RESEARCH ARTICLE

Demonstrating detail in investigative interviews—An examination of the DeMo technique

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Summary
Attaining an uninterrupted free report (FR) is at the heart of best practice investigative interviewing guidance. However, witnesses/victims do not naturally provide detailed accounts. Techniques have been developed to counter-act this, such as a report everything (RE) instruction. This research examined the relative effectiveness of an addition to the RE component, a demonstration of the level of detail, using a behavioural exemplar, by describing an innocuous object; the Demonstration for More detail (DeMo) technique. Participants (N = 61) watched a mock crime video and asked to recall it using one of three instructions: (a) basic FR as the control, (b) RE instruction and (c) RE instruction plus DeMo technique. Participants who were given the DeMo technique recalled more details than both the control and RE groups. Accuracy rates were similarly high across all conditions. The implications of using the DeMo technique within an investigative interview are discussed.

KEYWORDS
free recall, free report, grain size, investigative interview, report everything, victim interview, witness interview

1 INTRODUCTION

Gathering full and faithful information from witnesses, victims and sources is essential to police investigations and, in the current climate, to ensuring security of a country (Milne & Bull, 2016; Milne, Griffiths, Clarke, & Dando, 2019). The aim of a well-conducted investigative interview is to gather as much accurate and relevant information as possible in an ethical and unbiased way. It is internationally recognised that free recall accounts result in the most accurate statements and are therefore recommended in evidence-based interviewing guidance around the world (e.g., Achieving Best Evidence Guidance, Home Office, 2002, 2007, 2011; see Davies, Bull, & Milne, 2016 for a review). However, witnesses and victims do not naturally provide full detail when they engage in a free recall (Koriat & Goldsmith, 1996).

Even co-operative adults often withhold more information than they spontaneously report (Fisher & Geiselman, 1992). One reason is the obedience of social communication rules. From a very young age, we start to learn how to interact with each other within a conversation. We start to learn rules that underpin effective communication. One such rule concerns the ‘Maxim of Quantity’ (Grice, 1975), where it is deemed inappropriate if one person dominates the conversation and that turn taking is more appropriate. As a result, people normally provide as much information as they think is needed in each turn of a conversation, and no more. However, in an investigative interview, a different set of communication rules apply, some of which are completely opposite to the usual ways of communicating (e.g., dictating the control of conversation, and reporting in detail). This is because the goal is to obtain as much good quality information from the interviewee’s memory as possible, a goal that does not normally underlie usual conversation.

Memory for an event is believed to be stored as a series of coded representations whereby what is stored in memory is not an exact replica of the target event itself but a multiplicity of interconnected...
codes that preserve the experience (Bower, 1967). Hence, there are likely to be several means of retrieving or cueing episodic memory (Melton & Martin, 1972). Even partial or apparently insignificant features of an event may trigger previously inaccessible memory codes. However, interviewees often feel ill at ease or apprehensive in a formal interview setting. They may believe the police are already knowledgeable about the event and are only likely to be interested in ‘important’ and fully remembered information (see Milne & Bull, 1999). Consequently, information is often held back. Furthermore, witnesses and victims will expect the interviewer to do most of the talking and to be asking lots of questions, based on media representations of police interviewing (Fisher & Geiselman, 1992; Milne, 2017). As a result, interviewees control the reporting of recalled information and decide at what level of precision to report (Pansky, Koriat, & Goldsmith, 2005). Interviewees may strategically regulate the grain size of their answers and provide accurate coarse information instead of the more detailed fine grain elements of memory for an event (Goldsmith, Koriat, & Weinberg-Elezer, 2002; Koriat & Goldsmith, 1996). This so-called grain size control is often used when people are interviewed in an open-ended, free report (FR) format (Goldsmith, Koriat, & Pansky, 2005).

Most interviewees simply do not know the level of detail required and may think that descriptive details are unimportant (Fisher, 2010; Powell, Fisher, & Wright, 2005; Vrij, Hope, & Fisher, 2014). Thus, interview techniques have been developed to counter-act witness and victim expectations and natural communication processes. One such technique is a report everything (RE) instruction, a method to encourage people to report as much detail as possible (Fisher & Geiselman, 1992; Milne, 2004, 2017). An RE instruction aims to lower an interviewees’ subjective threshold for reporting information, by asking interviewees to RE they remember, in any order they wish, without any editing, even if the interviewee thinks the details are trivial, not important, or cannot remember completely an aspect of the target event (Fisher & Geiselman, 1992; Milne, 2004, 2017). This helps to promote elaborate recall, aiming to get interviewees to report fine-grain detail and to counter-act everyday communication rules that hinder detailed reporting. When providing a RE instruction, interviewees can additionally be encouraged to ignore the attributed confidence they give to specific pieces of information and to RE as it comes to mind, even if they do not feel sure of this (Milne, 2004, 2017; Milne & Bull, 1999). This is to minimise omissions of possibly valuable information, as research has demonstrated that the confidence-accuracy relationship in episodic memories is by no means always a positive one: an interviewee can be very confident about an incorrect detail, and very unsure about a correct one (e.g., Evans & Fisher, 2011; Odinot, 2008; Odinot & Wolters, 2006; Sarwar, Allwood, & Innes-Ker, 2014; Shaw, Appio, Zerr, & Pontoski, 2007). The encouragement to ignore attributed confidence must, however, be guided by clear instruction not to make anything up or fill in the gaps in their memory, to temper guessing or making assumptions (Milne, 2004, 2017; Milne & Bull, 1999).

An RE instruction is considered a general tool for investigators in obtaining free recall accounts from interviewees and has been incorporated into many investigative interviewing protocols around the world (see, e.g., Achieveing Best Evidence, Home Office, 2011; UK PEACE Cognitive Interview, Milne, 2004, 2017; New Zealand Police, 2008; Schollum, 2005; Van Amelsvoort & Rispens, 2017). Maximising the amount of information in the free recall phase of the interview is of crucial importance as research has shown that techniques used to develop such accounts, in subsequent phases of the interview, often result in detail of poorer quality (even when these are open-ended prompts; Milne, Clare, & Bull, 1999; Kontogianni, Hope, Taylor, & Gabbert, 2020).

RE instructions contain a remark for the interviewee ‘to be as detailed as possible’ in their report. In recent research, a practice interview (see Danby, Brubacher, Sharman, & Powell, 2015) or sample story have been used to demonstrate the level of detail desired with children. One of the most extensive studied methods to increase the reporting of details during a free recall in adult account emanates from the verbal lie detection literature: the model statement (MS) (see Vrij, Leal, & Fisher, 2018). An MS is a detailed example statement of an event that is unrelated to the topic of the interview, often presented by using an audio file (see Leal, Vrij, Warmelnik, Vernham, & Fisher, 2015). Leal et al. (2015) found that giving interviewees an example of what to do works better in terms of obtaining detail than the mere instruction ‘to be as detailed as possible’. Participants who had listened to the MS reported more than twice as much as participants who had not listened to it. Although Brackman, Otgaard, Roos af Hjelmsäter, and Sauerland (2017) found no such effect of the MS technique, most research demonstrates that an example facilitates the elicitation of information (see Bogaard, Mejjer, & Vrij, 2014; Evens et al., 2016; Harvey, Vrij, Leal, Lafferty, & Nahari, 2017; Leal et al., 2015; Leal, Vrij, Deeb, & Jupe, 2018; Porter et al., 2017; Vrij et al., 2017). Leal et al. (2018) pose that the MS may work better than a verbal instruction because an example is more concrete. Moreover, it works as a social comparison (Vrij et al., 2018). An example provides a reference standard and raises expectations about the level of detail required (Festinger, 1954). Porter et al. (2017) suggest that specific recall features are being facilitated, depending on the content of the MS. For example, a spatially oriented MS led to an increase in spatial details, where an MS emphasizing temporal details let to an increase in temporal information.

Anecdotally, after years of training investigators, the first and second authors noticed that, in practice, police interviewers were describing non-crime related objects as part of their RE instruction in an attempt to help explain to the interviewee the level of detail required. In these behavioural exemplars, the interviewer describes an innocuous object (e.g., a water bottle) that also acts as an active reminder throughout the interview process by putting it on the table in front of the interviewee. To the best of our knowledge, this live demonstration was used and suggested for the first time by a police officer during an advanced witness interview training session in the UK in 2003. The live demonstration of required detail expands on the RE instruction, which is based on extant psychological theory. The demonstration is similar to an MS in that it is an example. It is, however, different in the way it is presented and, although it is aimed at explaining a general conversational rule, might differ in terms of recall properties it addresses (e.g., object and person descriptions). Since 2003, the live demonstration has formed part of police witness/victim interview training around the world (e.g., UK, Oz, NZ, Ireland) and is referred to as a tool for eliciting more detail in national training packages concerning police interviewing (e.g., New Zealand Police, 2008). However, this tool has never been empirically tested and thus it was
decided to examine the relative effectiveness of the behavioural exemplar addition to an RE instruction, which is given as part of the ground-rules at the outset of an interview: the Demonstration for More detail (DeMo) technique. This was accomplished by administering two FR instructions, RE and DeMo, as well as a control free recall and measuring the number of correct, incorrect and confabulated details reported in each condition and overall statement accuracy rates. Based on the literature on episodic memory in general and on findings concerning the MS, three hypotheses were made: (a) the DeMo instruction will lead to a greater number of details being recalled compared to both the RE and the control, (b) the information increase in the DeMo group can be largely attributed to an increase in object and/or person details and (c) there will be no difference in accuracy rate of information across conditions.

2 | METHOD

2.1 | Design

A single-factor between-participants design was employed. The independent variable was FR instruction with three levels: (a) control, a free recall of the target event, (b) RE instruction and (c) DeMo technique where participants were given the same RE instruction plus a live demonstration of a detailed description of an object (a cup filled with water in this instance) to give them an idea of what level of detail was expected (as in police training packages, PEACE-CI, Milne, 2004, 2017). The exemplar was then left as an active reminder throughout the recall process. The dependent variables were the number of correct, incorrect and confabulated details reported. Recall accuracy rate was computed by dividing the number of correct details by the total number of details. Each type of detail recalled (i.e., person, object, action and surrounding) was also recorded.

2.2 | Participants

A total of 61 participants (46 women and 15 men) were recruited from a university campus. The mean age of the participants was 21.12 (SD = 3.73, range 17–39 years). They took part as mock witnesses in exchange for credits or a small honorarium. There were no significant differences in age and gender between the three conditions (p’s > .05).

2.3 | Materials

This study contained the following materials: a mock crime video and three interview scripts.

2.3.1 | Mock crime video

The stimulus event was a video of an attempted car break-in (lasting 2 min, 40 s), previously used in experimental research on the cognitive interview (Wright & Holliday, 2007) and the self-administered interview (Gabbert, Hope, & Fisher, 2009). The video depicts a non-violent incident about three males entering a parking lot and trying to break into one of seven cars that are parked. During their attempt, several incidental actors (male and female) pass by. The video ends when the presumed owners enter the car park, whereupon the three perpetrators split up and run away. The video was shown individually to participants using a 15-in. desktop monitor and headphones.

2.3.2 | Interview scripts

For each of the three conditions, a different interview script was used. The script for the control condition was as follows: “Last week you were witness to an incident. Please tell me what you remember from the video.” The interview script for the RE condition elaborated on the amount and level of detail that was expected. Participants were told: “Last week you were witness to an incident. Please tell me everything about the incident you can remember. Even the things you can only partially remember or things that seem unimportant to you. They can be important to the police. Describe everything in as much detail as possible. You can also report things that you do not feel entirely sure of. The one thing you may not do is guess about things you cannot remember. Whenever you’re ready, tell me everything that comes to mind, in your own time and pace.”

In the DeMo condition, the interviewer gave the same RE instruction and additionally said: “I’ll give you an example to give you an idea of what level of detail is expected.” The interviewer followed this remark by putting a cup filled with water on the table and gave the following instruction: “You could simply say: this is a cup. But you could also say: this is a cup. It’s made of plastic, but it is not a disposable cup, because it’s solid. The cup is purple, both on the in- and outside. It is slightly translucent and contains horizontal stripes. The cup is round, and wider at the top than at the bottom. The cup is about 10 centimetres high and is filled up to 2 centimetres under the brim with a liquid. The liquid is odourless and the cup does not feel warm. The cup doesn’t have a handle. I will leave the cup here to remind you of how detailed I would like you to give your account.”

FR extension: In all three conditions, when the interviewee came to a natural conclusion, that is, the participant stopped talking, looked at the interviewer and explicitly said to have nothing more to add to the statement—the interviewer was required to pause for a few seconds, to thank the interviewee for the information and to say: “Please take some time to see if there is more you can remember.”

2.4 | Procedure

Participants were recruited via an announcement on an online university platform for experiment registration. In the announcement, it was explained that the aim of the study was to analyse investigative processes of the Dutch police. Participants were informed that the study comprised two sessions: watching a short video (maximum duration
of the session: 10 min), followed by a conversation about that video a week after viewing it (maximum duration of the session: 50 min). After watching the video on a desktop monitor, participants checked their appointment details (time, date and location) for the follow-up interview.

To mirror police practice, participants were randomly assigned to one of the three recall conditions and interviewed by one of the researchers 1 week later in a different room to that in which they had witnessed the mock crime. A considerable number of witnesses in the Netherlands (37%) are interviewed 1 week or more after the incident and most interviews (at least 77%) are conducted at another location, rather than near the crime scene.1 After welcoming the participant with a cup of tea or coffee and a short chat to build rapport, which consisted of the interviewer asking how he/she was doing, the interviewer then clarified the interview process (aim and structure) and discussed practical issues (note-taking and audio-recording). The interviewer checked if the participant had any concerns regarding the interview and addressed them if needed (none were raised). After this engage and explain phase, the interviewer used the interview script that corresponded to the condition to initiate a free report. In all conditions, the interviewer listened to the account without interrupting or asking questions. When the interviewee came to a natural conclusion, the interviewer gave the FR extension instruction. The interviewer then listened to any further recall. This was to reflect police interview practice in conducting FRs, as investigators often give the witness or victim the opportunity to extend the FR (i.e., to add recollections) before starting the questioning phase. When the extension of the FR came to a natural conclusion, the interviewer thanked the interviewee for participation and closed the interview. After the interview, a debriefing sheet was given to participants in order to explain the purpose and the design of the study. It also provided contact details of the experimenter in case questions arose. For participants in the DeMo condition, the debriefing sheet contained two user evaluation questions: (a) ‘We gave you an example of how detailed you were desired to report, did the example help you?’ (Y or N) and (b) ‘Explain your answer’. The same two researchers, with backgrounds in cognitive psychology, were told to follow the strict protocols, and conducted all interviews, evenly distributed across the three conditions, to ensure consistency. All interviews were audio recorded.

2.5 | Data coding

The mock crime used in this study contained information that was divided into items that were coded as either Person (e.g., the offender’s hair colour, clothing etc.), Action (e.g., walking to a car), Object (e.g., car colour) or Surrounding (e.g., trees in the car park), in accordance with the coding template used by such as Wright and Holliday (2007); see also Dando, Wilcock, & Milne, 2009). The event was originally transcribed and the first scoring template contained 699 details, this was extended to cover all of the details reported by witnesses in this study, an accumulated approach—thus an exhaustive list was compiled (as in prior research, Milne & Bull, 1996). The resultant template contained 892 pieces of information: 420 Person details, 209 Surrounding details, 120 Action details and 143 Object details.

Reported details were scored as ‘correct’ if present in the mock crime and described correctly. A change in an existing element was scored as ‘incorrect’ (e.g., “a black sweater” instead of “a blue sweater”). Reported items that were not present in the mock crime at all were scored as ‘confabulated’. A distinction between incorrect details and confabulations was undertaken as in a legal setting these have very different ramifications. A point was given to each detail.

Two independent raters coded seven (11%) randomly selected transcripts of the sample to assess inter-rater reliability and any discrepancies were discussed. Kappa coefficients were computed for the following measures: quantity of information (κ = 0.84, p < 0.01), type of detail (κ = 0.93, p < 0.01) and accuracy (κ = 0.90, p < 0.01). These kappa values show strong agreement between the raters on all measures (see Fleiss, 1981; Landis & Koch, 1977).

3 | RESULTS

3.1 | Overall recall performance

ANOVA analyses were conducted for both the FR stage and the FR extension stage separately.

3.1.1 | FR stage

The mean recall performance in the free recall (and accompanying 95% confidence intervals) as a function of recall condition is shown in Table 1. An ANOVA showed that the effect of recall technique for the overall number of details reported was significant, $F(2, 58) = 5.13, p = .009$. A post-hoc Tukey-test showed that participants who received the DeMo-technique reported significantly more correct details than those in the control condition ($d = 0.79$) and in the RE condition ($d = 0.83$). This effect was due to a significant difference in the number of correct ($F(2, 58) = 4.08, p = .022$) and incorrect details ($F(2, 58) = 4.94, p = .010$). Participants who received the DeMo-technique reported significantly more correct details than those in the control ($d = 0.74$) and the RE ($d = 0.72$) condition. In addition, participants who received the DeMo-technique also reported significantly more incorrect details than those in the control ($d = 0.72$) and RE ($d = 0.86$) conditions. Non-significant differences were found for the number of confabulated details reported and for the accuracy rate, which were high across all conditions (see Table 1).

3.1.2 | FR extension stage

The recall performance in the free recall stage and the accompanying 95% confidence intervals as function of recall instruction is shown in Table 2. An ANOVA showed an effect of recall instruction
on the total number of details reported, $F(2, 58) = 7.46, p = .001$. A post-hoc Tukey-test showed that participants who received the control instruction reported significantly more details than participants who received the RE instruction ($d = 5.41$). This effect was due to a significant difference in the number of correct details ($F(2, 58) = 7.36, p = .001$) in the extension of the FR. Participants in the control condition reported significantly more correct details than those who received the RE ($d = 1.38$) instruction. The difference between the total number of details between the control and the DeMo condition was non-significant. A non-significant difference was also found for the number of incorrect details, confabulated details and for the accuracy rate for the extension of the FR across the three groups.

### 3.1.3 Type of detail

To isolate the type of detail (person, surrounding, object and action) the DeMo instruction is enhancing, the recall performance per type of detail was examined (see Tables 3 and 4 for the FR and extension of the FR, respectively). ANOVA showed a significant effect of recall instruction in the FR on the number of person ($F(2, 58) = 3.80, p = .028$) and surrounding details ($F(2, 58) = 3.59, p = .034$) reported. Post-hoc Tukey-tests showed that, in the FR, participants who were given the DeMo-technique reported significantly more person details than participants who received the control instruction ($d = 0.72$). Participants who were administered the DeMo-technique also reported significantly more surrounding details than participants who received the RE instruction ($d = 0.85$). In the extension of the FR, a significant effect of recall instruction was revealed on the number of person ($F(2, 58) = 3.62, p = .033$) and surrounding details ($F(2, 58) = 3.64, p = .032$) reported, and the accuracy rate for action details ($F(2, 58) = 3.43, p = .039$). Post-hoc Tukey tests showed that, when extending their FR, participants in the control condition reported more person ($d = 0.83$) and surrounding ($d = 0.89$) details, and reported action details at a higher accuracy rate ($d = 0.78$) than participants who received the RE instruction. When detail type was split across correct, incorrect and confabulated details, there were non-significant differences in both the FR and the FR extension.

### 3.1.4 Accuracy

As mentioned above, there were no significant differences for overall accuracy rates between conditions in both the FR and the extension of it. However, across all recall conditions, a paired sampled $t$-test showed an overall significant difference between accuracy of details reported in the FR ($M = 0.85$) and the FR extension ($M = 0.72$), $t(56) = 3.53, p = .001$.

### 3.1.5 User evaluation

The feedback from the participants in the DeMo condition showed that almost all participants (20 out of 21) found the cup example description a useful demonstration of detail. Overall, the feedback was positive and contained comments such as: "This simple object worked for me, because you can tell so many things about it."; "I thought I had a detailed description in my memory, but when the example was
given, I appeared to be even more extensive than I thought.; “Normally I wouldn’t describe a cup in such detail, so it opened my eyes for the possibilities.” For one participant, the demonstration was not helpful: “I found it odd that they used a cup. I would have expected that they gave me a more real-life situation.”

4 | DISCUSSION

The aim of the current study was to examine the relative effectiveness of a way of maximising the quantity of detail in a free call segment of an investigative interview: the DeMo technique. Hypothesis one was supported in that the DeMo technique resulted in more details (29%) being reported compared to a simple instruction to free recall and the RE instruction (large effects). This result is in line with several studies on the MS technique in that it shows a beneficial effect of using an example to increase the level of detail in reports (see Bogaard et al., 2014; Ewens et al., 2016; Harvey et al., 2017; Leal et al., 2015; Leal et al., 2018; Porter et al., 2017; Vrij et al., 2017). The user evaluation of the present study indicated that the interviewees attended to the demonstration of detail and found it useful. Attention and motivation seem to be crucial factors in being able to benefit from an example (see Social learning theory: Bandura, 1977, 1986). In fact, Brackman et al. (2017) found no effect of the MS technique and discussed the possibility that their participants were not motivated enough to perform well and to use the example to their advantage when providing information. In the present study, the object that was described by the interviewer (a cup) stayed in sight on the table to ensure participants were reminded of the example and the level of detail required, while they were engaging in the free recall task. We did not include measurements on this particular factor; therefore, we do not know if or how much it contributed to the information increase. More research is needed to map the conditions under which an example or demonstration works best for enhancing recall of information from episodic memory.

We have to point out here that the RE instruction itself did not result in enhanced recall compared to the control condition. At first, this seems surprising, since the RE is an instruction developed for lowering the reporting threshold of interviewees and is incorporated in many investigative interview protocols around the world. However, this is one of the first studies that have isolated the relative effectiveness of an RE instruction and findings are in line with Milne and Bull (2002). Milne and Bull also found that an RE instruction was the most effective for recall in combination with another tool, in that case, a mental reinstatement of context instruction. It seems that on its own a verbal RE instruction is not robust enough to counter-act everyday conversational rules thought to limit extensive free recall. A demonstration could be a useful tool in addition to an RE instruction.
for obtaining more detail in free recall accounts. More research is needed on the relative effectiveness of the RE instruction and combinations with other interview tools aimed at facilitating episodic memory and communication about what is stored inside.

Hypothesis two was only partially supported in that the information increase in the DeMo group could be attributed to all four types of information, but largely to person and surrounding details (large effects). We hypothesised that the reporting of person descriptions and object details would be facilitated, as we used an object to describe the level of detail required. In contrast to Porter et al. (2017), who suggest that specific recall features are being facilitated by an MS (depending on the recall property being addressed: e.g., spatial or temporal), this study suggests that the DeMo technique increases the ratio of reporting of incorrect details compared to the control and RE conditions. The DeMo technique was aimed at counteracting a general conversational rule: the ‘Maxim of Quantity’ (Grice, 1975). Normally, people will provide as much information as they think is needed, and no more. However, details are important in every investigation and, therefore, people should be facilitated in regulating the grain size of their answers and to provide more detailed fine grain elements instead of coarse information of their memory for an event (see Goldsmith et al., 2002; Koriat & Goldsmith, 1996).

Hypothesis three was upheld as there were no differences in accuracy rates across conditions. All accuracy rates in the FR were high, .86 (control), .87 (RE) and .84 (DeMo). The fact that the DeMo technique increased the reporting of incorrect details compared to the control and RE conditions is not surprising, since the DeMo technique was aimed at lowering the reporting threshold. When the number of reported details increases without a change in accuracy rate, the number of incorrect details increases in proportion to the increase in correct details. Results from Brewer, Vagadia, Hope, and Gabbert (2018) lend support for our ‘reporting threshold’ hypothesis. Brewer et al. suggest that witnesses to crimes, despite their confidence about coarse grain details (broad details, e.g., that the suspect was wearing a light-coloured jacket), withhold this information because they believe it might be uninformative for the police. The seemingly trivial coarse-grain details can be extremely valuable for investigations, for example when combined with other evidence or by reducing the potential number of persons or objects to search for. Indeed, interviewees in the study of Brewer et al. provided more coarse-grain details after their free recall in a subsequent forced recall task, without clearly compromising overall accuracy. Results of the present study suggest that interviewees even withhold this good quality information when explicitly asked to RE and when instructed to be as detailed as possible. These predominantly accurate details can be obtained in a free recall task by demonstrating the level of detail and thereby reducing their reporting threshold. Further research could examine recall precision as a dependent measure (see Evans & Fisher, 2011).

Although the differences in accuracy rate between the three groups were relatively small and non-significant, we have to point out here that the accuracy rate in the control group was highest. A non-significant difference in mean accuracy does not simply say that there is no actual difference. In fact, one could argue that the reporting threshold in the experimental groups was lowered ("You can also report things that you do not feel entirely sure of"), with an increase in the number of inaccurate recollections as a result. In fact, Paulo, Albuquerque, and Bull (2016) found that spontaneous ‘uncertainties’ (e.g., I think the man had a black jacket) were related to a decrease in accuracy of the statement. Around 65% of the produced ‘uncertainties’ in their experiment were correct, as opposed to 90% of the ‘certainties’. Paulo et al. (2016) suggest that the ‘uncertainties’ were not the result of inferior memory traces: interviewees who provided more ‘uncertainties’ did not provide more incorrect or confabulated details in their remaining recall. In the future, it would be interesting to conduct a study on the effect of the instruction to ignore attributed confidence for recollections on the reporting threshold and statement accuracy. Considering the relatively small differences in mean accuracy between the three groups and the small standard deviations in this study, another design or a far bigger group size is needed to have enough statistical power to find a difference, if any. An a priori power analysis based on results of the current study, suggest a fivefold number of participants per group when using a similar design.

One particular aspect of mirroring police practice in this study resulted in an unexpected finding. Police officers often provide interviewees the opportunity to extend their FR, before they start asking questions: After the free recall account comes to a natural conclusion, they ask the witness or victim to think if there is anything more he or she can remember and listen to any further recall. In our study, such an open prompt helped the control group catch up with the two experimental groups in terms of quantity of information reported in their FR. It could be that a simple instruction to ‘take time to see if you can remember more’ helps to overcome the social norm of turn-taking and over-talking. However, the accuracy rates significantly decreased across all groups: error rates nearly doubled. It seems that once memory is exhausted in a free recall, an open prompt to extend a free recall may not be a useful tool for acquiring high-quality information. Indeed, past research examining the efficacy of the cognitive interview often found that second and third retrieval attempts had lower accuracy rates than an initial free recall (e.g., Clarke, Prescott, & Milne, 2013; Milne et al., 1999). More recent research has also found this effect (see Kontogianni et al., 2020). More research is warranted looking at the accuracy rates of open prompts aiming to extend an FR before going to the questioning phase.

There are at least two aspects of the current study that may limit the ability to generalise the findings. The first is that the target event was a mock crime video as opposed to a live event, and therefore lacks realism (i.e., devoid of sensory cues). This was partly dealt with by interviewing participants after a 1-week delay in a different room to that in which they had seen the video, to ensure they had to mentally reinstate the context when performing a free recall task. It could also be argued that participants in the present study were informed in advance that they would be questioned about the video and therefore were the so-called intentional learners (see, e.g., Schmidt, 2012). They might have consciously tried to memorise information. However, participants were not instructed beforehand that they would view a video of a crime. Moreover, although participants knew they would...
take part in a conversation about the video, they were not explicitly warned about their subsequent memory evaluation of the video content. Therefore, the design might have mirrored witness practice in that the participants were incidental learners until the start of the crime (Bjorklund, 1995). Of course, it cannot be ruled out that participants have intentionally learned information from the crime, as cannot be ruled out in real-life as well. Furthermore, the research examining memory differential across intentional versus incidental learners is not clear-cut.

Second, from an applied perspective, a technique that asks witnesses to give an uninterrupted free recall without defining the relevance of the detail given can be a problem in certain legal jurisdictions for certain types of crime (primarily word against word crimes such as sexual offences). This approach has led prosecutors to express concerns about excessive detail in the records of interviews, which may in turn reduce the impact of testimony in court, especially if it is irrelevant detail (Westera, Powell, Milne, & Goodman-Delahunty, 2019). Thus, the RE and DeMo technique needs to incorporate clear guidance on how interviewers can manage the detail produced to ensure that the resultant interview, if used in court as evidence in chief, serves the primary evidential goal, which is a detailed but relevant coherent narrative (Westera, Powell, & Milne, 2017). There is a balance to be drawn, and we need investigate in detail to establish the answer to the two investigative questions: "what happened?" (if anything did happen) and "who did what?", but if the same interview is then used to evaluate a victim's or witness's reliability and credibility then too much detail could be debilitating (though also see Westera, McKinnie, Keble, Milne, & Masser, 2015).

To conclude, the DeMo technique looks to be a promising addition to the investigative interviewer's tool-belt for obtaining more high quality detail in the free recall. This is comforting as this technique is used by practitioners in many countries. Finding techniques to maximise the free recall is crucial, as research has demonstrated that trying to extend a free recall even with open-ended prompts reduces the accuracy of information gained. It follows that investigators require reliable information to drive informed investigative decision making. More research is required to look at the best context for the use of the DeMo and also to examine how its repeated use throughout an interview impacts upon both the quality and quantity of recall.

DATA AVAILABILITY STATEMENT
The dataset generated and analysed during the current study are available from the corresponding author on reasonable request.

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ENDNOTE
1 See: criminal information system of the Dutch police in 2017. This system contains records of official acts and activities of police officers (registrations, mutations, official reports, etc.).

REFERENCES
Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice-Hall.
Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.
Bjorklund, D. F. (1995). Children's thinking: Developmental function and individual differences (2nd ed.). Pacific Grove, CA: Brooks/Cole.
Bogaard, G., Meijer, E. H., & Vrij, A. (2014). Using an example statement increases information but does not increase accuracy of CBCA, RM, and SCAN. Journal of Investigative Psychology and Offender Profiling, 11, 151–163. https://doi.org/10.1002/jip.1409
Bower, G. (1967). A multicomponent theory of the memory trace. In K. W. Spence & J. T. Spence (Eds.), Psychology of learning and motivation (Vol. 1, pp. 229–325). New York, NY: Academic Press.
Brackman, N., Otgaar, H., Roos af Hjelmsäter, E., & Sauerland, M. (2017). Testing a new approach to improve recall in different ages: Providing witnesses with a model statement. Translational Issues in Psychological Science, 3, 131–142. https://doi.org/10.1037/tps0000116
Brener, N., Vagadia, A., Hope, L., & Gabbert, F. (2018). Interviewing witnesses: Elicitic coarse-grain information. Law and Human Behavior, 42, 458–471. https://doi.org/10.1037/hob0000294
Clarke, J., Prescott, K., & Milne, R. (2013). How effective is the cognitive interview when used with adults with learning disabilities specifically for conversation recall? Journal of Applied Research in Intellectual Disability, 26(6), 546–556. https://doi.org/10.10111/jar.12049
Danby, M. C., Brubacher, S. P., Sharman, S. J., & Powell, M. B. (2015). The effects of practice on children's ability to apply ground rules in a narrative interview. Behavioral Sciences & the Law, 33(4), 446–458. https://doi.org/10.1002/bsl.2194
Dando, C. J., Wilcock, R., & Milne, R. (2009). The cognitive interview: The technique of memory for conversation recall. Law and Human Behavior, 33(4), 298–307. https://doi.org/10.1002/bsl.2194
Davies, G., Bull, R., & Milne, R. (2016). Analysing and improving the testimony of vulnerable witnesses interviewed under the ‘achieving best evidence’ protocol. In P. Radcliffe, A. Heaton-Armstrong, G. Gudjonsson, & D. Wolchover (Eds.), Witness testimony in sexual cases: Investigation, law and procedure. Oxford, UK: Oxford University Press.
Evans, J. R., & Fisher, R. P. (2011). Eyewitness memory: Balancing the accuracy, precision and quantity of information through metacognitive monitoring and control. Applied Cognitive Psychology, 25(3), 501–508. https://doi.org/10.1002/acp.1722
Ewens, S., Vrij, A., Leal, S., Mann, S., Jo, E., Shaboltas, A., ... Houston, K. (2016). Using the model statement to elicit information and cues to deceive from native speakers, non-native speakers and those talking through an interpreter. Applied Cognitive Psychology, 30(6), 854–862. https://doi.org/10.1002/acp.3270
Festinger, L. (1954). A theory of social comparison processes. Human Relations, 7(2), 117–140. https://doi.org/10.1177/001872675400700202
Fisher, R. P. (2010). Interviewing cooperative witnesses. Legal and Criminological Psychology, 15, 25–38. https://doi.org/10.1348/135532509X41891
Fisher, R. P., & Geiselman, R. E. (1992). Memory-enhancing techniques for investigative interviewing: The cognitive interview. Springfield, IL, England: Charles C Thomas.
Fleiss, J. L. (1981). Balanced incomplete block designs for inter-rater reliability studies. Applied Psychological Measurement, 5(1), 105–112. https://doi.org/10.1177/014661708100500115
Gabbert, F., Hope, L., & Fisher, R. P. (2009). Protecting eyewitness evidence. Law and Human Behavior, 33(4), 298–307.
Goldsmith, M., Koriat, A., & Pansky, A. (2005). Strategic regulation of grain size in memory reporting over time. Journal of Memory and Language, 52(4), 505–525. https://doi.org/10.1016/j.jml.2005.01.010
Goldsmith, M., Koriat, A., & Weinberg-Elizer, A. (2002). The strategic regulation of grain size in memory reporting. Journal of Experimental

ENDNOTE
1 See: criminal information system of the Dutch police in 2017. This system contains records of official acts and activities of police officers (registrations, mutations, official reports, etc.).
Westera, N. J., Powell, M. B., Milne, R., & Goodman-Delahunty, J. (2019). Police organizational responses to interviewing victims of sexual offences. In R. Bull & I. Blandon-Gitlin (Eds.), *Handbook of legal and investigative psychology*. London: Routledge.

Wright, A. M., & Holliday, R. E. (2007). Enhancing the recall of young, young-old and old-old adults with cognitive interviews. *Applied Cognitive Psychology, 21*(1), 19–43. https://doi.org/10.1002/acp.1260

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