Interview styles, adult’s recall and personality in investigative interview settings: Mediation and moderation effects

Kent Madsen and Pekka Santtila

Abstract: Previous studies have investigated the effects of a humanitarian rapport-orientated and a dominant non-rapport-orientated interview style on the memory performance of adults in two interviews separated by a 6-month interval. Also, the impact of interviewees’ personality on recall was investigated. In the present exploratory study, the data that formed the basis of previous findings were reanalysed for potential indirect effects of interview approach on interviewees’ recall, and for any potential relation between the interview approach and interviewees’ recall as moderated by their personality. Results showed three full mediation effects in the second interview: the rapport index (interviewers’ demeanour) mediated the relation between the interview approach and increased recall; the non-rapport index mediated the relations between the interview approach and decreased recall. Follow-up analyses showed a full mediation effect for the individual items friendliness and cooperation in the rapport index, and for negative attitude, nonchalance, impatience and brusqueness and obstinacy in the non-rapport index. Moreover, the results showed a significant moderation effect; the relationship between the interview approach and confabulated memories being moderated by openness to

ABOUT THE AUTHOR

The first author’s ongoing research project has a Therapeutic Jurisprudential approach. Basically, it experimentally investigates the effects of two empirically grounded interview styles, a humanitarian rapport-orientated and a dominant non-rapport-orientated approach, on adult’s memory performance and psychological well-being in two interviews separated with a 6-month interval. Also investigated was the effect of interviewees’ personality on recall. The findings of these previous studies, in essence, show that a humanitarian rapport-orientated approach facilitated the interviewee’s recall as well as their psychological well-being, whereas a dominant non-rapport-orientated approach hampered their recall and contributed to a decreased psychological well-being. The research reported in this paper is connected to previous studies insofar that it seeks to confirm and refine previous results. In a wider perspective, the results may help identify empirically supported aspects that forms the essence of rapport.

PUBLIC INTEREST STATEMENT

The police interview is an important investigative tool in criminal investigations. How the police conduct these investigative interviews affects not only crime victim’s and suspect’s legal rights but also the public’s perception of the police. This article investigated whether the interviewer’s behaviour related to interview styles (a humanitarian versus a dominant style) in greater detail could explain previous findings—that a humanitarian conducted interview elicited a larger amount of information. It was found that the interviewer’s conduct alone in some instances explained an increased recall in the humanitarian approach, and a decreased recall in the dominant condition. Understanding these effects can help improve the police’s ability to elicit more information during interviews. An increased recall may give crime victims increased opportunities for justice as well as help not guilty suspects to show their innocence.

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experience; and a high level of openness was associated with an increase in confabulated memories.

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**Keywords:** mediation; moderation; personality; rapport; recall

In the forensic literature, rapport is considered important for facilitating communication (e.g., Bull, 2013; Milne & Bull, 1999; St-Yves, 2006). For example, previous research shows that rapport-orientated and non-rapport-orientated interview styles result in differences in the memory performance of adults (Collins, Lincoln, & Frank, 2002; Holmberg, 2004; Vallano & Schreiber Compo, 2011) and in suspects’ cooperation (Alison et al., 2014; Kelly, Miller, & Redlich, 2015).

Using an experimental design, Holmberg and Madsen (2014) found that a rapport-orientated approach, in comparison to a non-rapport-orientated approach, contributed to interviewees’ reporting substantially more information in two interviews, but did not, however, investigate potential indirect effects of interview approach on interviewees’ recall. Madsen and Holmberg (2015) found that the interviewees’ personality (Five-Factor Model, FFM) affected their memory performance directly. Neuroticism predicted increased recall, and this more so with the humanitarian rapport-orientated approach, whereas openness to experience and extraversion predicted decreased recall. No statistical significant effects of trait anxiety on interviewees’ recall were found. Additional analyses (Madsen, 2017) showed that neuroticism was associated with decreased recall in the non-rapport-orientated approach; in the humanitarian rapport-orientated approach, conscientiousness was associated with less reported memories, and openness to experience was associated with more reported confabulated memories (Madsen, 2017); however, the potential moderation of these effects by the personality of the interviewee were not explored.

Furthermore, there are gaps in the investigative literature on rapport. Abbe and Brandon (2013) called for empirical research on how rapport contributes to interview outcomes, how it is best established, and how rapport can be used for instrumental purposes in investigative interviews. Borum, Gelles, and Kleinman (2009) pointed to the lack of an empirically based definition of the essence of rapport.

Accordingly, and adding to the ongoing discussion as to how and why rapport and personality contribute to memory performance, the aim of the present study was to explore previous findings (Holmberg & Madsen, 2014; Madsen, 2017; Madsen & Holmberg, 2015) in greater detail. More specifically, the study explores the potential indirect effects of the interview approach (rapport versus non-rapport orientated) on memory performance through the interviewers’ demeanour in each approach. In addition to which it also investigates the possible effects regarding the relationship between the interview approach and interviewees’ memory performance as moderated by their personality. The results of the present study may contribute to gaining a better understanding of the operative properties of rapport.

Investigative interviews may include a complex, positive and dynamic interaction between interactants labelled rapport (Fisher & Geiselman, 2010; Shepherd & Griffiths, 2013), the precise effects and components of which remain allusive (Abbe & Brandon, 2013, 2014). In the literature on investigative interviewing, different aspects and constructs are considered important and have been suggested to contribute to rapport; for example, an awareness of how the interviewer and interviewee influence one another in the interaction is emphasised by Fisher and Geiselman (2010) and Shepherd and Griffiths (2013). Moreover, aspects such as the interviewer creating a personal atmosphere (treating the interviewee as a person with individual needs), active listening and an empathic approach are also stressed as important (Fisher &
Geiselman, 1992; Shepherd & Griffiths, 2013). St-Yves (2006) argued that in order to facilitate rapport it is important for an interviewer to keep an open mind, being objective and acting professionally, in addition to paying attention (Milne & Bull, 1999; St-Yves, 2006). Collins et al. (2002) pointed to the importance of the interviewer's friendliness, as well as allocating adequate time to develop rapport. Other rapport-building behaviours are self-disclosure (e.g., Vallano & Schreiber Compo, 2011) and mimicry (Abbe & Brandon, 2014). The latter describe a perception–behaviour link that refers to an often automatically activated tendency to act the same way as we see others do (Dijksterhuis & Bargh, 2001). The causal effect is believed to be bi-directional and greater imitation produces greater liking and rapport, and the inverse (Chartrand & Bargh, 1999; Dijksterhuis & Bargh, 2001).

Few empirical studies in the context of investigative interviewing have assessed rapport holistically and based on an explicit theoretical framework. Such an approach, assuming a view that rapport as a construct is not one-sidedly static by nature, but can be construed as always being on a continuum (e.g., Kelly et al., 2015), allows for a more adequate consideration of the dynamic aspects of the construct. For example, Alison, Alison, Noone, Elntib, and Christiansen (2013) examined the rapport-based behaviour of police interrogators in interviews with terror suspects using their coding framework: Observing Rapport-Based Interpersonal Techniques (ORBIT). The conceptual basis of ORBIT draws from two theoretical frameworks: the literature on motivational interviewing (MI; originally developed by Rollick and Miller in the domain of counselling) and the five approaches of acceptance, adaption, autonomy, empathy and evocation for assessing interviewer use of MI-consistent strategies, and the Interpersonal Behavior Circle (IBC; developed by Leary and Coffey). The IBC was used to assess interrogator and interviewee interpersonal behaviour along dimensions of authority, passivity, challenge and collaboration. Furthermore, Walsh and Bull (2012) used Tickle-Degnen and Rosenthal’s (1990) conceptualisation of rapport to examine rapport in investigative interviews with suspects. The construct of Tickle-Degnen and Rosenthal (1990) emanates from social psychology and focuses on how reciprocal, non-verbal correlates manifest themselves in the interaction. The dynamic structure of rapport is described in terms of three interrelated, theoretical prototypes: mutual attentiveness, positivity and coordination. The first component, mutual attentiveness refers to the degree of involvement the interactants experience. When rapport is experienced they take an interest in what the other is saying and doing, i.e., their focus is other-involved. Mutual attentiveness facilitates a focused and interconnected interaction. The second component, positivity, signals a willingness to communicate, and may manifest itself in feelings of mutual friendliness and caring when interactants experience rapport. The third component, coordination, express itself as a balance and harmony between interacting parties and when the interactants experience rapport they become more accommodating and show mutual responsiveness. Early in the interaction, high levels of positivity and mutual attentiveness characterise rapport. As the interaction progresses, rapport is expressed more through attentiveness and coordination (Tickle-Degnen & Rosenthal, 1990).

Holmberg and Madsen (2014) integrated Tickle-Degnen and Rosenthal’s (1990) theoretical conceptualisation of rapport with previous empirical findings regarding both crime victims’ and offenders’ perceptions of their police interviewers as humanitarian or dominant (Holmberg, 2004; Holmberg & Christianson, 2002), thus describing an empirically based model of rapport. In the humanitarian rapport-orientated approach, interviewers acted cooperatively, helpfully, in a friendly manner, obligingly and with empathy. In addition, they expressed a positive attitude, showed a personal interest and made efforts to create a personal conversation (Holmberg, 2004; Holmberg & Christianson, 2002; Holmberg & Madsen, 2014). The operational components of the humanitarian rapport-orientated approach are congruent with what researchers have emphasised as being important for developing rapport, as well as the theoretical prototypes in Tickle-Degnen and Rosenthal’s (1990) construct. In the dominant non-rapport-orientated approach, the interviewers acted indifferently and unemotionally, aggressively, unfriendly, impatiently, brusquely and obstinately, and in a dissociative manner, in addition to which they showed a negative, condemning, formal and non-accessible attitude towards the interviewee (Holmberg, 2004; Holmberg &
Christianson, 2002). This theoretical and empirically based model of rapport was tested in an investigative interview context (mock) regarding interviewees’ recall, including the defined memory subcategories (Holmberg & Madsen, 2014).

1.1. Five-Factor Model and memory performance
The FFM (see, e.g., McCrae & Costa, 2008) of personality describes the basic tendencies of individuals in the five traits of neuroticism, extraversion, openness to experience, agreeableness and conscientiousness. Previous research on relations between episodic memory and FFM factors are with few exceptions conducted outside the context of investigative interviews. Openness to experience (Ayotte, Potter, Williams, Steffens, & Bosworth, 2009; Booth, Schinka, Brown, Mortimer, & Borenstein, 2006; Pearman, 2009; Schaie, Willis, & Caskie, 2004; Soubelet & Salthouse, 2011; Terry, Puente, Brown, Faraco, & Miller, 2013) and extraversion (Dubey, Singh, & Srivastave, 2014; Meier, Perrig-Chiello, & Perrig, 2002; Schåe et al., 2004) are associated with increased memory performance, while neuroticism is associated with poorer memory performance (Areh & Umek, 2007; Ayotte et al., 2009; Dubey et al., 2014; Hultsch, Hertzog, Small, & Dixon, 1999; Meier et al., 2002). Madsen and Holmberg (2015) findings: that in the first interview, neuroticism predicted an increased recall (and more so in the humanitarian rapport-orientated approach) for decision and action memories; in the second interview, that openness to experience predicted decreased recall for decision and action memories, and that extraversion predicted a decreased recall for peripheral memories are in contrast to previous studies. Extended analyses (Madsen, 2017), in which the scores for all the memory subcategories for both interviews were added together and correlated (bivariate) with FFM subscales, showed results which were somewhat more in line with previous research. That is, neuroticism was associated with less reported central visual memories in the dominant non-rapport-orientated approach. In the humanitarian rapport-orientated approach, conscientiousness was associated with less reported decision and action memories, and openness to experience was associated with an increase of confabulated central visual memories. The question of whether personality moderates the effects of interview style has not been explored. It is conceivable that the effects of interview style on memory performance depend, at least partly, on the personality of the interviewee.

Accordingly, the aim of the present study is to further explore the data that formed the basis of the results found by Holmberg and Madsen (2014), Madsen (2017) and Madsen and Holmberg (2015) concerning the potential indirect effects of the interview approach (rapport-orientated versus non-rapport orientated) on interviewees’ memory performance. However, the interview approaches were not perceived one-sidedly as being either rapport or non-rapport orientated by participants. Instead, in the humanitarian rapport-orientated approach, elements related to the non-rapport-orientated approach were reported being present, and vice versa (for details, see Holmberg & Madsen, 2014). We wanted to understand if the interviewers’ demeanour (as measured by a humanitarian and a dominant index comprising of different aspects of rapport [or lack of it]) mediated the effects significantly. Such findings could confirm and refine previously obtained results showing a causal link between interview styles and interviewees’ recall.

To understand the mediation effects in detail, we further explored which individual item assessing the interviewers’ demeanour contributes to that effect. Moreover, in accordance with findings in Holmberg (2004) and Holmberg and Christianson (2002), the present study made no distinction between interviews with victims or suspects; the main focus was on a holistic approach to interviewing, a way of relating [or lack thereof] to the interviewee.

It was hypothesised that the interviewer’s demeanour in the rapport-orientated approach would mediate increased recall, and that interviewer’s demeanour in the non-rapport-orientated approach would mediate decreased recall. A second aim was to explore any potential relation between the interview approach and the interviewee’s memory performance as moderated by their personality (FFM factors).
2. Method

2.1. Participants
The data sample was one of convenience. Interview I was completed by 88 women and 58 men \( (N = 146; \text{university students, academics and the general public}) \), aged between 18 and 70 years \( (M = 35.7, SD = 13.3) \). Seventy-five women and 52 men completed interview II \( (N = 127) \) aged 18–70 years \( (M = 36.4, SD = 13.3) \). Except for by chance, the participants had no previous experience/knowledge of investigative interviews.

2.2. Procedure
The studies (Holmberg & Madsen, 2014; Madsen & Holmberg, 2015) were based on an experimental design that comprised of three phases: exposure, interview I (conducted approximately one week after exposure) and interview II (approximately 6 months after exposure). During exposure, participants interacted in a computer simulation that served as a memory stimulus. In interview I \( (N = 146) \), participants were randomly assigned to be interviewed in either a humanitarian rapport-orientated approach \( (n = 72; \text{interview length ranging between } 11 \text{ and } 30.5 \text{ min}, M = 21.39, SD = 4.28) \) or a non-rapport-orientated approach \( (n = 74; \text{interview length ranging between } 6 \text{ and } 20 \text{ min}, M = 12.19, SD = 2.55) \) about events during exposure. The first interview attempted to simulate a police interview following a crime. In interview II \( (N = 127) \), participants were re-interviewed in the same condition and interview style; humanitarian rapport-orientated approach \( (n = 63; \text{interview length ranging between } 5 \text{ min } 46 \text{ s and } 34 \text{ min } 37 \text{ s}, M = 20.34, SD = 3.52) \) or a non-rapport-orientated approach \( (n = 64; \text{interview length ranging between } 3 \text{ min } 9 \text{ s and } 23 \text{ min } 32 \text{ s}, M = 9.49, SD = 4.13) \). The second interview symbolised a follow-up police or a court hearing (few existing studies have assessed adult’s free recall memory over long retention periods). Importantly, the interviews lasted until the interviewees themselves declared that they had nothing further to report.

The personality of participants in terms of the FFM was assessed with Rammstedt and John’s (2007) 10-item BFI-10 (translated into Swedish). Participants completed the inventory immediately prior to exposure. Also, participants completed the State-Trait Anxiety Inventory, state version (STAI-S; Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) pre- and post-exposure.

2.3. Stimulus material
A computer simulation in which two participants interacted simultaneously served as a memory stimulus. The computer simulation attempted to represent aspects of a real-life situation by evoking emotions as well as participant’s feelings of being a victim or a perpetrator of a crime while simultaneously observing, deciding on and acting upon unfolding aspects of the simulated event in which the participants played an active part. In addition, the computer simulation had an unlimited number of details possible to remember. The computer simulation was based on a fictitious theme: the fresh water system in a fictitious city inhabited by two fictitious ethnic groups had been polluted. The participants acted as a representative (randomly assigned) for one of the groups, and had the task to avoid illness/death by administering bactericides to the fresh water system over the course of 48 fictitious days (presented to participants). The participants had a choice of helping both ethnic groups, or only their own. However, unbeknownst to participants, the computer software (developed by Daniel Block, Master of Engineering) was programmed to favour one ethnic group (less illness/mortality) over the other (higher sickness rate/mortality). Moreover, participants representing the favoured group had the option of stealing the opponent’s delivery of bactericides on four occasions (which few opted to do, thus, a group of perpetrators did not crystallise), whereas participants representing the non-favoured group received four messages stating that their delivery of bactericides had been stolen.

Participants operated the computer simulation via the computer screen. Based on assumptions that participant’s attention would be directed to and shared between different features of the computer screen/simulation events, potential memory stimulus to be remembered were for
analyses purposes divided into memory subcategories: central visual information (the shifting status of the ethnic group’s health; the set of regulators for administration of bactericides), information related to participant’s decisions and actions (participant’s strategic decisions to distribute or conserve bactericides over the course of 48 fictitious days), and peripheral information (e.g., news pictures [affective pictures; Lang, Bradley, & Cuthbert, 2005]). In addition, participant’s confabulated information (details not present in the simulation) was observed and coded for. A more detailed description of the computer simulation, procedures for observing and coding memory performance, as well as inter-rater reliability is found in Holmberg and Madsen (2014).

2.4. Measurement of interview styles

The interviews were conducted within the constraint of a style and the interviewers dynamically made use of non-verbal as well as verbal correlates to convey the style in questions according to the underlying variables it was made up of (see Table 1). Also, in the humanitarian rapport-orientated approach, the interviewers strived to create a mutually collaborative environment, as opposed to a confrontational and maladaptive one, corresponding to the theoretical core components as described in Tickle-Degnen and Rosenthal’s conceptualisation.

For example, in the humanitarian rapport-orientated approach, the interviewer would smile, nod, keep appropriate eye-contact (e.g., to convey positivity, a personal interest), and allow the interviewee ample time to reflect on questions (e.g., to convey friendliness, coordination); if the opportunity arose, the interviewer would orally express understanding for the interviewee’s situation (e.g., to convey empathy). In the non-rapport-orientated approach, whenever the interviewee would show uncertainty or hesitate in their narration, the interviewer would cut in and ask connecting and clarifying questions (e.g., to convey impatience, unfriendliness). Moreover, if the opportunity arose, they would make verbal remarks along the lines of “You don’t remember much, do you?” (e.g., to convey deprecation, a negative attitude). The individual variables (e.g., nonchalance; friendliness) that made up the interviewers’ demeanour in each interview approach were assessed from the interviewee’s perspective. Thus, the study took a holistic approach and assessed rapport from an insider (the interviewee) perspective; which, even though not explicitly measured in this study, most likely leads to an outsider (the interviewer) perspective on rapport.

Both interview conditions involved an initial free recall phase followed by open-ended prompts of scripted parts of the computer simulation. The interview script was elementally designed and included references to: inter alia, 40 items selected from the computer simulation screen;

| Table 1. The individual variables that made up a humanitarian rapport-orientated (eight items) and a dominant non-rapport orientated (nine items) approach, respectively. Cronbach’s alpha showed good internal consistency, .89 and .84, respectively |
|---------------------------------------------------------------|
| **Humanitarian rapport-orientated approach** | **Dominant non-rapport-orientated approach** |
| 1. Interviewer acted calmly and allowed time to comment | 1. Interviewer was aggressive |
| 2. Interviewer showed an obliging manner | 2. Interviewer acted in a hurry and provided no time for reflection |
| 3. Interviewer showed personal interest and tried to create a personal conversation | 3. Interviewer showed deprecation |
| 4. Interviewer showed empathy | 4. Interviewer was nonchalant |
| 5. Interviewer expressed a positive attitude towards you as a human being | 5. Interviewer showed a condemning attitude |
| 6. Interviewer was cooperative | 6. Interviewer was brusque and obstinate |
| 7. Interviewer was helpful | 7. Interviewer was impatient |
| 8. Interviewer was friendly | 8. Interviewer was unfriendly |
| 9. Interviewer expressed a negative attitude | |
participant’s 48 strategic decisions to distribute and/or conserve bactericides; options to steal/being robbed of bactericides; 38 shifting news pictures (affective pictures) that included an unlimited number of details to remember.

All interviews (audiotaped) were conducted by two former police officers with extensive experience of service (32 and 26 years, respectively), including as detectives.

**Previous data; manipulation of interview styles; STAI measurements pre- and post-exposure**

Immediately after each interview, the participants/interviewees completed Holmberg and Christianson’s (2002) 17-item inventory on their perception of interviewer’s demeanour. Each item was assessed on a 1 (to a low degree) to 7 (to a high degree) Likert scale: eight items related to a humanitarian rapport-orientated approach, and nine items related to a dominant non-rapport-orientated approach.

Prior to comparisons (means), the sum of scores for items in each approach was divided by the number of items that each category consisted of, respectively. Theoretically, the minimum mean is one and maximum mean is seven in each category. The manipulation worked as intended. Regarding the first interview, independent t-tests showed that those interviewed in a humanitarian rapport-orientated approach perceived their interviewer to be humanitarian (\(M = 5.78, SD = 0.86\)) to a greater extent than did those interviewed in a non-rapport-orientated approach (\(M = 4.16, SD = 1.15\)), \(t(135.05) = 9.71, p < .001, d = 1.61\). Furthermore, those interviewed with a non-rapport-orientated approach perceived their interviewer to be dominant (\(M = 1.97, SD = 0.89\)) to a greater extent than did those interviewed with a humanitarian rapport-orientated approach (\(M = 1.21, SD = 0.34\)), \(t(93.86) = 6.85, p < .001, d = 1.13\). Regarding the second interview, independent t-tests showed that those interviewed in a humanitarian rapport-orientated approach perceived their interviewer to be humanitarian (\(M = 5.92, SD = 0.82\)) to a greater extent than did those interviewed in a non-rapport-orientated approach (\(M = 3.88, SD = 1.40\)), \(t(102.20) = 10.08, p < .001, d = 1.78\). Additionally, those interviewed with a non-rapport-orientated approach perceived their interviewer to be dominant (\(M = 2.05, SD = 1.15\)) to a greater extent than did those interviewed with a humanitarian rapport-orientated approach (\(M = 1.12, SD = 0.21\)), \(t(67.24) = 6.36, p < .001, d = 1.13\). A detailed overview of the impact of individual variables in each interview approach is found in Holmberg and Madsen (2014).

The results in regard to the STAI-S (Spielberger et al., 1983) showed that participants reported a marginally higher degree (non-significant) of anxiety post- than pre-exposure. Independent t-tests for individual items showed that participants felt significantly more strained, jittery and confused post- than pre-exposure, indicating that the participants to some extent were emotionally affected.

2.5. Statistical computations

Preacher and Hayes (2008) INDIRECT macro for SPSS was used to assess each proposed mediation model. The mediation analyses were tested using the bootstrapping method with bias corrected confidence estimates (MacKinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2004). In the present analyses, the 95% confidence interval of the indirect effects was obtained with 5000 bootstrap resamples (Preacher & Hayes, 2008).

Moderation was assessed using the PROCESS macro for SPSS (Hayes, 2013) and a simple moderation model (see Figure 1). Interview style (categorical variable: humanitarian rapport-orientated versus dominant non-rapport-orientated approach) was the independent variable (IV) and interviewees’ memory performance (defined subcategories) was the dependent variable (DV); as the proposed moderator variable were used measurements of interviewees’ personality (extraversion; agreeableness; conscientiousness; neuroticism; openness to experience). In these analyses, the bootstrapping method with a bias corrected confidence estimates were used; a 95% confidence interval was obtained with 5000 bootstrap resamples.
3. Results

3.1. Interview approach and memory performance; mediation effects

Interviews were systematically explored for full mediation effects regarding the indirect effect of the interview approach (rapport-orientated versus non-rapport-orientated approach) on interviewees’ memory performance (as defined in subcategories) through the interviewers’ demeanour in each interview approach (humanitarian rapport index; dominant non-rapport index), respectively. Following Baron and Kenny (1986), the data were explored using multiple regressions to test for mediation (basically, the IV significantly predicts the DV; the IV significantly predicts the mediator (M); the M significantly predicts the DV while IV is controlled for; the previously significant IV (step 1) is now greatly reduced or non-significant). Interview I revealed no opportunities to test for mediation.

In interview II, analyses showed that conditions for three mediation models were met in regard to memory subcategories (after initially testing total memory. See Table 2 for bivariate correlations). In the first proposed model, the interview approach (IV), the humanitarian rapport index (proposed mediator), and central visual memories (DV) revealed a significant model $F(2, 124) = 5.87, p < .01$, which explained 7.2% of the variance. It was found that the interview approach was positively associated with central visual memories ($b = 1.86, t(124) = 2.70, p < .01$) as well as the humanitarian rapport index ($b = 2.04, t(124) = 10.04, p < .001$). Finally, the proposed mediator, the humanitarian rapport index, was positively associated with central visual memories ($b = 0.62, t(124) = 2.06, p < .05$). Results of the mediation analysis confirmed the mediating role of the humanitarian rapport index in the relation between the interview approach and the number of reported central visual memories ($B = 1.27, SE = 0.62, BC 95% CI [0.09, 2.55]$). In addition, results indicated that the direct effect of interview approach on central visual memories became non-significant ($b = 0.61, t(124) = 0.66, p = .51$) when controlling for the humanitarian rapport index, thus suggesting full mediation. The model is shown in Figure 2.

In the second proposed model, the interview approach (IV), the dominant non-rapport index (proposed mediator), and the central visual memories (DV) revealed a significant model $F(2, 124) = 10.63, p < .001$, which explained 13.3% of the variance. Results showed that the interview approach was positively associated with central visual memories ($b = 1.86, t(124) = 2.70, p < .01$). It was also found that the interview approach was negatively related to the dominant non-rapport index ($b = -0.93, t(124) = -6.31, p < .001$). In addition, the results indicated that the mediator, the dominant non-rapport index, was negatively associated with central visual memories ($b = -1.45, t(124) = -3.64, p < .001$). Results of the mediation analysis confirmed the mediating role of the dominant non-rapport index in the relation between the interview approach and the number of reported central visual memories ($B = 1.39, SE = 0.44, BC 95% CI [0.60, 2.31]$). Additionally, results indicated that the direct effect of the interview approach on central visual memories became non-significant ($b = 0.51, t(124) = 0.68, p = .50$) when controlling for the dominant non-rapport index, which suggest full mediation. The model can be seen in Figure 3.

In the third proposed model, the interview approach (IV), the dominant non-rapport index (proposed mediator), and the decision and action memories (DV) revealed a significant model
Table 2. Bivariate correlations in Interview II (N = 127), between the rapport index\(^a\) (n = 63) and the non-rapport index\(^b\) (n = 64), and defined memory subcategories, including total memory (the sum of all correct recall) and false total memory (confabulated recall; the sum of all confabulated recall)

|                      | Total memory | Central visual memory | Decision & action memory | Peripheral memory | False total memory | False central visual memory | False peripheral memory | Rapport index | Non-rapport index |
|----------------------|--------------|-----------------------|--------------------------|-------------------|--------------------|-----------------------------|-------------------------|--------------|------------------|
| Total memory         |              |                       |                          |                   |                    |                             |                         |              |                  |
| Central visual memory| .703**       |                       |                          |                   |                    |                             |                         |              |                  |
| Decision & action memory| .764**   | .456**                |                          |                   |                    |                             |                         |              |                  |
| Peripheral memory    | .840**       | .405**                | .413**                   |                   |                    |                             |                         |              |                  |
| False total memory   | .165         | .178*                 | .184*                   | .066              |                    |                             |                         |              |                  |
| False central visual memory| -.041     | -.064                 | .113                    | -.121             | .698**             |                             |                         |              |                  |
| False peripheral memory| .250**   | .282**                | .171                    | .169              | .879**             | .271**                      |                         |              |                  |
| Rapport index        | .309**       | .289**                | .266**                  | .230**            | .137               | -.048                       | .216*                   |              |                  |
| Non-rapport index    | -.268**      | -.378**               | -.327**                 | -.067             | -.225*             | -.067                       | -.258**                 | -.714**      |                  |

Note: \(^a\) = interviewer demeanour shown in the humanitarian rapport-orientated approach (eight items), \(^b\) = interviewer demeanour shown in the dominant non-rapport-orientated approach (nine items).

\(^*\) p < .05 and \(^**\) p < .01.
The interview approach was positively associated with decision and action memories ($b = 3.10$, $t(124) = 3.44$, $p < .001$). It was also found that the interview approach was negatively related to the dominant non-rapport index ($b = -0.93$, $t(124) = -6.31$, $p < .001$). The results indicated that the mediator, the dominant non-rapport index, was negatively associated with decision and action memories ($b = -1.34$, $t(124) = -2.50$, $p < .05$). Results of the mediation analysis confirmed the mediating role of the dominant non-rapport index in the relation between the interview approach and the number of reported decision and action memories ($B = 1.26$, $SE = 0.46$, BC 95% CI [0.34, 2.16]). Moreover, results showed that the direct effect of the interview approach on decision and action memories became non-significant ($b = 1.86$, $t(124) = 1.83$, $p = .07$) when controlling for the dominant non-rapport index, thus indicating full mediation. The model is shown in Figure 4.

$F(2, 124) = 9.28$, $p < .001$, which explained 11.6% of the variance. The interview approach was positively associated with decision and action memories ($b = 3.10$, $t(124) = 3.44$, $p < .001$). It was also found that the interview approach was negatively related to the dominant non-rapport index ($b = -0.93$, $t(124) = -6.31$, $p < .001$). The results indicated that the mediator, the dominant non-rapport index, was negatively associated with decision and action memories ($b = -1.34$, $t(124) = -2.50$, $p < .05$). Results of the mediation analysis confirmed the mediating role of the dominant non-rapport index in the relation between the interview approach and the number of reported decision and action memories ($B = 1.26$, $SE = 0.46$, BC 95% CI [0.34, 2.16]). Moreover, results showed that the direct effect of the interview approach on decision and action memories became non-significant ($b = 1.86$, $t(124) = 1.83$, $p = .07$) when controlling for the dominant non-rapport index, thus indicating full mediation. The model is shown in Figure 4.
3.2. Follow-up analyses regarding mediation effects

In order to explore the results of the first mediation model (Figure 2) in greater detail, follow-up mediation analyses on each individual item (eight) that make up the humanitarian rapport index were carried out, revealing two full mediations models. First, the interview approach (IV), the interviewer’s friendliness (proposed mediator), and the central visual memories (DV) revealed a significant model \( F(2, 124) = 9.95, p < .001 \), which explained 12.4% of the variance. It was found that the interview approach was positively associated with central visual memories (\( b = 1.86, t(124) = 2.70, p < .01 \)) as well as the interviewer’s friendliness (\( b = 2.06, t(124) = 7.55, p < .001 \)). Lastly, the proposed mediator, the interviewer’s friendliness, was positively associated with central visual memories (\( b = 0.75, t(124) = 3.46, p < .001 \)). Results of the mediation analysis confirmed the mediating role of the interviewer’s friendliness in the relation between the interview approach and the number of reported central visual memories (\( B = 1.58, SE = 0.53, BC 95\% CI [0.68, 2.75] \)). Moreover, results indicated that the direct effect of interview approach on central visual memories became non-significant (\( b = 0.32, t(124) = 0.40, p = .69 \)) when controlling for the interviewer’s friendliness. Second, the interview approach (IV), the interviewer’s cooperativeness (proposed mediator), and the central visual memories (DV) revealed a significant model \( F(2, 124) = 6.76, p < .01 \), which explained 8.4% of the variance. It was found that the interview approach was positively associated with central visual memories (\( b = 1.86, t(124) = 2.70, p < .01 \)) as well as the interviewer’s cooperativeness (\( b = 2.00, t(124) = 7.38, p < .001 \)). Additionally, the proposed mediator, the interviewer’s cooperativeness, was positively associated with central visual memories (\( b = 0.54, t(124) = 2.43, p < .05 \)). Results of the mediation analysis confirmed the mediating role of interviewer’s cooperativeness in the relation between the interview approach and the number of reported central visual memories (\( B = 1.07, SE = 0.47, BC 95\% CI [0.27, 2.13] \)). Additionally, the results showed that the direct effect of the interview approach on central visual memories became non-significant (\( b = 0.78, t(124) = 0.96, p = .34 \)) when controlling for the interviewer’s cooperativeness.

Results of the second mediation model (Figure 3) were also further investigated by follow-up mediation analyses on each individual item (nine) that make up the dominant non-rapport index, and four full mediation models were revealed. First, the interview approach (IV), the interviewer’s negative attitude (proposed mediator), and the central visual memories (DV) revealed a significant model \( F(2, 124) = 11.58, p < .001 \), which explained 14.4% of the variance. Results indicated that the interview approach was positively associated with central visual memories (\( b = 1.86, t(124) = 2.70, p < .01 \)) Furthermore, the interview approach was negatively related to the interviewer’s negative attitude (\( b = -0.97, t(124) = -5.01, p < .001 \)), and the mediator, the interviewer’s negative attitude, was negatively associated with central visual memories (\( b = -1.17, t(124) = -3.88, p < .001 \)). Results of the mediation analysis confirmed the mediating role of the interviewer’s negative attitude in the relation between the interview approach and the number of reported central visual memories (\( B = 1.15, SE = 0.35, BC 95\% CI [0.53, 1.89] \)). Moreover, the results indicated that the direct effect of the interview approach on central visual memories became non-significant (\( b = 0.73, t(124) = 1.02, p = .31 \)) when controlling for the interviewer’s negative attitude. Second, the interview approach (IV), the interviewer’s nonchalance (proposed mediator), and the central visual memories (DV) revealed a significant model \( F(2, 124) = 8.77, p < .001 \), which explained 11.0% of the variance. The results showed that the interview approach was positively associated with central visual memories (\( b = 1.86, t(124) = 2.70, p < .01 \)), as well as being negatively related to the interviewer’s nonchalance (\( b = -1.04, t(124) = -4.55, p < .001 \)). The results also indicated that the mediator, the interviewer’s nonchalance, was negatively associated with central visual memories (\( b = -0.81, t(124) = -3.12, p < .01 \)). Results of the mediation analysis confirmed the mediating role of the interviewer’s nonchalance in the relation between the interview approach and the number of reported central visual memories (\( B = 0.86, SE = 0.35, BC 95\% CI [0.26, 1.64] \)). Additionally, the direct effect of the interview approach on central visual memories became non-significant (\( b = 1.02, t(124) = 1.42, p = .16 \)) when controlling for the interviewer’s nonchalance. Third, the interview approach (IV), the interviewer’s impatience (proposed mediator), and the central visual memories (DV) revealed a significant model \( F(2, 124) = 10.64, p < .001 \), which explained 13.3% of
the variance. Results showed that the interview approach was positively associated with central visual memories ($b = 1.86, t(124) = 2.70, p < .01$). It was also found that the interview approach was negatively related to the interviewer’s impatience ($b = -1.61, t(124) = -6.31, p < .001$). In addition, results showed that the mediator, the interviewer’s impatience, was negatively associated with central visual memories ($b = -0.84, t(124) = -3.64, p < .001$). Results of the mediation analysis confirmed the mediating role of interviewer’s impatience in the relation between the interview approach and the number of reported central visual memories ($B = 1.36, SE = 0.44, BC 95% CI [0.58, 2.30]$). Moreover, results indicated that the direct effect of the interview approach on central visual memories became non-significant ($b = 0.51, t(124) = 0.68, p = .50$) when the interviewer’s impatience was controlled for. Forth, the interview approach (IV), the interviewer’s brusqueness and obstinacy (proposed mediator), and the central visual memories (DV) revealed a significant model $F(2, 124) = 10.76, p < .001$, which explained 13.4% of the variance. Results showed that the interview approach was positively associated with central visual memories ($b = 1.86, t(124) = 2.70, p < .01$). It was also found that the interview approach was negatively related to the interviewer’s brusqueness and obstinacy ($b = -0.81, t(124) = -4.10, p < .001$). The results showed that the mediator, the interviewer’s brusqueness and obstinacy, was negatively associated with central visual memories ($b = -1.09, t(124) = -3.67, p < .001$). Results of the mediation analysis confirmed the mediating role of the interviewer’s brusqueness and obstinacy in the relation between the interview approach and the number of reported central visual memories ($B = 0.91, SE = 0.32, BC 95% CI [0.33, 1.55]$). Furthermore, results suggested that the direct effect of the interview approach on central visual memories became non-significant ($b = 0.98, t(124) = 1.40, p = .16$) when controlling for the interviewer’s brusqueness and obstinacy.

Follow-up mediation analyses regarding the third mediation model (Figure 4) showed no statistically significant results.

### 3.3 Moderation effects between the interview approach, memory performance and personality

In order to further explore the results (Madsen, 2017; Madsen & Holmberg, 2015), interview I and II were systematically analysed for possible interaction effects regarding the relationship between the interview approach and the interviewees’ memory performance as moderated by their personality.

Results showed no significant relation in interview I, while one significant interaction effect emerged in interview II; the relationship between the IV interview approach and the DV sum of confabulated memories, and the proposed moderator FFM factor openness to experience showed a significant model $F(3, 122) = 2.92, MSE = 6.39, p < .05$. The model explained 3.6% of the variance. The moderator, openness to experience, showed a negative non-significant relation ($b = -0.21, t(122) = -1.26, p = .21$), while the IV, the interview approach, showed a positive non-significant relation ($b = 0.55, t(122) = 0.03, p = .98$). The interaction between the interview approach and openness to experience was significant $F(1, 122) = 6.77, p = .01$. The moderation effect and simple slopes of the three models indicated that when openness to experience is low (minus one SD from centred mean), there is a non-significant negative relationship between the interview approach and the number of reported confabulated memories, $b = -0.98, BC 95% CI [-2.34, 0.38], t = -1.42, p = .157$. At a mean value of openness to experience, there is a non-significant positive relationship between the interview approach and confabulated memories, $b = 0.01, BC 95% CI [-0.92, 0.94], t = 0.03, p = .979$. When openness to experience is high (plus one SD from centred mean), there is a positive relationship, on the verge of being significant, between the interview approach and confabulated memories, $b = 1.00, BC 95% CI [-0.00, 2.01], t = 1.97, p = .051$. Estimated conditional means (number of confabulated memories) at this value of the moderator openness to experience are 2.41 in the dominant non-rapport approach, and 3.41 in the humanitarian rapport approach (see Figure 5).

### 4. Discussion

Results in the present study showed three full mediation models in the second interview. First it was found that the indirect effect of the interview approach on recall of central visual memories
was mediated by the humanitarian index (interviewer’s demeanour), increasing the interviewee’s recall. Second, and correspondingly, the indirect effects of the interview approach on recall of central visual memories and decision and action memories, respectively, were mediated by the dominant index, decreasing the number of reported information. Follow-up analyses of the individual items that made up the humanitarian index revealed two full mediation models involving the interviewer’s friendliness and cooperation, thus suggesting that these variables contributed to the original finding. Similar analyses of the individual items that made up the dominant index showed, in regard to central visual memories, four full mediations. This indicates that the interviewer’s negative attitude, nonchalance, impatience as well as brusqueness and obstinacy operationally contributed to the mediation effect in the dominant non-rapport approach. Additionally, the results also showed a significant interaction effect involving the interviewee’s personality in the second interview. The relationship between the interview approach and recall of confabulated memories was moderated by the FFM factor openness to experience, and higher trait scores were associated with more reported confabulated memories.

4.1. Interview approach and memory performance; mediation effects

All significant mediation models were obtained in the second interview (6 months after exposure), and none in the first interview. This may be due to at least two intertwined explanations. First, an inspection of means for the humanitarian and dominant index (the manipulation) in each interview, respectively, indicates that the manipulation was marginally stronger in the second interview in comparison to the first. More specifically, interviewers were perceived as more humanitarian ($M = 5.92$) in the humanitarian approach, and less humanitarian ($M = 3.88$) in the dominant approach, in comparison to corresponding measurements ($M = 5.78$) and ($M = 4.16$) in interview I. Moreover, interviewers were perceived as more dominant ($M = 2.05$) in the dominant approach, and less dominant ($M = 1.12$) in the humanitarian approach, in comparison to corresponding measurements ($M = 1.97$) and ($M = 1.21$) in interview I. Secondly, the total added mean for each index may suggest a lack of statistical power due to the presence of perhaps particularly floor effects. However, this is somewhat contradicted by the fact that the variance each significant mediation model explained, that is $R^2$, indicated on small and medium effect sizes. Nevertheless, an eyeball inspection of the means for individual items that made up each style (see Holmberg & Madsen, 2014) indicate the presence of both ceiling and floor effects among some of the individual variables, which, given the study’s statistical approach, may have contributed to an overall weakened statistical power. The latter notion is supported by the fact that several of the executed mediation models were close to reaching full mediation statistically.
In terms of outcome, that is memory performance, the interviewees’ better recall in the humanitarian rapport-oriented approach is in line with previous comparable studies (Collins et al., 2002; Holmberg, 2004; Vallano & Schreiber Compo, 2011; Walsh & Bull, 2010), as is the reduced recall of interviewees in the non-rapport-orientated approach (Holmberg, 2004; Holmberg & Madsen, 2014). In terms of the mediation effects that were found, results in the present study are in line with the study by Alison and colleagues (2013) in which, inter alia, structural equation modelling showed that better interviewing skills (MI-behaviour) had a large direct effect on increased yield of information in police interrogations with suspects. Moreover, better interviewing skills also improved adaptive interviewing (the interviewer’s interpersonal behaviour) and decreased maladaptive interviewing. Interestingly, interviewing skills also had an indirect effect on improving the suspects’ adaptive responding (interpersonal behaviour) via its aforementioned effects of increasing the interviewers’ adaptive responding and decreasing maladaptive responding. These effects suggest that interviewing skills have an indirect effect on increased yield of information (Alison et al., 2013). The results in the present study in regard to mediation effects are consistent with a suggested reciprocal effect (Chartrand & Bargh, 1999; Dijksterhuis & Bargh, 2001; Tickle-Degnen & Rosenthal, 1990) insofar as interviewees, from an insider’s perspective, respond to the interviewers’ demeanour in each interview approach by increasing or decreasing recall, respectively. This in turn suggest that interviewers, to a large extent, are in a position to affect interview outcomes by adapting rapport building behaviour; a notion that is supported by findings of Alison and colleagues (Alison et al., 2013, 2014). Although, keeping in mind that authentic police interviews with suspects might add an additional dimension (e.g., suspects who from the onset have decided to yield as little information as possible or no information at all) in terms of an interpersonal behaviour that might prove hard to change (Alison et al., 2013).

In regard to the mediating effects of friendliness and cooperativeness in the humanitarian index, these items were among the descriptors in the Principle Component Analyses of authentic crime victims’ and offenders’ perception of a humanitarian interview style (Holmberg, 2004; Holmberg & Christianson, 2002), whose findings form the base for the manipulation in Holmberg and Madsen (2014). First, in regard to friendliness, this finding is in line with the study by Collins and colleagues (2002), in which interviewees in the rapport condition stated that interviewer’s friendly and supportive attitude motivated them to make additional effort to recall details. A friendly behaviour is consistent with Tickle-Degnen and Rosenthal’s (1990) positivity component, which is thought to lead to feelings of friendliness and warmth, and on an operational level may include such aspects as the interviewer listening actively, having an empathic approach, creating a personal atmosphere, and paying attention; all of which are stressed as being important for rapport (e.g., Fisher & Geiselman, 1992, 2010; Milne & Bull, 1999; Shepherd & Griffiths, 2013; St-Yves, 2006). Second and in regard to cooperation, this finding corresponds well with the theoretical prototype of coordination (Tickle-Degnen & Rosenthal, 1990), which refers to a balance and harmony between interactants. This balance and harmony translates to interactants being accommodating and responsive to each other’s behaviour (Tickle-Degnen & Rosenthal, 1990). From an interviewer’s perspective, this, inter alia, translates to employing rapport-building aspects in an adaptive fashion. The presence of coordination is said to increase communication efficiency (Tickle-Degnen & Rosenthal, 1990). Amongst the feasible explanations for the operative effects of friendliness and cooperation, are the functions of the perception–behaviour link; for example, it is suggested that behaviour trait inference originates from observed behaviours (Dijksterhuis & Bargh, 2001). In the present study, such a function might manifest itself as interviewees responding accordingly to the interviewer’s displayed friendliness and cooperativeness, either as a result of an automatic or motivated response, and consequently sharing more information. Indeed, a similar function might be at play and explain the results of the interviewer’s negative attitude, nonchalance, impatient, and brusque and obstinate behaviour in the dominant non-rapport-oriented approach; thus, suggesting that interviewees responded in accordance with interviewer’s displayed demeanour by reporting less information.

The individual variables that make up each interview style in Holmberg and Madsen (2014) were not operationally defined but based on self-reports by the interviewees. This was also true for
friendliness in Collins et al. (2002). On one hand, this suggests that only limited conclusions can be
drawn from the results in the present study. However, it may be argued that the absence of
operationally defined variables, better allows the interviewer to dynamically convey the generic
meaning of each style, as a gestalt unity (Dijksterhuis & Bargh, 2001; Tickle-Degnen & Rosenthal,
1990).

4.2. Moderation effects between interview approach, memory performance and personality
Result in the present study suggests that higher scores on the FFM factor openness to
experience moderate the relationship between the interview approach and interviewee’s recall. According to Costa and McCrae (1992, 1995; McCrae & Costa, 2008), openness to experience is comprised of being intellectually curious as well as being flexible in thought and action. The latter includes an imaginative aspect. From that departing point, it is perhaps not surprising that the higher scores on openness in the present study were associated with increased recall. Moreover, the results indicate that recall appears to increase for those interviewed in the humanitarian rapport-orientated approach. This is somewhat in contrast to previous findings (Madsen & Holmberg, 2015), where openness to experience in the second interview was found to predict decreased decision and action memories. The result in the present study, in terms of increased memory performance, is in line with previous research (Ayotte et al., 2009; Booth et al., 2006; Pearman, 2009; Schae et al., 2004; Soubelet & Salthouse, 2011; Terry et al., 2013). However, the referenced studies were conducted outside the context of investigative inter-
views and do not specifically focus on confabulated memories. Amongst the possible influen-
cing factors for the somewhat conflicting results is the fact that the interviewees’ personality was assessed with a 10-item short version of the Big Five Inventory (Rammstedt & John, 2007), which obviously measured fewer facets in comparison to the standard Big Five Inventory (John, Donahue, & Kentle, 1991). Moreover, the previously discussed and suggested lack of statistical power may have contributed to non-significant results in regard to modera-
tion effects.

4.3. Strengths and limitations, and future directions
The present study has several strengths. First, the present study adds further support to previous
findings that showed a causal link between the interview styles and the interviewee’s recall (Holmberg & Madsen, 2014). In addition, it also indicated which operational components in each style that particularly contributed to the results. Importantly, this adds to a better understanding of the complex dynamic interaction between the interviewer and interviewee. Secondly, in spite of the results being obtained in a context of mock investigative interviews (an experimental design with authentic crime victims and offenders presents ethical problems), the interviews contain several aspects that add to the ecological validity, such as all interviews were conducted by two experienced former police officers. Furthermore, the operationalisation of each interview style (manipulation) was based on authentic crime victims’ and offenders’ perception of police inter-
views as well as a theoretical foundation. The latter allows for a holistic and, arguably, a more thorough assessment of the interaction and the outcome of rapport. In addition, the lengths of interviews in the present study overlap with those of real-life police interviews; for example, as a comparison, Pearse and Gudjonsson (1997) investigated 161 audiotaped police interviews with suspects at two South London police stations. The length of interviews ranged between 2–109 min (M = 22, SD = 18.1), and 85% of the interviews were completed in less than half an hour. Thirdly, the computer simulation (memory stimuli) was designed to represent a real-life event; it provided an unlimited number of details to remember, and the participant took an active part in events that was designed to evoke feelings of being a victim or perpetrator of a crime. Whether the latter feelings were actually evoked remains unclear (not explicitly measured); however, participants were to some extent emotionally affected by the simulation. Arguable, the memory stimuli contained aspects similar to those of a real event.

There are some limitations to this study. First, a large number of analyses were conducted in the present study, which per se carries an increased risk for significant results arising by chance. Thus,
when interpreting the obtained results, in particular in regard to the moderation effect, certain caution is advised. In regard to the mediation effects, it might be worth considering that the significant results are theoretically grounded and go in the expected directions. Secondly, the sample size was rather small. A post-hoc computation of achieved power (alpha = .05, medium effect size = .15) indicate a power of around .77. This suggests that a larger sample would have been appropriate in order to better detect any effect in the population. Moreover, there was a lack of diversity among participants of which a number were recruited from university settings. The results in the present study should be replicated in a future study utilising an adequate sample size as well as a priori hypothesising. Also, using a more diverse sample in regard of participants would be beneficial. Thirdly, in the present study the interviewer’s perception of rapport was not assessed (due to the interviewers being aware of the research hypotheses). This would have enabled investigating interactional effects of interviewer and interviewee demeanour and should be addressed in future studies. A future study should also include an experimental manipulation involving the interviewer; for example, by inducing a motivational dimension related to the evocation of information. Such an approach, supposedly, may to a higher degree influence the interviewer’s demeanour in the dominant non-rapport-orientated approach, and thereby better elucidate all aspects of that style. However, precaution should be taken not to introduce hostility, which would be considered a potential confound.

5. Conclusions
Mediation effects do not per se implicate causality in a certain direction. In addition, it is most likely that an interaction between interactants involves bidirectional responses, for example, the interviewees’ insider perspective of rapport (as in the present study) may lead to a responding behaviour that corresponds to that of an outsider’s perspective of rapport (the interviewers); thus, affecting and reinforcing his or her behaviour. From such a point of departure, that is, the interviewer’s strategic use of a rapport-orientated approach (or lack of), the mediation effects in the present study can be seen as adding support for causal relationships between both the humanitarian rapport-orientated as well as the non-rapport-orientated approach, and the interviewees’ recall.

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Author details
Kent Madsen1,2
E-mail: kent.madsen@hkr.se
Pekka Santtila1
E-mail: pekka.santtila@abo.fi
1 Åbo Akademi University, Finland.
2 Kristianstad University, Sweden.
3 NYU-ECNU Institute for Social Development, New York University Shanghai, Shanghai, China.

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