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4 Eliciting Intelligence from Sources Informed about Counter-Interrogation Strategies:

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An Experimental Study on the Scharff Technique

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Abstract

1
2 The Scharff technique aims to elicit information by affecting the source's perception of the
3 interviewer's existing knowledge. Although the technique has been found to be effective for
4 gathering new information, countermeasures to the technique have not been examined. In a 2
5 x 2 between-subjects experiment, we informed half of the 120 sources about the counter-
6 interrogation strategy of carefully considering the interviewer's prior knowledge and the
7 tactic of providing information perceived as already known to the interviewer. After this,
8 sources were interviewed with the Scharff technique or the Direct approach, widely used in
9 human intelligence gathering situations and consisting of open-ended and direct questions.
10 We found that 'informed sources' did not succeed in revealing information already known to
11 the interviewer, where informed sources and uninformed sources revealed known information
12 to a similar degree (1.62 pieces vs. 1.65 pieces). Sources interviewed with the Direct approach
13 (vs. Scharff technique) revealed a larger amount of information previously known to the
14 interviewer (2.18 pieces vs. 1.08 pieces). When interviewed with the Scharff technique,
15 sources informed about the counter-interrogation strategy attempted to adopt more counter-
16 interrogation strategies. The present study replicates earlier research on the Scharff technique
17 as a technique effective in affecting the source's perception of the interviewer's prior
18 knowledge. The results of the current study indicate that both the Scharff technique and the
19 Direct approach might be similarly robust against counter-interrogation strategies, in terms of
20 gathering new information. Future studies should focus on implementing more
21 comprehensive training in counter-interrogation strategies for the sources.

22
23 *Keywords:* the Scharff technique, information elicitation, human intelligence
24 gathering, perspective taking, investigative interviewing, counter-interrogation strategies.

Eliciting Intelligence from Sources Informed about Counter-Interrogation Strategies: An Experimental Study on the Scharff Technique

There is a new strand of research examining the efficacy of human intelligence (HUMINT) gathering techniques (e.g., Evans et al., 2013, 2014; Granhag, Kleinman, & Oleszkiewicz, 2016). HUMINT gathering involves the collection of information through an interaction between two or more individuals, usually an interviewer and a source (Justice, Bhatt, Brandon, & Kleinman, 2010). In the intelligence gathering domain the officer can apply various techniques to facilitate the collection of information when interviewing sources about terrorist plans and upcoming criminal activities (US Army, 2006). To intercept such efforts, terrorist organizations has put together training manuals to inform their sources about the strategies and tactics that intelligence officers may use, and also offer methods to withstand the officers' interview practices (e.g., IRA's green book). However, interviewers have also recognized that some sources attempt to counter their interviewing efforts and have therefore developed tactics that aims to counter the sources' counter-interview attempts (e.g., Toliver, 1997). This paper is on the efficacy of HUMINT gathering techniques when counter-interrogation tactics are applied.

Information Elicitation by Means of Affecting the Source's Perception

Information elicitation relates to collecting information in such manner that a source underestimates his or her contribution of new information (i.e., information that is unknown to the interviewer) while remaining unaware of the interviewer's information objectives (Justice et al., 2010). The Scharff technique, named after the German interrogator Hanns Scharff, whose remarkable capacity to elicit information in interviews during World War II is well documented (e.g., Toliver, 1997). The Scharff technique includes tactics specifically aimed at information elicitation by affecting the source's perception of the interaction with the interviewer (Oleszkiewicz, 2016). Granhag (2010) argued that the tactics used in the

Scharff technique originate from the psychological concept of perspective taking, which describes the “capacity to consider the world from other viewpoints and allows an individual to anticipate the behavior and reactions of others” (Galinsky, Maddux, Gilin, & White, 2008, p. 378). Granhag, Oleszkiewicz, and Kleinman (2016) argued that the following set of interrelated principles are at the core of the Scharff technique: (a) the source usually forms a perception of what and how much information the interviewer holds prior to the interview, (b) the source’s perception affects his or her counter-interrogation strategies, and (c) the counter-interrogation strategies employed affect what and how much information the source reveals (see also Granhag & Hartwig, 2015, Tekin et al., 2015). The interviewer employing the Scharff technique, for his/her part, makes use of his/her insights about the source’s perception of the interview and can thus counteract the source’s strategies (Granhag, 2010).

Tactics Employed in the Scharff Technique

The Scharff technique describes a set of tactics aimed at eliciting information (see Oleszkiewicz, 2016 for a review of the tactics). Using a *friendly approach*, the interviewer creates a comfortable atmosphere. This is done through, for example, displaying acceptance and adopting adaptive interpersonal behaviors (Alison, Alison, Noone, Elntib, & Christiansen, 2013). The interviewer does *not press for information*. Instead, the interviewer offers the source to add information beyond the information presented by the interviewer. Another tactic is to establish an *illusion of “knowing it all”*. In the beginning of the interview, the interviewer presents known information to appear as already holding large amounts of information. To seem cooperative, the source must provide information beyond what the interviewer revealed. If the source overestimates the amount of information held by the interviewer and strives to provide already known information, s/he might unknowingly reveal information that is, in fact, novel to the interviewer. Another tactic is the use of *claims*. Using this tactic, the interviewer presents claims that s/he expects the source to confirm or

disconfirm. The assumption behind this tactic is that (dis)confirming a claim might be seen as a more passive form of complicity compared to answering questions. Finally, one tactic is to *ignore new information*. This describes downplaying new information as unimportant or as already known to the interviewer to hide that the information is of interest.

Previous Research on the Scharff Technique

To reflect some important features of HUMINT, early research on the Scharff technique (Granhag, Cancino Montecinos, & Oleszkiewicz, 2013) introduced an experimental scenario. The sources were semi-cooperative, meaning that they were holding incomplete information on an upcoming terrorist attack and were motivated to strike a balance between not revealing too much or too little information. Novel measures for evaluating interviewing techniques were developed, including both objective (e.g., new information revealed) and subjective measures (e.g., sources' subjective perceptions of the interaction) (Oleszkiewicz, Granhag, & Cancino Montecinos, 2014). The so-called Direct approach is described in the US Army field manual (US Army, 2006) as a mix of open-ended and direct questions posed in a business-like manner. The Direct approach has proven to be widely used (Oleszkiewicz, Granhag, & Kleinman, 2017a; Redlich, Kelly, & Miller, 2011; US Army, 2006). Comparisons between the Scharff technique and the Direct approach have shown that (i) the Scharff technique elicits more new information, and that sources interviewed with the Scharff technique (ii) underestimate the amount of new information revealed, (iii) perceive the interviewer to be more knowledgeable about the discussed topic, (iv) overestimate the amount of information the interviewer holds, and v) find it more difficult to apprehend the interviewer's information objectives (Granhag, Kleinman, & Oleszkiewicz, 2016). The Scharff technique has been evaluated in different experimental contexts, including sources varying in their willingness and ability to cooperate (Granhag, Oleszkiewicz, Strömwall, & Kleinman, 2015), small cells of sources (Granhag, Oleszkiewicz, & Kleinman, 2016), and

repeated interviews (Oleszkiewicz, Granhag, & Kleinman, 2017b). Furthermore, the Scharff technique has also been evaluated when trained to police handlers (Oleszkiewicz et al., 2017a) and military intelligence officers (Granhag, Oleszkiewicz, Lefsaaker Sakrisvold, & Kleinman, in press).

Relating the Concept of Self-Regulation to Counter-Interrogation Strategies

The use of counter-interrogation strategies can be argued to relate to the psychological concept of self-regulation. Self-regulation involves processes that control and direct people towards goals and/or away from threats (Carver & Scheier, 2011; Fiske & Taylor, 2008). The investigative interview can be seen as a threat to the interviewee's credibility (Granhag & Hartwig, 2008), thus evoking self-regulatory strategies in the interviewee (Fiske & Taylor, 2008). Based on self-regulation theory, Granhag and Hartwig (2008) have argued that interviewees aim to reduce threat by deciding how to act during the interview and by attempting to predict features of the interview, that is, questions posed by the interviewer. Consequently, interviewees' strategies can be argued to originate from their perception of what and how much the interviewer knows about the interviewees' activities (Granhag & Hartwig, 2015).

Adapting to the Interviewer's Knowledge as a Counter-Interrogation Strategy

As argued by Oleszkiewicz (2016), the Strategic Use of Evidence (SUE) approach and the Scharff technique are similar in the sense that they both aim to affect the interviewee's (i.e., the suspect's or the source's) perception of the interaction. For the SUE approach, the interviewer discloses the evidence strategically after having listening to parts of or the suspect's full account (Granhag & Hartwig, 2015). The rationale for this is that a guilty suspect will be unaware of existing evidence against him/her and therefore need to manage the difficult task of accounting for possible evidence when providing his/her account of what happened. In the SUE approach the goal is to distinguish between guilty and innocent

suspects and the interviewer attempts to influence the suspect's management of self-incriminating information. In the Scharff technique, on the other hand, the goal is information gathering and the interviewer attempts to influence the source's management of information in general (Oleszkiewicz, 2016).

In research on the SUE approach, Luke, Dawson, Hartwig, and Granhag (2014) suggest that verbally forthcoming strategies, such as the willingness to make critical disclosures about one's activities, may reflect an attempt to account for possible self-incriminating evidence and can, consequently, reflect the suspect's attempt to avert threats this evidence poses to his/her credibility. Luke and colleagues (2014) found that informing suspects about the possibility that the interviewer might possess incriminating evidence induced guilty suspects to employ verbally forthcoming counter-interrogation strategies. In another study, Luke, Hartwig, Shamash, and Granhag (2015) found that guilty suspects who received information about the SUE tactics employed more verbally forthcoming strategies than uninformed guilty suspects. Hence, verbally forthcoming strategies can be explained as a way of adapting to the interviewer's knowledge, either knowledge that is inferred to be known, or knowledge presented during the interaction.

Providing Known Information as a Counter-Interrogation Strategy

Research into counter-interrogation strategies adopted by real sources/detainees is relatively scarce (Granhag, Clemens, & Strömwall, 2009). Currently research shows, however, that sources/detainees often adopt countermeasures in interaction with the police (Alison et al., 2014). In a field analysis of 181 police interviews with convicted terrorists, Alison and colleagues (2014) identified five clusters of commonly adopted counter-interrogation strategies. One of the clusters, conceptualized as verbal counter-interrogation strategies, included discussing an unrelated topic, providing scripted responses, and providing information already known to the police. Also noteworthy is that the tactic of providing

known information is recommended by the Al-Qaeda training manual, in which one piece of advice concerning interrogation and questioning reads: “When I talk while under torture, I do not mention unknown dates and places to the security personnel, but well known ones¹” (p. 176 in the Al-Qaeda Training Manual). Similarly, research in counter-interrogation strategies used by non-terrorist mock suspects identifies providing an elaborate story of one’s activities to be a commonly used tactic (Hartwig, Granhag, & Strömwall, 2007). Importantly, and in sharp contrast to research with mock suspects in studies on the SUE approach, research on real sources/detainees do not describe the interviewees’ incentive or approach for employing this tactic.

The Present Study

The present study advances previous work on the Scharff technique by examining the effectiveness of the technique when sources are informed about counter-interrogation strategies. As outlined above, research has demonstrated that the Scharff technique can be effective in different contexts (see Granhag et al., 2015, Granhag, Oleszkiewicz, & Kleinman, 2016, Oleszkiewicz et al., 2017a, 2017b). Similar to the SUE approach, the Scharff technique affects the source’s perception of the interviewer’s prior knowledge (Oleszkiewicz, 2016). The interviewer in the Scharff technique wants to be perceived as more knowledgeable than s/he in fact is. Concurrently with this, the source needs to contemplate the interviewer’s knowledge and objectives (Granhag & Hartwig, 2015; Soufan, 2011). In the present experimental study, sources received information about the counter-interrogation strategy of contemplating the interviewer’s knowledge and providing information they believe to be already known by the interviewer. Using the experimental paradigm and the novel measures outlined above (i.e., relating new information revealed and sources’ subjective perceptions of

¹ The Department of Justice, that has published the manual online, provides only selected text that do not include the lesson from which the citation above is retrieved.

the interaction; Granhag et al., 2013; Oleszkiewicz, Granhag, & Cancino Montecinos, 2014; Oleszkiewicz, Granhag, & Kleinman, 2014), we compared the effectiveness of the Scharff technique and the Direct approach in the context of sources using counter-interrogation strategies.

Hypotheses. The following hypotheses were formulated.

New information elicited. As the Scharff condition starts with the interviewer presenting already known information up front (to establish the ‘illusion of knowing it all’) and attempts to collect specific information by using claims, we expected that sources interviewed with the Scharff technique would have to go beyond the presented information in order to appear cooperative (and consequently assure help from the police). In contrast, sources interviewed with the Direct Approach would be faced with an interviewer who does not share any known information and only poses direct questions. Hence, we predicted 1) that the Scharff technique would elicit more new information than the Direct approach.

Furthermore, as half of the sources would be informed about and encouraged to apply the counter-interview strategy of revealing already known information (i.e. ‘informed’ sources), we expected them to be more motivated to avoid revealing new information than would the sources who were not informed about this strategy (i.e., ‘uninformed’ sources). Hence, we predicted 2) that informed sources would reveal less new information than uninformed sources.

Subjective perceptions of the interview. As the Scharff interviewer would start the interview with disclosing what was already known about the situation, whereas the Direct Approach interviewer would not share any such knowledge, we predicted 3) that sources interviewed with the Scharff technique would perceive the interviewer to have held relatively more information prior to the interview. In addition, we predicted 4) that sources interviewed with the Scharff technique would more commonly misperceive the interviewer’s knowledge

(i.e., perceive that the interviewer holds information that the interviewer, in fact, does not hold), than would sources interviewed with the Direct approach. Moreover, as the Scharff interviewer does not pose any specific questions, we predicted 5) that sources interviewed with the Scharff technique would have a less clear understanding of the interviewer's information objectives compared to sources interviewed with the Direct Approach.

Relating objective measures and subjective measures. Finally, we expected 6) sources interviewed with the Scharff technique to underestimate their contribution of new information, whereas for the Direct approach, we expected sources to overestimate their contribution of new information. In other words, we predicted an interaction effect regarding the objective amount of new information revealed and the perceived amount of new information revealed. We based this prediction on that the Scharff technique would result in sources unknowingly revealing new information, whereas in the Direct approach, sources would estimate almost all information revealed as new to the interviewer. We did not expect the interaction effect to differ across the informed and uninformed source conditions. This is because the counter-interrogation strategy “I will reveal information that the interviewer already knows” would only be successful (on behalf of the source) if the source is correct in his or her assessment of the interviewer’s knowledge. Hence, due to the illusion of “knowing it all” tactic, sources interviewed with the Scharff technique were expected to make relatively more incorrect assessments of the interviewer’s knowledge, leading these sources to underestimate their own contribution.

Counter-interrogation strategies. We also explored the sources’ descriptions of their counter-interrogation strategies. We investigated the number of different kinds of strategies and the sources’ perception of the effectiveness of these strategies. We also investigated the strategy “I will reveal information that they already know” in terms of perception of efficacy (e.g., whether the strategy helped the sources provide known information and withhold new

information). We related these measures with the success as measured by our objective measures.

Method

Participants

We recruited participants through mailing out a request to participate in the study to mailing lists including students at Åbo Akademi University, University of Turku, and Vaasa University of Applied Sciences. The study was conducted in Turku and in Vaasa (Finland). The study was conducted in either Finnish or in Swedish, including Finnish-speaking ($n = 60$) and Swedish-speaking ($n = 60$) participants. As some participants were bilingual, they could choose their preferred language for participating. One-hundred and twenty participants (73 women and 47 men), ranging in age from 18 to 55 years ($M = 25.60$, $SD = 6.02$) participated in the study. The majority of participants (87%) were students. The rest, who also answered to the mail sent out to the student's mailing lists, held an occupation. In reward for taking part in the study, the participants took part in a lottery of cinema tickets (á €12.50). All participants gave their written consent to take part in the study and have their voices audio taped.

The interviewers. The interviewers (two women in the age of 25, fluent in Swedish and Finnish) were trained to conduct the interviews. The interviewers were trained to strictly follow the interview scripts, word-by-word, and performed exercises for returning to the script in case of unexpected complications. They were blind to the information condition and unaware of which pieces of information that were available to the participants. The number of interviews conducted by each interviewer was spread evenly across interview and information conditions. Each interviewer conducted an equal number of interviews in Finnish and Swedish, also distributed evenly across conditions.

Ethical Permission

The study was granted approval by the Ethical Review Board of Åbo Akademi University (Finland) and the experimental paradigm used in the present study was granted approval by the Ethical Review Board of the University of Gothenburg (Sweden).

Design

We randomly allocated participants across a 2 (interview condition: Scharff vs. Direct approach) x 2 (information condition: informed vs. not-informed) between-participants design: 60 participants were interviewed using the Scharff technique and 60 were interviewed using the Direct approach. Furthermore, half of the participants assigned to each interview condition received information about the counter-interrogation strategy of contemplating the interviewer's knowledge, including the tactic of providing information perceived as already known to the interviewer.

Measures and Procedure

Pre-interview. In accordance with the procedure used in previous studies on the Scharff technique (e.g., Granhag et al., 2013), we instructed participants (hereafter sources) to take on the role of a semi-cooperative source. We instructed sources to carefully read a coherent story consisting of general and specific information, in total 35 pieces of information (see Appendix 1), on a fictive extremist group and their planned bombing. Sources received no information on how much or what information the interviewer already held. All sources were instructed to strike a balance between not revealing too much information (to stay loyal to the extremist group) and not reveal too little information during the interview (to be perceived as cooperative and consequently assure help from the police). Sources were told that their chance of winning additional cinema tickets would increase if they managed to strike this balance. We also told sources that to appear cooperative, they were allowed to fabricate information during the interview. Critically, they were also informed that being

caught lying would reduce their chances of winning additional tickets. In reality, all sources were equally qualified to win the lottery (a cinema ticket á €12.50). Sources were given 25 minutes to read the material and plan the upcoming talk with the interviewer. To facilitate the sources comprehension of the material they were requested to answer 16 open-ended questions about the extremist group and the planned bombing prior to the interview. Importantly, the sources had all material present during the interview.

The counter-interrogation condition. We informed half of the sources about the counter-interrogation strategy of carefully considering the current knowledge available to the interviewer, including the tactic of providing information perceived to be known by the interviewer. We recommended informed sources to reveal information that was likely to be known to the interviewer, thus strategically countering the interviewer's strategies but still be perceived as cooperative. To manage the strategy, the informed sources were guided through a stepwise reasoning that (i) acknowledged that the source is called to an interview, (ii) that the interviewer might have connected the source to the upcoming attack and thus (iii) must hold some kind of information, and (iv) asked the source to ponder what information the interviewer is likely to hold. Moreover, informed sources were discouraged to simply repeat information told by the interviewer during the interview, to not seem less cooperative. To increase sources' motivation to adopt the above strategy, we encouraged them to write down their planning. Sources were told that they could use other strategies, in addition to or instead of the one described.

The Interview. The participant was alone in the room during the interview, which was conducted through anonymous accounts on Skype using only voice recording. The interviews lasted on average 6.27 minutes ($SD = 2.13$). The Scharff technique interviews were longer ($M = 7.79$, $SD = 1.23$) than the Direct approach interviews ($M = 4.75$, $SD = 1.69$), $t(118) = 11.28$, $p < .001$, $d = 2.04$, 95% CI [1.61, 2.50]. This difference in length was mainly

due to the time it took for the interviewers to establish the illusion of “knowing it all” in the Scharff condition. In both conditions, the interviewer started the conversation by greeting the source, explained that the interview was being recorded, and acknowledged the problematic situation the source was in. In both conditions a final open-ended question was posed before ending the interview; “Would you like to add something before we end this?”.

The Scharff technique. In the Scharff condition, the interviewer requested to start the interview by outlining some of the information that is already known to the police. The interviewer then attempted to create the illusion of “knowing it all” while maintaining a friendly approach. The interviewer presented a story containing 11 pieces of already known information. Next, the interviewer posed an open-ended question; “Now, I am sure you understand that we are already in possession of some useful information... but of course, you are more than welcome to tell us what you know”. After the source’s response, the interviewer implemented the claim tactic by stating three claims, all containing correct information (counterbalanced for order effects): the location of the attack, the date of the attack, and the time the bomb would be triggered (e.g., “I understand that you also know about this, that one chooses a shopping centre as the target, and the Hansakortteli shopping centre is truly a tourist attraction... It is pretty easy to hide in the crowd and there are many places to hide the bomb at. But these aren’t any news for you, since you also know that the Hansakortteli is the target for the attack...?”; “One can wonder if they have intentionally chosen the holidays, since many policemen are on vacation then..., cause you do know that the bomb will detonate the 27th of December...?”). A three-second window followed each claim, leaving room for the source to respond. Independent of the source’s reaction (or lack thereof), the interviewer immediately went on presenting the next claim. The interviewer did not at any time press for information nor display unfamiliarity or surprise in response to any information revealed.

The Direct approach. For the Direct approach the interviewer did not reveal what information was known and maintained an atmosphere resembling that of a professional business meeting. The interviewer invited the source to share what s/he knew; “Okay, so you can start by telling me what you know about the situation”. After the source’s response, the interviewer asked three direct questions (counterbalanced for order effects): The themes of these questions were the same as for the claims in the Scharff protocol (e.g., “Where will they attack?; When will the deed take place”). Regardless of the source’s answer, these questions were followed up once, for example, “Please be more specific, where exactly will they attack?”.

Post-Interview. After the interview, all participants filled out three questionnaires. Before filling them out, it was made clear that the role-taking part of the study was over, and that the questionnaires were to be answered truthfully.

The first questionnaire consisted of three checklists. The checklists listed all the 35 pieces of information available to the participant (see Appendix 1). We instructed the participants to mark the pieces they perceived they had revealed during the interview. We thereafter asked the participants to mark which revealed pieces of information they perceived were new to interviewer (i.e., information not known to the interviewer prior to the source having provided that information). Finally, the participants were asked to mark the pieces of information they believed the interviewer held prior to the interview.

The second questionnaire concerned counter-interrogation strategies (see Table 1). First, the subjective use of counter-interrogation strategies was assessed by asking the participants to describe their strategies. Also, the participants answered questions regarding their perception of the effectiveness of the strategies (Question 1) and difficulty to adopt the strategies (Question 2). Next, all participants answered questions regarding the specific counter-interrogation strategy outlined in the information condition. Specifically, the “I will

reveal information that they already know” strategy was assessed on its perceived efficacy in terms of facilitating providing already known information (Question 3) and withholding new information (Question 4). In addition, the participants rated to what extent they thought they were perceived as cooperative by the interviewer (Question 5).

In the third questionnaire, the perception of the interview was assessed (see Table 2). The first crucial question was related to the perception of the interviewer’s knowledge prior to the interview (Question 1). Another crucial question was related to the interviewer’s information objectives (Question 2). Moreover, we assessed the participants’ perception of how motivated they were during the interview (Question 3), how difficult it was to understand the instructions of the study (Question 4) and how difficult it was to take on the role as a source (Question 5).

[INSERT TABLES 1 AND 2 ABOUT HERE]

Coding. The taped interviews were transcribed verbatim and coded for the information provided by the source (range: 0-35 units) (see Appendix 1). A piece of information was coded if the piece was uttered during the interview. Furthermore, a piece of information was coded as “new” if it was unknown to the interviewer (range: 0-24 units). Information that had resulted from claims presented was coded only if the source clearly affirmed a claim (e.g., “yes”, “true”). Ambiguous answers, or if the source reacted with silence, were not coded. To code participants’ self-reported strategies, the descriptions were examined by one coder who established a coding scheme (Hartwig et al., 2007; Strömwall et al., 2006). A counter-interrogation strategy was coded as “present” if the participant had described employing it during the interview. For example, if the participant had described that he/she attempted to reveal information that he/she thought was already known to the interviewer, this would be coded as the strategy of “contemplating the interviewer’s knowledge”. See Table 3 for coded strategies.

[INSERT TABLE 3 ABOUT HERE]

Interrater reliability. Of the transcribed interviews, 30% (selected from all conditions) were independently coded by two assistants, both blind to all conditions. Interrater reliability for new information revealed was calculated ($\kappa = .96$). Disagreements were addressed with discussions between the assistants. One of the assistants proceeded to code the remaining 70% of the transcripts. The first coder and a second coder coded all the descriptions of the counter-interrogation strategies separately and inter-rater reliability was calculated ($\kappa = .95$). A total of 2101 agreements were observed, which represented 99.06% of all observations. The few disagreements were addressed in discussions between the coders.

Open Data Statement

Scripts for all analyses, materials, and anonymized data are available at the Open Science Framework (<https://osf.io/aq8dp/>). The material is in Swedish and Finnish. English translations can be requested from the corresponding author.

Results

Preliminary Analyses

We conducted five two-way independent ANOVAs in order to test hypotheses 1 to 5. In order to test hypothesis 6 we used a mixed ANOVA-type GLM. With respect to the participants' motivation (see Question 3 in Table 2), we obtained a mean score above the midpoint of the scale ($M = 5.46$, $SD = 1.22$). Participants found the instructions relatively easy to understand ($M = 5.96$, $SD = 1.25$), and found it moderately difficult to take the role as a source ($M = 4.26$, $SD = 1.62$). No statistically significant differences were found between the four conditions with respect to the participants' motivation ($p = .87$), how difficult it was to understand the instructions ($p = .72$), or how difficult it was to take the role of a source ($p = .21$).

The Sources' Counter-Interrogation Strategies

The sources' descriptions of strategies. Two-way ANOVAs were conducted to analyze the counter-interrogation strategies described by the sources (see Table 3). For the total number of counter-interrogation strategies ($F = 4.55, p = .005$) and the strategy of contemplating the interviewer's prior knowledge and providing information perceived as known to the interviewer, Levene's test indicated a violation of homogeneity of variance ($F = 18.72, p < .001$). Therefore, a more conservative alpha of .01 was set for these analyses to decrease the otherwise inflated risk of type-1 error.

Concerning the number of counter-interrogation strategies described, there was an main effect of approach, $F(1, 97) = 4.56, p = .035, \eta_p^2 = .045$ such that the number of strategies were higher in the Direct condition ($M = 2.28, SD = 1.08$) than in the Scharff condition ($M = 1.88, SD = .92$). There was no main effect of training, $F(1, 97) = .18, p = .670, \eta_p^2 = .002$, indicating that sources in both conditions attempted to adopt strategies to a similar degree. There was, however, a statistically significant interaction effect between interview condition and information condition regarding the number of counter-interrogation strategies described, $F(1, 97) = 9.12, p = .003, \eta_p^2 = .086$. In the Scharff condition, the informed sources ($M = 2.21, SD = .93$) attempted to adopt more strategies than uninformed sources ($M = 1.54, SD = .78$), whereas for the Direct approach informed sources ($M = 2.04, SD = .76$) attempted to adopt less strategies than uninformed sources ($M = 2.54, SD = 1.30$). The full factorial model explained 12.3% of the variance, $F(3, 97) = 4.55, p = .005, \eta_p^2 = .123$.

Informed sources ($M = .31, SD = .47$) described the counter-interrogation strategy of contemplating the interviewer's knowledge significantly more often than uninformed sources ($M = .08, SD = .27$), $F(1, 97) = 9.18, p = .003, \eta_p^2 = .086$. There was no effect of approach, $F(1) = .558, p = .457, \eta_p^2 = .006$, and no interaction between training and approach, $F(1) = .043, p = .836, \eta_p^2 = .000$. The entire full factorial model explained 9.2% of the variation, $F(3)$

= 3.26, $p = .025$, $\eta_p^2 = .092$. However, this counter-interrogation strategy did not succeed in objective measures, where informed sources ($M = 1.62$, $SD = 1.60$) and uninformed sources ($M = 1.65$, $SD = 1.66$) revealed already known information to a similar degree, $F(1, 116) = .01$, $p = .906$, $\eta_p^2 = .000$.

The sources' perception of the counter-interrogation strategies. Two-way ANOVAs were conducted to analyze the sources' perception of the counter-interrogation strategies. Compared to uninformed sources ($M = 4.23$, $SD = 1.59$) informed sources thought it was more difficult to withhold new information ($M = 3.68$, $SD = 1.57$), but this difference was not statistically significant, $F(1, 105) = 3.17$, $p = .078$, $\eta_p^2 = .029$. Neither was there a statistically significant effect of approach, $F(1, 105) = .27$, $p = .602$, $\eta_p^2 = .003$, nor interaction effect, $F(1, 105) = .78$, $p = .380$, $\eta_p^2 = .007$. The entire full factorial model explained only 4% of the variation in the outcome, $F(3, 105) = 1.44$, $p = .235$, $\eta_p^2 = .040$.

Informed sources thought they were perceived as more cooperative ($M = 4.11$, $SD = 1.34$), than uninformed sources ($M = 3.85$, $SD = 1.45$), but not significantly so, $F(1, 106) = 1.03$, $p = .312$, $\eta_p^2 = .010$. Neither was there a statistically significant effect of approach, $F(1, 106) = .00$, $p = .949$, $\eta_p^2 = .000$, nor interaction effect, $F(1, 106) = 2.40$, $p = .125$, $\eta_p^2 = .022$. The entire full factorial model explained 3% of the variation in the outcome, $F(3, 106) = 1.11$, $p = .349$, $\eta_p^2 = .030$.

Compared to uninformed sources ($M = 3.96$, $SD = 1.55$), informed sources thought to a wider extent that their strategies helped them in reaching their goals ($M = 4.08$, $SD = 1.52$), but the difference was not statistically significant, $F(1, 100) = .15$, $p = .701$, $\eta_p^2 = .001$. There was no statistically significant effect of approach, $F(1, 100) = 1.07$, $p = .303$, $\eta_p^2 = .011$, and no interaction between approach and training, $F(1, 100) = 1.01$, $p = .317$, $\eta_p^2 = .001$. The full

model only explained 2% of the variance in the outcome, $F(3, 100) = .75, p = .526, \eta_p^2 = .022$.

Compared to sources interviewed with the Scharff protocol ($M = 3.08, SD = 1.37$), sources interviewed with the Direct approach thought it was easier to adopt counter-interrogation strategies during the interview ($M = 3.67, SD = 1.60$), $F(1, 99) = 3.82, p = .054, \eta_p^2 = .037$, although the difference was not statistically significant. There was no main effect of training, $F(1, 99) = .23, p = .637, \eta_p^2 = .002$, and no interaction effect of approach and training, $F(1, 99) = .01, p = .913, \eta_p^2 = .000$. The full model explained 4%, $F(3, 99) = 1.38, p = .253, \eta_p^2 = .040$.

Furthermore, sources in the Direct approach thought they were more able to provide information that they believed was known to the interviewer ($M = 4.36, SD = 1.45$), than sources interviewed with the Scharff protocol ($M = 3.55, SD = 1.66$), $F(1, 108) = 7.31, p = .008, \eta_p^2 = .063$. There was no effect of training, $F(1, 108) = .24, p = .625, \eta_p^2 = .002$, or interaction, $F(1, 108) = .77, p = .384, \eta_p^2 = .007$. The entire full factorial model thus explained 7.3% of the variance in the outcome variable, $F(1, 108) = 2.83, p = .042, \eta_p^2 = .073$. This was also reflected in the objective measures. Sources interviewed with the Direct approach protocol provided a larger amount of information that was already known to the interviewer ($M = 2.18, SD = 1.79$) than sources interviewed with the Scharff protocol ($M = 1.08, SD = 1.21$), $F(1, 116) = 15.28, p < .001, \eta_p^2 = .116$. There was no effect of training, $F(1, 116) = 0.01, p = .906, \eta_p^2 = .000$, and no interaction effect, $F(1, 116) = 0.00, p = 1.00, \eta_p^2 = .000$. The full model, thus, explained 11.7% of the variance, $F(3, 116) = 5.10, p = .002, \eta_p^2 = .117$.

New Information Revealed During the Interview

The amount of new information collected. Sources interviewed with the Scharff protocol provided more new information ($M = 4.20$, $SD = 2.15$) than sources interviewed with the Direct approach protocol ($M = 3.55$, $SD = 1.72$). However, this result was not statistically significant, $F(1, 116) = 3.34$, $p = .07$, $\eta_p^2 = .028$. Hence, Hypothesis 1 was not supported. Sources who were not informed about the specific counter-interrogation strategy revealed more new information ($M = 4.13$, $SD = 2.05$) than informed sources ($M = 3.62$, $SD = 1.87$), but the information conditions did not differ significantly, $F(1, 116) = 2.11$, $p = .15$, $\eta_p^2 = .018$. Thus, Hypothesis 2 was not supported. Furthermore, no significant interaction effects between interview conditions and information conditions regarding new information elicited were found, $F(1, 116) = .02$, $p = .89$, $\eta_p^2 = .000$. The model explained 4.5% of the variation in the outcome, $F(3, 116) = 1.82$, $p = .147$, $\eta_p^2 = .045$.

Deception. Eleven pieces of fabricated information were uttered during the interviews. These were too few for statistical analysis, as the fabrications constituted less than 3% of all information revealed. This is in line with earlier studies on the Scharff technique (see e.g., Oleszkiewicz, Granhag, & Kleinman, 2014) for more information on deception in this context).

The Sources' Perception of the Interview

The perception of the interviewer's prior knowledge. Sources in the Scharff condition perceived the interviewer to have held more information prior to the interview ($M = 5.15$, $SD = 1.49$) in comparison with sources who had faced the Direct approach ($M = 3.75$, $SD = 1.24$), $F(1, 116) = 31.71$, $p < .001$, $\eta_p^2 = .215$. Hence, Hypothesis 3 was supported. There was no effect of training, $F(1, 116) = 3.04$, $p = .084$, $\eta_p^2 = .026$, nor was there any interaction between approach and training, $F(1, 116) = 1.15$, $p = .286$, $\eta_p^2 = .010$. The full

factorial model thus explained 23.6% of the variance in the outcome, $F(3, 116) = 11.96, p < .001, \eta_p^2 = .236$.

Compared to the sources in the Direct approach condition ($M = 1.88, SD = 1.99$), sources interviewed with the Scharff protocol ($M = 4.42, SD = 2.36$) more often misperceived the interviewer to have held pieces of information that the interviewer in fact did not hold, $F(1, 116) = 39.83, p < .001, \eta_p^2 = .256$. Thus, Hypothesis 4 was supported. Again, there was no effect of training, $F(1, 116) = .17, p = .679, \eta_p^2 = .001$, or any interaction between approach and training, $F(1, 116) = .25, p = .619, \eta_p^2 = .002$, with the full model explaining 25.8%, $F(3, 116) = 13.42, p < .001, \eta_p^2 = .258$.

Furthermore, sources in the Scharff condition had a less clear understanding of the interviewer's information objectives ($M = 3.70, SD = 1.81$) in comparison with sources in the Direct approach ($M = 4.30, SD = 1.84$), but this difference was not statistically significant, $F(1, 116) = 3.20, p = .076, \eta_p^2 = .027$. Hence, Hypothesis 5 was not supported. There was no effect of approach, $F(1, 116) = .16, p = .692, \eta_p^2 = .001$, nor any interaction between approach and training, $F(1, 116) = .16, p = .692, \eta_p^2 = .001$. The full factorial model explained no more than 2.9%, $F(3, 116) = 1.17, p = .324, \eta_p^2 = .029$.

Relating Objective and Subjective Measures

A mixed ANOVA-type GLM with the two interview conditions as the between-subjects factor and the revealed information scores (objective and subjective) as the within-subjects factor was conducted. The interaction showed that the difference between the objective amount of new information revealed and the sources' perception of new information revealed depended on the interview condition, $F(1, 118) = 11.58, p = .001, \eta_p^2 = .089$. The interaction was analyzed further by the use of simple effects tests for each interview condition. The sources in the Scharff condition perceived to have revealed a lesser amount of new information ($M = 3.78, SD = 2.29$) than they objectively revealed ($M = 4.20, SD = 2.15$),

but not to a statistically significant extent, $F(1, 118) = 1.87, p = .17, \eta_p^2 = .016$. In contrast, the sources in the Direct approach perceived to have revealed significantly more new information ($M = 4.60, SD = 2.57$) than they objectively revealed ($M = 3.55, SD = 1.72$), $F(1, 118) = 11.87, p = .001, \eta_p^2 = .091$ (see Figure 1). Thus, hypothesis 6 was partially supported. To test whether the interaction effect was similar across the two information conditions, a mixed ANOVA-type GLM with the two information conditions and the two interview conditions as the between-subjects factor and the revealed information scores as the within-subjects factor was conducted. As expected, training did not significantly affect the interaction between the amount of new information revealed and sources' perception of new information revealed, $F(1, 116) = .09, p = .76$.

[INSERT FIGURE 1 ABOUT HERE]

Discussion

The present study adds to previous work on HUMINT gathering techniques by comparing the effectiveness of the Scharff technique to that of the Direct approach when sources are informed about counter-interrogation strategies. Half of the sources were given information about contemplating the interviewer's knowledge, including the tactic of providing information that is perceived as known by the interviewer. Measures included both objective (i.e., information revealed) and subjective (i.e., the sources' perception of the interviewer's previous knowledge) measures. The use of counter-interrogation strategies and the impact of these strategies on the interview techniques were explored.

Effectiveness to Gather New Information

Based on previous research (e.g., Oleszkiewicz, Granhag, & Cancino Montecinos, 2014; Oleszkiewicz, Granhag, & Kleinman, 2014; May & Granhag, 2016; Oleszkiewicz et al., 2017b), we predicted that the Scharff technique would outperform the Direct approach with respect to gathering new information. We also expected informed sources to be more

motivated to withhold new information, thus revealing a smaller amount of new information. In both cases, the observed differences were in the predicted directions, although not statistically significant. Regarding new information gathered, we found no statistically significant interaction effects between interview condition and information condition. It is possible that the sources' extensive use of counter-interrogation strategies led to differences between the outcome of the present study and previous studies on the Scharff technique (see e.g., Granhag, Kleinman, & Oleszkiewicz, 2016). Sources in the present study might have been extra cautious about revealing information, resulting in a smaller difference between the two compared interview approaches. Moreover, informed sources interviewed with the Scharff technique might have had a more difficult task with figuring out how to achieve their counter-interrogation objectives (in comparison to informed sources in the Direct approach condition), since these sources were faced with what was known to interviewer in the tactic of the "illusion of knowing it all". This could have limited the sources' ability to reveal information in the Scharff condition, which could explain why the sources interviewed with the Scharff technique in the present study reveal less new information in comparison to earlier studies on the technique.

The results of the current study indicate that the counter-interrogation strategy of contemplating the interviewer's knowledge did not have a large negative effect on the effectiveness of the interview techniques to elicit new information. Put differently, both the Scharff technique and the Direct approach might be similarly robust against this counter-interrogation strategy, in terms of gathering new information.

The Sources' Perception of the Interview

Because information elicitation involves collecting information by affecting the source's perception of the interaction, we stated predictions regarding the sources' perception of the interviewer's information objectives. We predicted that the sources in the Scharff

condition would perceive the interviewer as more knowledgeable due to the illusion of “knowing it all”. In line with previous work (e.g., Granhag, Oleszkiewicz, & Kleinman, 2016), sources interviewed with the Scharff technique (vs. Direct approach) perceived the interviewer to have held significantly more information prior to the interview. Misperceptions of information as already known to the interviewer were also more common in the Scharff condition, which is in line with earlier studies (e.g., Granhag et al., 2015). Sources interviewed with the Scharff technique had a relatively less clear understanding of the interviewer’s information objectives, but this result did not reach statistical significance. Regarding this measure on perception, earlier research on the Scharff technique has shown both significant (see e.g., Granhag et al., 2015; Oleszkiewicz, Granhag, & Kleinman, 2014; May, & Granhag, 2016) and non-significant results (Oleszkiewicz, Granhag, & Cancino Montecinos, 2014; Oleszkiewicz et al., 2017b). Moreover, Granhag et al. (in press) found that sources interviewed by Scharff-trained military intelligence officers thought it was more difficult to read the interviewer’s information objectives, in comparison to those interviewed by officers who were not trained in the Scharff technique. In contrast, Oleszkiewicz et al. (2017a) did not find a significant effect with regard to this measure when training professional handlers from the police.

Altogether, these results support the notion that the Scharff technique affects the sources’ perception in a way that makes the interviewer appear more knowledgeable than s/he in fact is (Granhag, Kleinman, & Oleszkiewicz, 2016). Sources in the present study did, however, not differ regarding one of the goals in information elicitation, that is, the perceived difficulty to read the interviewer’s information objectives.

Relating Objective and Subjective Measures

Another goal in information elicitation is to collect information by leading the source to underestimate his/her contribution of new information. We examined this by relating

objective and subjective scores with new information revealed. Sources interviewed with the Scharff technique perceived to have revealed a lesser amount of new information than they objectively revealed, but this pattern was not statistically significant. In contrast, sources in the Direct approach condition perceived to have revealed significantly more new information than they objectively revealed. These results are in line with previous work on the Scharff technique (e.g., Granhag, Oleszkiewicz, & Kleinman, 2016) and suggest that the Scharff technique and the Direct approach differ regarding their effectiveness to affect the sources' perception of their contribution of new information. Whereas the Scharff technique seems to affect the sources' perception in accordance with the goal of information elicitation techniques, the Direct approach is in sharp contrast with this goal.

The Impact of Counter-Interrogation Strategies on Information Elicitation

The present study set out to explore possible effects of counter-interrogation strategies on the Scharff technique. The Scharff technique is strongly tied to the concept of perspective taking and aims at eliciting information by means of leading the source to perceive the interviewer as knowledgeable. Therefore, possible countermeasures to the technique would include to take the perspective of the interviewer in order to figure out what the interviewer already knows and reveal information that is perceived as already known to the interviewer. We found that sources who were informed and uninformed about considering the interviewer's knowledge described using a similar number of counter-interrogation strategies. This indicates that semi-cooperative sources generally try to counter the interrogation by employing strategies. We also found that sources described that they had adopted the strategy they were informed about and encouraged to use. However, in objective measures, informed sources did not manage to reveal more previously known information than uninformed sources. Hence, this specific counter-interrogation strategy was not very successful. Sources interviewed with the Direct approach (vs. Scharff technique) revealed more information that

was already known to the interviewer. This finding is not surprising. Sources interviewed with the Direct approach do not receive explicit demonstrations of what the interviewer already knows. These sources might thus more often reveal information that they have planned to reveal, which is likely to include both already known and new information. In the Scharff technique, sources need to go beyond the information presented by the interviewer in the illusion of “knowing it all”, thus providing less information that is already known to the interviewer. Sources interviewed with the Direct approach (vs. the Scharff technique) also thought it was easier to provide information perceived as already known to the interviewer. Although the difference failed to reach statistical significance, sources interviewed with the Direct approach (vs. the Scharff technique) thought it was easier to adopt counter-interrogation strategies during the interview. This indicates that sources interviewed with the Direct approach are in a better position to provide already known information and therefore adopt this as a counter-interrogation strategy. Interestingly, this suggests that the Scharff tactics, such as presenting already known information in the attempt to establish the illusion of “knowing it all”, might make it more difficult for sources to use the counter-interrogation strategy of providing known information.

We found that sources interviewed with the Direct approach attempted to adopt a larger number of counter-interrogation strategies, in comparison to sources interviewed with the Scharff technique. Moreover, an interaction effect was found that suggested that sources informed about the counter-interrogation strategy attempted to adopt a larger number of counter-interrogation strategies when interviewed with the Scharff technique. However, this was not the case for the sources interviewed with the Direct approach. This result could be due to the tactics used for the Scharff technique. Informed sources interviewed with the Scharff technique might have inferred that the interaction would be challenging when faced with the illusion of “knowing it all”, and therefore did not adhere to their pre-planned

strategies, and consequently came to introduce alternative strategies in order to counter the interview. In the Direct approach condition, however, the sources are in a better position to use their pre-planned counter-interrogation strategies. The counter-interrogation strategies adopted by the informed sources in the Scharff condition were, however, not met with success in objective measures. Although the difference failed to reach statistical significance, the Scharff technique elicited more new information than the Direct approach. In contrast, sources in the Direct approach seemed to succeed in adopting the counter-interrogation strategy of revealing known information.

Additionally, we found that informed sources thought it was more difficult to withhold new information than uninformed sources, yet this difference did not reach statistical significance. We did not find any statistically significant differences regarding informed and uninformed sources' perception of being perceived as cooperative by the interviewer or perception of their strategies being helpful in reaching goals.

Limitations

One important limitation that can have impacted the outcome of the present study concerns the information about counter-interrogation strategies that was given to half of the participants. For some outcomes, no statistically significant differences between the informed sources and uninformed sources were found. Contrary to our expectations, informed and uninformed sources revealed an equal amount of new information, indicating that the strategies adopted by the informed sources were unsuccessful and therefore ineffective. It is difficult to interpret this outcome, but one reason could be that the instructions regarding the strategy of contemplating the interviewer's prior knowledge was not comprehensive enough to help the sources reach their goals. In addition, this outcome could also be due to the sources changing their strategies, and consequently, in the case of the informed sources, using other strategies than the one instructed to them. Instructing the sources to do as well as

possible with their planned specific strategy might have magnified the difference between the informed and uninformed sources in terms of counteracting the interview techniques. Also, as a possible result of the sources' change of strategies, the statistical power of the present study might not have been high enough to detect an actual effect.

Finally, an important limitation to consider when interpreting our findings is that the setting used in the present study differs from a typical HUMINT gathering setting in the field. For example, the participants in our study, who were mainly students, differ from typical sources in several aspects. We would, however, like to argue that the Scharff technique is likely more, not less, effective in real life than in lab settings. Real-life sources are more motivated than students to employ counter-interrogation strategies (Alison et al., 2014; Soufan, 2011). Because the Scharff technique is tailored to counteract these strategies, it might outperform the Direct approach in real life. This should, however, be tested in future studies.

Conclusions and Future Directions

The present study provides some initial support that the effectiveness of the Scharff technique is relatively robust against counter-interrogation strategies in general and the strategy of revealing known information in particular. Counter-interrogation strategies can result from an individual's own approach or instructions and training from an organized group (Alison et al., 2014). Therefore, future research should include different ways of training sources in counter-interrogation strategies. Also, the effectiveness of the Scharff technique should be evaluated when sources are informed about other kinds of counter-interrogation strategies than the strategy outlined in the present study. The present study included an explorative examination of the effects of counter-interrogation strategies on human intelligence gathering techniques. Future studies should aim at testing defined hypotheses when examining the impact of counter-interrogation strategies.

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Table 1

Questions concerning counter-interrogation strategies

Question	7-point Likert scale	Informed sources, <i>M (SD)</i>	Uninformed sources, <i>M (SD)</i>	<i>t (df)</i>	<i>p</i>
1. To what extent did the strategies help you reach your goals during the conversation?	1 = To a very small extent 7 = To a great extent	4.08 (1.52)	3.96 (1.55)	0.38 (102)	0.70
2. How easy was it to adopt the strategies?	1 = Very difficult 7 = Very easy	3.31 (1.52)	3.48 (1.53)	0.56 (101)	0.58
3. To what extent were you able to provide information that you believed was known to the interviewer?	1 = To a very small extent 7 = To a great extent	3.89 (1.73)	4.05 (1.46)	0.53 (110)	0.60
4. How easy was it to withhold new information while trying to provide information that you perceived as already known to the interviewer?	1 = Very difficult 7 = Very easy	3.68 (1.57)	4.23 (1.59)	1.81 (107)	0.07
5. How cooperative do you think you were perceived as by the interviewer?	1 = Not at all cooperative 7 = Very cooperative	4.11 (1.34)	3.85 (1.45)	0.96 (108)	0.34

Table 2

Questions concerning the source's perception of the interview

Question	7-point Likert scale	Informed sources, <i>M (SD)</i>	Uninformed sources, <i>M (SD)</i>	<i>t (df)</i>	<i>p</i>
1. How much information about the planned bombing do you think that the police held prior to the interview?	1 = A very small amount 7 = A great amount	4.67 (1.40)	4.23 (1.65)	1.55 (118)	0.12
2. How easy was it for you to understand what information the interviewer was seeking to obtain?	1 = Very difficult 7 = Very easy	4.07 (1.97)	3.93 (1.72)	0.40 (118)	0.69
3. How motivated were you regarding striking a balance between not revealing too much information nor too little information during the interview?	1 = Not at all motivated 7 = Very motivated	5.42 (1.37)	5.5 (1.07)	0.37 (118)	0.71
4. How difficult was it to understand the instructions of the study?	1 = Not at all difficult 7 = Very difficult	2.00 (1.25)	2.08 (1.27)	0.36 (118)	0.72
5. How difficult was it to take on the role as a source?	1 = Not at all difficult 7 = Very difficult	3.88 (1.53)	3.6 (1.70)	0.96 (118)	0.34

Table 3
Sources' Reported Use of Counter-Interrogation Strategies

Strategy	Description	Percentage per condition (n)				Total % (n)
		<u>Direct approach</u>		<u>Scharff technique</u>		
		<u>Informed (22)</u>	<u>Uninformed (28)</u>	<u>Informed (24)</u>	<u>Uninformed (27)</u>	
Mislead/Fabrications	Tell lies, modify information	9.1	14.3	25.0	0	11.9
Masked Deception	Mix lies with truth	4.5	3.6	0	3.7	3.0
Modify Importance	Reduce or magnify threat and/or consequences	0	0	8.3	7.4	4.0
Avoid Details	Not reveal detailed information, give vague or overarching information	50.0	35.7	33.3	37.0	38.6
Unrelated Information	Reveal irrelevant information, bypass the discussed subject	4.5	7.1	0	3.7	4.0
Withholding	Concentrating on not revealing information, being quiet, give brief answers	4.5	14.3	12.5	3.7	8.9
Repeat Knowledge	Repeat knowledge told by the interviewer	0	0	4.2	3.7	2.0
Add Alternatives	Give several alternatives, one of them being the right one	4.5	0	0	3.7	2.0
Naivety	Seem unknowledgeable about information, seem unsure about the correctness of information revealed	18.2	10.7	8.3	7.4	11.0
Await Initiative	Await the interviewer's initiative, let the interviewer lead the conversation	4.5	32.1	4.2	7.4	12.9
Stall Interview	Attempt to maneuver the conversation	0	3.6	0	0	1.0
Appeal for Empathy	Express discomfort, appeal to pity	9.1	7.1	4.2	0	5.0
Appeal for Relationship	Show will to be cooperative and/or reveal more information in future conversations	4.5	3.6	4.2	0	3.0
Contemplating the Interviewer's Knowledge	Adapt revealing of information to information revealed by the interviewer, reveal information that is thought to be known by the interviewer, "I will reveal information that they already know" strategy	40.9	10.7	29.2	3.7	19.8
Not Repeat Knowledge	Not repeat information revealed by the interviewer	4.5	0	20.8	0	5.9
Verifiable Information	Reveal information that is likely to become figured out or known to the interviewer in other ways	0	7.1	0	7.4	4.0
Cooperative Appearance	Seem cooperative, seem to be willing to reveal information, seem trustworthy, seem courteous	36.4	32.1	25	7.4	24.8

Prespecified Information	Give premeditated answers to questions or reveal premeditated pieces of information	9.1	21.4	4.2	22.2	14.9
Forthcoming	Reveal most of the information held	18.2	10.7	12.5	3.7	10.9
Add Extra Information	Reveal some information perceived to be new to the interviewer, reveal some relevant information beyond what was asked for, reveal some details	18.2	10.7	25.0	11.1	15.8
Avoid Lying	Avoid revealing false information	9.1	10.7	0	3.7	5.9

Note. A total of 101 participants provided descriptions. The participants reported 2.09 strategies on average ($SD = 1.02$). The descriptions of two participants were coded as not containing any counter-interrogation strategy.

Figure 1. An illustration of the interaction effect for the objective and subjective scores of new information revealed across the two information conditions within and between the two interview conditions. Objective = objective amount of new information revealed; Subjective = perceived amount of new information revealed. Higher values mean a larger amount of new information. The difference between the objective amount of new information revealed and the sources' perception of new information revealed depended on the interview condition, $F(1, 118) = 11.58, p = .001, \eta_p^2 = .089$.

Appendix 1

Checklist of Information Available to the Participants

- THE GROUP**
- Named MDA
 - Ten members
 - Located in Turku, Finland
 - Formed in connection to a manifestation against the Independence Day ball in 2013
- HISTORY**
- Has planned attacks
 - Has earlier planned a bomb attack in Helsinki, Finland
 - The planned bomb attack was cancelled
 - Cancelled because of a dispute in the group
 - Martin Andersson left the group after the dispute
- ACTIVE GROUP**
- Five people are planning an attack
 - Three people are Finnish
 - Two people are Estonian
- EXPERTISE**
- There are members with special knowledge
 - There are bomb experts
 - The Estonian are the bomb experts
- PLACE**
- The centre
 - Hansakortteli shopping centre
 - The Stockmann department store
- IT IS PLACED**
- On the second floor
 - In a department store section
 - In an electronics section
 - In the electronics section in Stockmann
- DATE**
- Around Christmas
 - After Christmas/Year-End sales
 - The 27th December
- WHEN DELIVERED**
- During opening hours/day time
 - Close to closing hours

HOW DELIVERED

- At 7:55 PM
- Placed in a device
- Place in a TV
- A device is going to be repaired
- A TV is going to be repaired

WHEN TRIGGERED

- During the evening
- After closing hours
- Around 11 PM