). Due to the time constraints interviewers were told that they had a maximum of an hour to interview each witness (reckoned to be quite sufficient time to comfortably undertake the task). In fact, these interviews lasted between 14 minutes to 29 minutes ( $M = 23.00$ ,  $SD = 4.73$ ). Interviewers were also advised by the first author that once they had obtained as much information as they believed they needed from witnesses (or when they felt that that the witness could not provide more information) they were then to write the witness statement, consult from the witness as to

---

<sup>4</sup> ADVOKATE refers to a judicial ruling in England and Wales that stated that interviews should include details of the (a) Amount of time the witness observed the incident; (b) details of physical Distance from the incident; (c) how Visible was the incident; (d) was the observation impeded by any Obstruction? (e) did the witness Know (or had seen anyone involved before; (f) Any reason to remember, if seen before (but only occasionally)? (g) how much Time has elapsed since seeing the incident?; (h) Error or material discrepancy – Is there any difference between description given and persons known to the investigation. Officers in England and Wales are trained to use this in witness interviews.

agreeing its contents, and then later hand it to the first author. Their statements were found not to follow any particular template, but often were ones that were chronologically ordered.

### **Analytical strategy**

#### **Phase I: Comparing accuracy of witnesses' verbal recall to the video stimuli**

The analyses consisted of three phases. In the first phase, having video-recorded the witness interviews, a Research Assistant (RA), trained by the first author, independently examined the sample of video-recorded witness interviews. The information provided by each of the 30 witnesses in the interviews were coded for accuracy (correctly recalled information), incorrect (e.g., saying that the car was blue when it was red) or confabulated (e.g., mentioning a detail or occurrence that was neither present nor happened), following Dando et al. (2008). From these details an accuracy rate was developed (i.e., number of correct details given by the witness, when compared to the overall accurate/inaccurate/confabulated details provided, after comparison to the video stimuli). Any details mentioned more than once were only noted on its first instance. This sample were subjected to inter-rater reliability measures, from a random sample of eight interviews (i.e., 27%) examined at random by the first author, finding strong inter-rater agreement (see Table 1).

#### **Phase II: Comparing interviewers' written statements to witness' verbal recall**

In the second phase of the analyses, a further trained RA independently examined the sample of the 30 written witness statements (as written by the interviewer), comparing these statements to witnesses' verbal recall from the recorded interview. The same codifications of accuracy, inaccuracy, and confabulation were those employed in the first phase. However, on this occasion the coding was that of similarities and differences between what the witness reported in the interview (regardless of their faithfulness to that of the original video stimuli) and what the interviewer recorded in the written statement. Accuracy rates were again

developed. The rate referred, firstly, to the number of details given by the witness, regardless as to whether these details were accurate/inaccurate/confabulated when compared to the stimuli. We then examined the written statement to establish how faithfully the interviewer reproduced what the witness had verbally reported. Our accuracy rate then was that of the overall accurate/inaccurate/confabulated details provided by the witness, comparing them to the accurate/inaccurate/confabulated and omitted details on the written statement as manually recorded by the interviewer. Since we had a video recording of the witness interview, we were able to examine what not only had been transposed to the written witness statement either correctly/incorrectly, but also, what had been omitted to be transposed by the interviewer. As these details might well be important these too were recorded as errors. The first author also examined eight of this sample (i.e., 27%), blind of the RA's ratings), obtaining highly suitable levels of inter-rater agreement (see Table 1).

### **Insert Table 1 Here**

### **Phase III: Assessing skill levels of interviewers from the interview recordings**

In the final phase, the first author analysed the recordings of the 30 witness interviews (blind at the time of its undertaking of the accuracy rates conducted in Phases 1 and 2), using a multi-itemed instrument of measurement to assess interviewer skills, developed from other published studies (i.e., Clarke and Milne, 2001; Walsh and Bull, 2010- see Appendix 1). In brief, the instrument noted the gender of both the interviewer/interviewee and interview duration, whether the interviewer performed interview tasks such as (at the start of the interview) recording the time and date, identifying those present, and the interview's location. Additionally, (at the end of the interview) whether the witness was asked if they wished to modify their verbal account, informed how to provide any extra information later, should they

recall something further, and whether the time of the interview ceased was noted. The instrument also included several measurements on an ascending five-point scale (where a score of '1' denoted unskilled, or poor, performance, and '5' referred to a highly-skilled performance) relating to interview tasks and behaviours as well as for overall interview performance (see Table 3). These tactics/behaviours were compiled from field studies concerning interview skills of trained officers in England and Wales (Clarke and Milne, 2001; Soukara et al., 2009; Walsh and Bull, 2010). Following Clarke and Milne (2001), a rating of '3' (satisfactory) on each of the dimensions was the minimum acceptable score. As such, ratings that fell beneath that figure were categorised as below acceptable standards in relation to that tactic/behavioural performance. The instrument also asked as to whether a sketch map was invited/undertaken and also which components of the (i) CI protocol were conducted; and (ii) ADVOKATE mnemonic were requested. No single dimension on the instrument was given added weighting.

A colleague of the first author, the highly experienced former police trainer was trained in the rating scale by the first author. He then independently measured 33% of the sample (n = 10). Table 2 demonstrates that the levels of concordance between these two raters varied between moderate to perfect agreement (Landis and Koch, 1977).

The first author compared interviewers' skill levels and compared them to the accuracy rates of both the witnesses' recall and the subsequent interviewer-generated written witness statements.

**Insert Table 2 here**

## **Results**

### **Overview of findings**

In all 30 interviews, we found that the investigators stated the interview's (i) date; (ii) start/finish times; (iii) location, and also asked the witness to identify themselves. In 73% of the

interviews ( $n = 22$ ) witnesses were asked at the end of the interview if they wished to add or modify any part of their verbal account. However, in only 30% of the interviews ( $n = 9$ ) did interviewers provide witnesses with a final summary. However, in each of these nine cases witnesses were then invited to make modifications. No witnesses, however, made any modifications. Results from each of the three phases of the analyses will now be presented in sequence.

### **Phase I: Comparing accuracy of witnesses' verbal recall to the video stimuli**

In this phase we found, across the corpus of 30 interviews (and the nine crime scene videos), an accuracy rate (correct information/correct, incorrect and confabulated information) of  $M = 87.67\%$  ( $SD = 10.37$ ), ranging between 52.63% and 100%. Table 3 provides the number of accurate, inaccurate and confabulated details provided by each witness. We also examined whether there was any correlation between the length of the interviewers' experience and witness accuracy rates, finding only a weak relationship,  $r = -.13$ ,  $n = 30$ ,  $p = 0.49$ .

**Insert Table 3 here**

### **Phase II: Comparing accuracy of written witness statements to that what witness reports in the recorded witness interview**

In the second phase of the analysis, a trained RA (unaware of the research aims) independently examined the sample of the written witness statements, employing the same percentage measures of accuracy, inaccuracy, and confabulation as in the study's first phase (though on this occasion after comparing the written statement solely to the witness interview). We found the mean accuracy rate of the statements written by the investigator was 86.78% ( $SD = 10.35$ ), when measured against what was stated by the witness during their interview (in the range of 52.38% to 100%). As such, all witness statements bar one possessed differences between what was written by the investigator and what was reported by the witness, with 20%

of those statements possessing accuracy rates of less than 80%, a figure we have used as the minimum tolerance level, though in 60% of our sample the accuracy rate did not attain 90%. We again examined the data to determine whether there was any correlation between the length of the interviewers' experience and the accuracy of the witness statements, finding what amounted to no relationship whatsoever,  $r = -.001$ ,  $n = 30$ ,  $p = 1.0$ .

### **Phase III: Assessing skill levels of interviewers**

In the third phase of the data analysis, the first author analysed the sample of interviews with the witnesses to assess interviewer skills and behaviours on the ascending 5-point rating scale (See Table 4). The overall mean rating for interview skill for the entire sample was 2.90 (SD = 0.84). We also examined the data to establish whether there was any relationship between the length of interviewers' experience and their overall skill levels, finding only there was only a small correlation,  $r = -.18$ ,  $n = 30$ ,  $p = 0.34$ , accounting for just 3% of the variance.

#### **Insert Table 4 here**

#### *Comparing interviewer skills (Phase III) against accuracy of witnesses' verbal recall (Phase I)*

Following Walsh and Bull (2010), the individual ratings of investigators were then dichotomised between those assessed as either unskilled/poor or unsatisfactory scores, falling beneath the accepted level of performance (scores of '1' and '2' on the rating scale) and those at or above the accepted level of performance (classified as '3', '4' or '5', or satisfactory, good or highly skilled respectively). Table 5 shows that those with higher overall interview skills on average obtained more accurate accounts than those rated as less skilled. This analysis found that 18 of the 26 tasks/behaviours measured on the ascending five-point Likert scale fell below the median score on the scale, with four of these being viewed as either 'poor' and none over the sample gaining a mean score that would be rated as 'good' or 'highly skilled'.



We further found that in those interviews, where witnesses provided an accuracy rate of at least 80% (a figure we offer as the minimum tolerance of error in their verbal recall), 95% of their interviewers were rated as at or above expected standards of proficiency in their overall interviewing skills. The corresponding figure for those interviewers who were assessed overall as below acceptable standards (where the verbal accuracy rate of witnesses fell below 80%) was much less (i.e., 55%). The relationship between these variables was found to be significant,  $X^2(1, N = 30) = 4.47, p = <.05$ .

From Table 5, it can be seen that in only two of the dimensions measured did the lesser skilled interviewers obtain more accurate information than their higher skilled counterparts. In one of those instances (i.e., *providing final summary*) the difference was marginal, while in the case of the task of *keeping the witness to the relevant topics* more information was obtained from the least skilled interviewers (though not significantly so). Further analysis revealed that those interviews where the interviewer asked the witness to undertake all three steps of (i) *reporting everything*; (ii) *re-instating mental context*; and (iii) *drawing a sketch map* of the criminal incident ( $n = 20$ ) resulted in an accuracy rate of  $M = 92.30\%$  ( $SD = 4.45$ ), whereas when interviewers conducted any two (or fewer) of these three steps ( $n = 10$ ) the accuracy rate was found to be  $M = 78.39\%$  ( $SD = 12.30$ ), a significant difference;  $t(28) = 3.09, p = <.05, d = 1.17$ . Moreover, overall interviewer skills levels were assessed as  $M = 3.15$  ( $SD = 0.81$ ) in the former group (i.e., those undertaking all the ‘three steps’), as opposed to overall interviewer skill levels being rated as  $M = 2.40$  ( $SD = 0.70$ ) among the latter group of interviewers (though such difference in skill levels between these two groups was not found significant;  $p = 0.96$ ). Table 5 also shows, following Cohen (1988), that effect sizes in 15 of the 26 dimensions measured would be regarded as strong, with just six viewed as fragile, the remaining five being of moderate strength.

**Insert Table 5 about here**

Table 6 presents data that reflects the frequency of tasks that were undertaken in the analysed sample, pertaining to the CI protocol and the ADVOKATE instructions<sup>5</sup>, in addition to the invitation to the witness to draw their recall of what happened. Table 3 also shows that the majority of investigators undertook several of the tasks associated with helping memorial performance of witnesses. At the same time, there were also tasks (i.e., change either temporal order or perspective, asking if there were any errors in the recall) that were undertaken only rarely. However, as can be seen from Table 6 there was a general neglect of the ADVOKATE questions. Only 13% ( $n = 4$ ) of investigators undertook four or more items, with the same number undertaking either one or none of the ADVOKATE items, while a further 63% ( $n = 19$ ) undertook to ask just two items. In 90% of those instances ( $n = 17$ ) the two questions that witnesses were asked concerned their distance from the criminal event and the lapse of time between that event and the subsequent interview).

**Insert Table 6 about here**

*Comparing interviewer skill levels (Phase III) to written statement accuracy (Phase II)*

Table 7 presents results when comparing interviewer skills levels conducted in the witness interviews against these manually recorded accuracy rates. Significant differences were found between interviewers' skill levels and their written statement accuracy. These replicated exactly the same dimensions as those previously reported when measuring interviewers' skill levels and witnesses' verbal recall accuracy. This was also the case after measuring *overall interview skills* and comparing these to the accuracy of the written statement. Effect sizes, as can be seen in Table 7, were strong in 14 of the 26 dimensions measured, with a further nine assessed as medium strength. Only three would be regarded as small ones.

**Insert Table 7 about here**

---

<sup>5</sup> See footnote 4 for an explanation of this mnemonic and its importance to the witness interview

After conducting an analysis of those written statements, where the interviewer had earlier asked the witness to undertake all three steps of (i) *reporting everything*; (ii) *re-instating mental context*; and (iii) *drawing a sketch map* of the criminal incident ( $n = 20$ ) an accuracy rate was found of  $M = 90.40\%$  ( $SD = 6.67$ ). In contrast, when interviewers had earlier conducted any two (or fewer) of these three steps ( $n = 10$ ) the accuracy of the written statements was found to be  $M = 79.53\%$  ( $SD = 12.79$ ), a significant difference;  $t(28) = 4.45$ ,  $p = <.05$ ,  $d = 1.68$ .

Finally, having examined how accurately (i) the witness provided a verbal account (by comparing that account to the video stimuli); and (ii) the interviewer completed the written statement (when compared to what the witness reported in the interview), we found an aggregated accuracy rate of  $M = 76.99\%$  ( $SD = 15.81$ ), in the range of 27.57% to 95.65%. That is, on average 23% of the details that were in the written statements were inaccurate either through recall errors made by witnesses (i.e., providing incorrect/confabulated details) or by errors made by interviewers (i.e., incorrect/confabulated/omitted details). It is understood that that witness errors are not necessarily caused by interviewers (and indeed may not be at all). It is well chronicled in the eyewitness literature the many reasons for witness failing to report accurately what they have seen. However, interviewing skills were found in the present study associated with more accurate witness recall and more accurate written witness statements. Specifically, for those investigators ( $n = 21$ ), whose overall interview skill levels were assessed as at or above acceptable levels of performance, the aggregated accuracy rate of phases 1 and 2 of the study was revealed to be  $M = 82.31\%$  ( $SD = 10.54$ ). The corresponding accuracy figure for those investigators whose skill levels were assessed as below those acceptable performance levels ( $n = 9$ ), was found to be  $M = 64.57\%$  ( $SD = 19.48$ ), a significant difference;  $t(28) = 3.25$ ,  $p = <.05$ ,  $d = 1.23$ .

## Discussion

In the present study (alike many prior studies) we measured initially witnesses' verbal recall for its accuracy. However, this study differed from those earlier ones since (with the same cohort of mock witnesses) we also examined the accuracy of subsequent interviewer-generated statements. That is, we emulated common field practices where these witness statements (in the vast majority of instances) are well known to the researchers as those that are manually compiled by interviewers. We hypothesised that there would be an association between interviewing skills and information accuracy verbally reported by witnesses in interviews.

Our findings, reinforced by consistently strong effect sizes, support our hypothesis that this accuracy rate was generally higher across the range of assessed tasks and behaviours when interviewers performed more skilfully. This was also found to be the case when we examined the accuracy of the written witness statements finding that more skilled interviewers produced more accurate witness statements. Overall interviewing skills were significantly associated with higher accuracy rates of information, in both the witnesses' verbal recall and the investigator-generated witness statements. Further, in interviews conducted by those investigators rated as least skilled, the accuracy rate was less than 2/3 on average in those cases. These findings follow similar patterns from previously conducted research (e.g., Walsh and Bull, 2010; 2012; 2015) whose field studies consistently found an association between skill levels and completeness of information. Together, these series of studies (when combined with the present one) lend weight to the belief that interview skills are not a luxury, but a necessity to the gaining of accurate and comprehensive accounts from interviewees; being the aim of prescribed information gathering models in which investigators are trained throughout the UK.

However, regardless of skill levels, we also found in every case in the sample (except one) the content of the written statements decreased in accuracy, when compared to what the witnesses stated during their interviews, and that in more than half the sample of interviews in

the present study the accuracy rate was less than 90%. Moreover, whether skilled or unskilled, certain interviewing tactics, such as questioning witnesses using the entire ADVOKATE procedure, were never seen in the study (and the full CI protocol was only followed once). As such, we remained unaware in the present study of the effects of their full usage on witness accuracy (although the CI has long been found in many other studies to promote increased and accurate witness reports, Memon et al., 2010). Notwithstanding these absences in the present study, when interviewers used *report everything* and the *mental re-instatement of context* (and also *the sketch map*), both skill levels and accuracy rates significantly increased.

Inaccurate written statements have been explained in prior studies (e.g., Brunel and Py, 2013; Griffiths et al., 2011; Kebbell and Wagstaff, 1996; Köhnken et al., 1994) as that related to police officers making judgments concerning the relevance and importance of information to the case, discriminating between details to make their own determinations concerning what should be recorded. However, the present study did not examine omissions on the written statement based on any relevance, but examined inaccuracies when compared to witness reports. Inaccuracies in written statements may also be connected to the memorial performance of the investigator, given what we understand as to the capability of working memory (Baddeley and Hitch, 1974). In short, interviewers find it highly challenging to remember everything accurately that a witness says, particularly when they perform other demanding tasks simultaneously. It should not be surprising that these cognitive demands placed upon investigators often leads to abridged, inaccurate and/or distorted versions being created in the written witness statements (Köhnken, 1994). It has been found that investigators may react to such cognitive demands by using more closed and leading questions (Westera et al., 2011). Such questioning strategies are known to yield fewer (and less accurate) details (Dickson and Hargie, 2006). We also found that those interviewers obtaining more accurate accounts were rated significantly more skilful in their questioning strategies.

When interviewers read back statements, they have written from the verbal information provided to them, it might be expected that witnesses might contest inaccuracies. We found this did not occur in our study, similar to findings in prior research (Rock, 2001). Whether such acceptance of incorrect statements by witnesses is due to fatigue at the end of the interview, power differentials in police interviews or due to witnesses being socially acquiescent, trusting the interviewer to have recorded accurately what they have reported, any inaccuracies can lead to problems later in the criminal justice process. The written statement remains important to both criminal investigations and the prosecution of a case. As such, inconsistencies between that statement and that which a witness provides in court may well be used to discredit their testimony. In these circumstances, perhaps all witness interviews should be either audio or video recorded so that a permanent and faithful record is made, rather than the attenuated ones found in the present study (and also in preceding ones, e.g., Hyman Gregory et al., 2011; Köhnken et al., 1994; Westera et al., 2013). Recording of interviews at least provides greater confidence that all details reported by witness will be preserved. Electronic recording of interviews may well create more transparency (Rock, 2001). However, they may also bring other challenges. For example, logically arranged witness statements written by investigators, though more deficit in their accuracy, are likely much easier to process than audio or video-recorded interviews where the witness may well recall details in a more random manner (Westera et al., 2011). Nevertheless, the use of body worn cameras by police officers to gather first accounts from victims and witnesses upon arrival at a crime scene have been developments generally viewed as having positive benefits.

Self-authored witness statements may be another alternative. However, they too will be problematised by similar issues of a lack of structure in recall, which would only be compounded by any limitations of witness illiteracy. Notwithstanding these concerns, the self-administered interview (SAI) framework has seen some promising results in trials (see Horry

et al., 2021). However, the SAI has only ever been intended as a prelude to a more typical witness interview, and not a replacement. Ultimately, we argue that such solutions will only serve to mask shortfalls in interviewing skills.

### **Limitations and future directions**

This was an exploratory study, containing a corpus of 30 interviews. Clearly, more research needs to be undertaken before we can safely draw firm conclusions. At the same time, however, the witness interviews were subjected to in-depth analyses, and the study contained several phases including the comparison between accuracy rates between written statements and verbal recall during criminal investigations. Further, all the interviews were conducted by trained and (in the majority of cases) highly experienced professional investigators. While we found no relationship between interviewers' experience and their exhibited skill levels when interviewing witnesses, (indicating that belief in experience as a sole means to elevate skill levels is a mistaken one), the use of such practitioners in the study does provide greater confidence in the study's applicability to practice, when compared to the majority of laboratory studies who do not use such professionals as interviewers. Our initial findings then may prompt researchers when conducting experimental research into witness memory to consider measuring how skilfully mock witnesses are interviewed, when reporting the accuracy of eyewitness accounts since we found that skill levels was significantly associated with witness (and indeed witness statement) accuracy.

The matter that there were nine videos as stimuli may be viewed as another limitation. The usage of nine videos very probably reduced the chances considerably of either the interviewers or all but four of the witnesses (all employed in the same small law enforcement agency) knowing in advance what crime scene their role involved. Such information may well have become more likely known had we used just the one crime scene, where informal conversations between colleagues in that agency over the period of the conducted experiment

may well have alerted others yet to be involved of what to expect. Nevertheless, there may well be variation in videos that prompted more memorable details than others, possibly prompted, say, by an increased emotional valence. Neither did we control for any individual differences that may have existed amongst witnesses. Ultimately however, this study was not a focus purely on memorial performance, but more importantly if (and what way) recall was associated (even affected) by interviewer skills. As such, however much or little a witness recalls, our study found increased amounts of accurate details were recalled in interviews conducted more skilfully. More, in these particular interviews, the written statements were found to be more faithful to the verbal content provided by witnesses. This may well be because more skilful interviewers tend to be those more attentive to what the witness says when conducting interviews. Our findings revealed that more accurate reports and statements were associated with significantly higher rated active listening skills.

Another limitation concerns mock witnesses in the present study who may well have been more attentive than might be the case in real-life settings, since they were given prior instructions that they were about to view a criminal incident about which they would later be asked to provide a recall (and were thus likely to be better prepared and task-focussed). It is true that the accuracy rates found in the study represent higher ones than usually found in research. The matter that our witnesses were those who, in their professional lives, undertake duties associated with criminal investigations (or, in the case of our university colleagues, were familiar with criminal investigations) might have led to these higher rates of verbal recall. However, as noted, this study concerned the connected matters of skills level and witness accuracy (and not just the latter). Such a potentially confounding variable as the status of our witnesses may suggest that real-life witnesses, not having either similar professional experience or prior awareness that they were about to witness a criminal incident, may perform even worse in authentic situations when called upon to recount what they saw as part of a criminal



investigation. Further, the time lapse between a witness watching the video stimuli and the interview taking place was around two hours. They returned to their normal duties between the two events which is believed by the researchers a suitable distraction technique. Our window of opportunity of the training course meant that we were confined to such smaller timescales. While, this time period is likely to be less than that experienced by witnesses in actual cases, it is still longer than that found in some published studies. Nevertheless, it is recommended that future research includes longer periods of time be built in to their design. That said, our prior point concerning the study examining interviewer skill assessment remains.

We also acknowledge that all but four of the interviews were conducted with mock witnesses who were backroom colleagues of the interviewers. As such, any pre-existing professional or personal relationship any mock witness had with an interviewer may have affected outcomes. However, we undertook a pre-experiment check with the senior managers with the agency to ensure that those interviewers and witnesses who were known to have close affiliations with each other were kept apart. Nevertheless, we cannot rule out the possibility of their existing working relationships being a confound. At the same time, the four interviewees not known to the interviewers did not produce outlier results. Still, we recommend future research ensures that interviews are conducted with those unknown to each other.

Finally, in connection with the national lockdown in England and Wales following the global pandemic, advice was given to police officers in that country by the National Investigative Interviewing Strategic Steering Group to interview witnesses over the telephone in ‘straightforward’ cases (and where their vulnerability was believed not to be an issue) (National Investigative Interviewing Strategic Steering Group, 2020). Officers were then to compose witness statements from that phone conversation. What effects such a method of evidence gathering has upon accuracies in either witnesses’ verbal recall or the interviewer-generated written statements remains as yet unknown, though research is urgently recommended.

## Conclusion

The present study undertook an innovative paradigm of measuring eyewitness accuracy at two key phases of the investigative process; gathering accurate accounts from eyewitnesses and compiling accurate written statements. Our findings stress the importance of interviewer skills when gathering accurate witness accounts. While we recognise that witnesses make errors in when recalling events, for reasons long and repeatedly chronicled and understood, it nevertheless behoves researchers and practitioners (given the importance of eyewitnesses to both progress and outcomes of criminal investigations) to identify areas where we can minimise those errors. We also acknowledge that investigators have many tasks to perform when conducting interviews. Thus, it perhaps should not be surprising that they cannot (accurately) always recall all what is said by their interviewees. Gathering eyewitness testimony then can be fraught with error. Our findings from the present study also suggest that such fallibilities are compounded not only by shortfalls in either witness or investigator memory, but also by those can be remedied within the orbit of law enforcement; that is, by undertaking *skilled* investigative interviewing.

There was no external funding for the present study.

The authors have no conflicts of interest to declare.

This study is dedicated to the memory of XXXXXXXXXXXX.

## References

- Baddeley, A.D. and Hitch, G. (1974). 'Working memory', in Bower, G.A. (ed.) *Psychology of learning and motivation*. New York: Academic press, pp. 47-89  
[http://dx.doi.org/10.1016/S0079-7421\(08\)60452-1](http://dx.doi.org/10.1016/S0079-7421(08)60452-1), .
- Bowles, P.V. and Sharman, S.J. (2014) A review of the impact of different types of leading interview questions on child and adult witnesses with intellectual disabilities. *Psychiatry, Psychology and Law*, 21(2), pp. 205-217. [doi.org/10.1080/13218719.2013.803276](https://doi.org/10.1080/13218719.2013.803276)

Brunel, M. and Py, J. (2013) Questioning the acceptability of the Cognitive Interview to improve its use. *L'Annee psychologique*, 113(3), pp. 427-458.  
Doi:10.4074/S0003503313003059

Clarke, C., and Milne, R. (2001) *National evaluation of the PEACE investigative interviewing course*. Home Office.

[Cohen, J.](#) (1988). *Statistical Power Analysis for the Behavioral Sciences*. Routledge.

Coupe, T., and Griffiths, M. (1996) *Solving residential burglary* (Crime Detection and Prevention Series No. 77). Home Office.

Dando, C., Wilcock, R. and Milne, R. (2008) The cognitive interview: Inexperienced police officers' perceptions of their witness/victim interviewing practices. *Legal and Criminological Psychology*, 13(1), pp. 59-70. doi:10.1348/135532506X162498

Dando, C., Wilcock, R. and Milne, R. (2009) The cognitive interview: The efficacy of a modified mental reinstatement of context procedure for frontline police investigators. *Applied Cognitive Psychology: The Official Journal of the Society for Applied Research in Memory and Cognition*, 23(1), pp. 138-147. doi:10.1002/acp.1451

Dando, C., Wilcock, R., Milne, R. and Henry, L. (2009) A modified cognitive interview procedure for frontline police investigators. *Applied Cognitive Psychology: The Official Journal of the Society for Applied Research in Memory and Cognition*, 23(5), pp. 698-716. doi:10.1002/acp.1501

Davis, M.R., McMahon, M. and Greenwood, K.M. (2005) The efficacy of mnemonic components of the cognitive interview: Towards a shortened variant for time-critical investigations. *Applied cognitive psychology*, 19(1), pp. 75-93. doi:10.1002/acp.1048

Dickson, D., and Hargie, O. (2006) 'Questioning', in Hargie, O. (ed.) *The handbook of communication skills*. London: Routledge, pp. 121-146.

Fisher, R.P., (2010) Interviewing cooperative witnesses. *Legal and Criminological Psychology*, 15(1), pp. 25-38. doi:10.1348/135532509X441891

Fisher, R. P., and Geiselman, R. E. (1992) *Memory-enhancing techniques for investigative interviewing: The cognitive interview*. Springfield IL: Charles C. Thomas.

Fisher, R. P., and Schreiber, N. (2007) 'Interviewing protocols to improve eyewitness memory', in Tolia, M., Lindsay, R., Ross, D. and Reed, J. (eds.), *The handbook of eyewitness psychology: Vol. 1. Memory for events*. Mahwah, NJ: Erlbaum Associates, pp. 53-80.

Fisher, R. P., Ross, S. J., and Cahill, B. S. (2010) 'Interviewing witnesses and victims', in Granhag, P.A., (ed.), *Forensic psychology in context: Nordic and international approaches*. Cullompton: Willan Publishing, pp. 56 -74.

Griffiths, A. (2008) *An examination into the efficacy of police advanced investigative interview training?* Unpublished PhD thesis. University of Portsmouth.

- Griffiths, A., and Milne, B. (2010) 'The application of Cognitive Interview techniques as part of an investigation', in Ireland, C.A., and Fisher, J. (eds.), *Consultancy and Advising in Forensic Practice*. Chichester: John Wiley & Sons, Ltd, pp. 69–90.
- Griffiths, A., Milne, B. and Cherryman, J. (2011) A question of control? The formulation of suspect and witness interview question strategies by advanced interviewers. *International Journal of Police Science & Management*, 13(3), pp. 255-267. doi:10.1350/ijps.2011.13.3.219
- Howe, M. L., Knott, L.M., and Conway, M. A. (2018) *Memory and miscarriages of justice*. London: Routledge
- Gregory, A.H., Schreiber Compo, N., Vertefeuille, L. and Zambruski, G. (2011) A comparison of US police interviewers' notes with their subsequent reports. *Journal of Investigative Psychology and Offender Profiling*, 8(2), pp. 203-215. doi:10.1002/jip.139
- Kebbell, M.R. and Milne, R. (1998) Police officers' perceptions of eyewitness performance in forensic investigations. *The Journal of social psychology*, 138(3), pp. 323-330. doi:10.1080/00224549809600384
- Kebbell, M.R. and Wagstaff, G.F. (1996) Enhancing the practicality of the cognitive interview in forensic situations. *Psychology*, 7(16). Retrieved from <http://www.cogsci.ecs.soton.ac.uk/cgi/psyc/newpsy?7.16>
- Kebbell, M.R. and Wagstaff, G.F. (1997) Why do the police interview eyewitnesses? Interview objectives and the evaluation of eyewitness performance. *The Journal of Psychology*, 131(6), pp. 595-601. doi:10.1080/00223989709603841
- Kebbell, M.R., Milne, R. and Wagstaff, G.F. (1999) The cognitive interview: A survey of its forensic effectiveness. *Psychology, crime and law*, 5(1-2), pp. 101-115. doi:10.1080/10683169908414996
- Köhnken, G., Thürer, C., and Zoberbier, D. (1994) The cognitive interview: Are the interviewers' memories enhanced, too? *Applied Cognitive Psychology*, 8, pp. 13–24. doi:10.1002/acp.2350080103
- Landis, J.R., and Koch, G.G. (1977) The measurement of observer agreement for categorical data. *Biometrics*. 33, pp. 159-74.
- Launay, C. and Py, J. (2015) Methods and aims of investigative interviewing of adult witnesses: An analysis of professional practices. *Pratiques psychologiques*, 21(1), pp. 55-70. doi:10.1016/j.prps.2014.11.001
- Meissner, C. A., Sporer, S. L., and Schooler, J. W. (2007) 'Person descriptions as eyewitness Evidence', in Lindsay, R., Ross, D., Read, J. and Toglia, M. (eds.), *Handbook of Eyewitness Psychology: Memory for People*. Mahwah NJ: Lawrence Erlbaum & Associates, pp. 3-34.
- Memon, A., Meissner, C.A. and Fraser, J. (2010) The Cognitive Interview: A meta-analytic review and study space analysis of the past 25 years. *Psychology, public policy, and law*, 16(4), pp. 340-372. doi:10.1037/a0020518

- Milne, R., and Bull, R. (1999) *Investigative Interviewing: Psychology and Practice*. Chichester: John Wiley and Sons.
- National Investigative Interviewing Strategic Steering Group. (2020). *Interviews with victims and witnesses during the Covid-19 pandemic*. Briefing document.
- Oxburgh, G.E. and Dando, C.J. (2011) Psychology and interviewing: what direction now in our quest for reliable information?. *The British Journal of Forensic Practice*, 13 (2), pp. 135-144. doi:10.1108/14636641111134378
- Powell, M., Fisher, R., and Wright, R. (2005) 'Investigative Interviewing ', in Brewer, N., and Williams, K. (eds.). *Psychology and law: An empirical perspective* ). New York: Guilford. pp. 11-42.
- Rock, F. (2001) The genesis of a witness statement. *Forensic Linguistics*, 8, pp. 44-72. <https://doi.org/10.1558/sll.2001.8.2.44>
- Shepherd, E., and Griffiths A. (2021) *Investigative interviewing: The conversation management approach*. Oxford: Oxford University Press.
- Soukara, S., Bull, R., Vrij, A., Turner, M. and Cherryman, J. (2009) What really happens in police interviews of suspects? Tactics and confessions. *Psychology, Crime & Law*, 15(6), pp. 493-506. doi:10.1080/10683160802201827
- Tulving, E. and Thomson, D.M. (1973) Encoding specificity and retrieval processes in episodic memory. *Psychological review*, 80(5), pp. 352-373. doi:10.1037/h0020071
- Verkamt, F. and Ginet, M. (2010) Variations of the cognitive interview: Which one is the most effective in enhancing children's testimonies? *Applied Cognitive Psychology*, 24, pp. 1279-1296. doi:10.1002/acp.1631
- Vrij, A., Meissner, C.A., Fisher, R.P., Kassin, S.M., Morgan III, C.A. and Kleinman, S.M. (2017) Psychological perspectives on interrogation. *Perspectives on Psychological Science*, 12(6), pp. 927-955. <https://doi.org/10.1177/1745691617706515>
- Walsh, D. and Bull, R. (2010) The interviewing of suspects by non-police agencies: What's effective? What is effective. *Legal and Criminological Psychology*, 15, pp. 305-321. DOI:10.1348/135532509X463356
- Walsh, D. and Bull, R. (2011) Benefit fraud investigative interviewing: A self-report study of investigation professionals' beliefs concerning practice. *Journal of investigative psychology and Offender Profiling*, 8(2), pp. 131-148. doi:10.1002/jip.137
- Walsh, D. and Bull, R. (2012) Examining rapport in investigative interviews with suspects: Does its building and maintenance work?. *Journal of police and criminal psychology*, 27(1), pp. 73-84. doi:10.1007/s11896-011-9087-x
- Walsh, D. and Bull, R. (2015) Interviewing suspects: Examining the association between skills, questioning, evidence disclosure, and interview outcomes. *Psychology, Crime & Law*, 21(7), pp. 661- 680. doi:10.1080/1068316X.2015.1028544

Westera, N.J., Kebbell, M.R. and Milne, B. (2011) Interviewing witnesses: do investigative and evidential requirements concur? *The British Journal of Forensic Practice*, 13(2), pp. 103–113. DOI: 10.1108/14636641111134341

Westera, N., Kebbell, M. and Milne, B. (2013) Losing two thirds of the story: a comparison of the video-recorded police interview and live evidence of rape complainants. *Criminal Law Review*, 4, pp. 290-308.

Wright, A.M. and Alison, L. (2004) Questioning sequences in Canadian police interviews: Constructing and confirming the course of events?. *Psychology, Crime and Law*, 10(2), pp. 137-154.

Wright, D.S., Nash, R.A. and Wade, K.A. (2015) Encouraging eyewitnesses to falsely corroborate allegations: Effects of rapport-building and incriminating evidence. *Psychology, Crime & Law*, 21(7), pp. 648-660. <https://doi.org/10.1080/1068316X.2015.1028543>

## Appendix 1: Witness interviewer skills rating scale

Interviewer	Male/Female			
Interviewee	Male/Female			
Length of interview				
To what extent did you include the following interviewing behaviours? For each item circle to appropriate point on the scale and add any comments you feel are necessary				
Planning and Preparation (may not be assessed until end of interview)				
1. Planning and preparation. For example, a score of 5 would demonstrate effective planning and preparation, good knowledge of information important to investigation, well thought out questioning strategy				A score of 1 would demonstrate poor planning and preparation such as case details insufficiently unknown, etc.
5	4	3	2	1
Comments; good/bad practice examples				
Engage and Explain phase				
2. Were the following details provided?				
2a. Date of interview	Yes	No		
2b. Time of commencement	Yes	No		
2c. Location of interview	Yes	No		
2d. Identification of all persons present	Yes	No		
3. Was the purpose of the interview explained?				
5. (Legally correct, clearly & professionally)	4	3	2	1 (Not explained)
Good/bad examples				
4. Was the interview process and structure (routine and 'route map') explained?				
5 (Legally correct, clearly & professionally)	4	3	2	1 (Not explained)
Good/bad examples				
5. Was it explained that the interview was an opportunity for the interviewee to provide their own account?				
5 (Legally correct, clearly & professionally)	4	3	2	1 (Not explained)
Good/bad examples				
6a. Ground rules: report everything even small things- "I wasn't there/I don't know what happened/supplying detail is important/ nothing too trivial or irrelevant / can ask for a break at any time				
5. (Legally correct, clearly & professionally)	4	3	2	1 (Not explained)
6b. Ground rules: if they do not understand to say so/ if they do know to say so, to point out if interviewer misunderstands/ do not guess				
5. (Legally correct, clearly & professionally)	4	3	2	1. Not explained
Good/bad examples				
7. Was there evidence of rapport building/ maintenance throughout?				
5 (Excellent rapport throughout)	4	3	2	1 (No rapport attempted)
NOTE: Does such <i>necessary</i> coverage extend rapport building, relaxing witness, ice-breaking, help witness understand that they do most of the talking etc, early empathic gestures)				
Good/bad examples				
Account phase				
8. Was the interviewee encouraged to give their free narrative of events?				

5 (Frequent encouragements/ TED approach)	4	3	2	1 (No encouragements, interruptions )
Good/bad practice				
9. Were the investigative topics developed/ probes and 'WH' questions?				
5 (Legally correct, clearly & professionally)	4	3	2	1 (Not developed)
Good/bad practice				
10. Was any lack of co-operation dealt with? (I.e. hostility, monosyllabic answers, reluctance )				
5 (Legally correct, clearly & professionally)	4	3	2	1 (Not dealt with)
Good/bad practice				
11. Was there a clear, logical and appropriate structure to the interview?				
5 (Appropriate)	4	3	2	1 (Inappropriate- topic hopping)
12a. Was there evidence of an appropriate use of questions (i.e. predominantly open questions consistent with the abilities and knowledge of the interviewee, probing where and when necessary, closed only for clarification/confirmation of stated material - and a lack of statement type, closed, suggestive, multiple, complex, forced choice, or leading questions, etc.)				
5 (Appropriate)	4	3	2	1 (Inappropriate)
12b. Was there evidence of appropriately arranged questioning strategies? (i.e. T.E.D type questions, leading to specific open and then to closed, used for probing or clarification)				
5 (Appropriate)	4	3	2	1 (Inappropriate)
13. Was the interview kept to relevant topics?				
5 (Appropriate)	4	3	2	1 (Inappropriate)
14. Did the interviewer use summaries and links?				
5 (Appropriate)	4	3	2	1 (Inappropriate)
15 Did the interviewer use interviewee's words and language				
5 Always	4	3	2	1 (Never)
16. Was any information provided thoroughly explored?				
5 (Thoroughly)	4	3	2	1 (Not explored)
17. Did the interviewer recognise and explore any inconsistencies?				
5 (Thoroughly)	4	3	2	1 (Not explored)
18. Were pauses used?				
5 (Legally correct, clearly & professionally)	4	3	2	1 (Not used)
19. Was there evidence of Conversational management skills?				
5 (Apparent)	4	3	2	1 (Not apparent)
20. Was there evidence of Cognitive interview skills?				
5 (Apparent)	4	3	2	1 (Not apparent)
Comments; good/bad practices				
21. CI - advise which CI components used Recall everything/Reinstatement of context/witness compatible questioning/Use of images or sketch maps/Encouraged to concentrate/Change temporal order/Change perspective				
Interviewer Characteristics				
To what extent did the interviewer demonstrate the following behaviour?				
22. Self confidence				
5 (Clear and confident)	4	3	2	1 (Nervous and unsure)
23. Open mindedness (probes new details, explores non-confirmatory details)				
5 (Non- judgemental)	4	3	2	1 (Persists with own entrenched view)
24. Flexibility				
5 (Responds to new information)	4	3	2	1 (Persists with own entrenched strategy)
25. Communication skills				



5 (Clear, appropriate speech)	4	3	2	1 (Complex/unclear)
26. Active listening				
5 (Always)	4	3	2	1 (Never)
27. Expresses empathy				
5 (Appropriately)	4	3	2	1 (Never)
Comments; good/bad practices				
28. Insert if ADVOKATE used (if only in part) Yes/No - if so which components Amount of time under observation/Distance/Visibility/Obstruction/Known or seen before/Any reason to remember/Time lapse/Error or material discrepancy possibility				
Closure phase				
29. Did the interviewer summarise the whole interview?				
5 Comprehensively	4	3	2	1 (No summary)
30. Was the interviewee invited to add, alter or correct any issues?			Yes	No
31. Was the interviewee informed of what may happen next?				
5 (Legally correct, clearly and professionally)	4	3	2	1 (Not Informed)
32. Were details provided of how to give further information? Yes/No				
33. Did the interview use appropriate language throughout the interview Yes/No				
34. Time of finish given			Yes	No
Comments; good/bad practices				
35. Overall assessment of interview				
5 Highly skilled	4 Skilled	3 Satisfactory	2 Not quite adequate	1. Needs training