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Personality of the Interviewee and its Influence on Rapport in Investigative Interviews

Sophia Rieken

s1947869

University of Twente

BMS Faculty

Department of Psychology

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1st Supervisor: Steven Watson

2nd Supervisor: Miriam Oostinga

Abstract

Despite the large focus on techniques, such as building rapport and approaches like accusatory or humanitarian styles, that are most effective in investigative interviews, it remains unclear what role the personality of the interviewee plays and in how far techniques need to be tailored. Therefore, this study aims to investigate how the personality of the interviewee mediates the relationship between interview style and rapport. The study was completely carried out online. First, a survey investigated the personality of the participants (n = 50) based on the Big Five Model of Personality. Following, investigative interviews about a crime vignette, in which an iPhone was stolen, in either the accusatory or humanitarian condition, were conducted through a video call. Lastly, a follow up survey examined how much rapport the participants build with the interviewer. A significantly larger amount of rapport appeared in the humanitarian condition compared to the accusatory condition. This study was not able to detect significant moderation effects for most of the personality traits. Nonetheless, an exploratory analysis found a moderation effect of low agreeableness. While the humanitarian approach was maximally effective at low levels agreeableness, the accusatory approach was maximally ineffective. Even though the results generally suggest that the police do not need to tailor their approaches, as most traits did not proof as a moderator, agreeableness needs to be investigated further. Especially because agreeableness is an important trait in criminal investigations, future research should be directed towards the effect of low agreeableness, to strengthen the exploratory findings of this study.

Keywords: Investigative interviews, rapport, personality, accusatory vs humanitarian approaches

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Personality of the Interviewee and its Influence on Rapport in Investigative Interviews

The discussion about criminal investigation interviews and the techniques, made use of by interrogators and police officers, has been an active area of research for the last 25 years. Moreover, the discussion about effectiveness and issues in investigative interviews also reached the attention of the society over the last years, mainly through media. One example for the media hype around criminal investigations, is the series "The Confession Tapes", that was published by Netflix in 2017, in which true examples of false confessions are explained very much in the light of mistakes made during the investigative interview. To resolve issues such as wrongful convictions and to increase the amount of information retrieved, one useful technique is building rapport, which is shown to improve memory (Collins, Lincoln & Frank, 2002), increase the amount of useful information (Abbe & Brandon, 2013) and increase trust and cooperation (Drolet & Morris, 2000). However, building rapport is not of equal ease with all interviewees, as personality characteristics such as Agreeableness (Wang, Gratch, & Rey, 2009) and Extraversion (Brixey & Novick, 2019) influence the process of rapport building. Moreover, also the rather neglected characteristics such as Neuroticism and Conscientiousness are assumed to effect rapport building. While the personality characteristics of the interviewer have been in the focus of a lot of studies, the personality of the interviewee has been rather neglected, even though existing literature indicates an influence. Thus, this study will focus on how the personality of the interviewee influences rapport building in investigative interviews.

Rapport

To build up a theoretical framework, the first step is to define the most important concepts. Firstly, Abbe and Brandon (2014) conceptualize rapport building as "a smooth, positive interpersonal interaction". According to Tickle-Degnen and Rosenthal (1990) rapport is comprised out of three basic concepts: mutual attentiveness, positivity, which can be expressed through caring and friendliness and lastly coordination, which refers to the harmony within a communication.

Research shows that rapport building can have favourable influences on the outcome of the interview. As pointed out by Abbe and Brandon (2013), rapport building is used to build up working alliances. That means that both, the interviewer as well as the suspect work together towards resolving the issue. If the suspect has the feeling that the interviewer is building this working alliance during the interview, the amount of educed information can be increased (Abbe & Brandon, 2013). Moreover, rapport improves the memory of witnesses in

investigative interviews, through providing freedom to speak in free narrative methods and providing time to retrieve information (Collins et al., 2002). Thus, an enhancement of the amount and quality of the information retrieved could be observed in rapport models in comparison to other methods. This makes rapport an important concept in investigative interviews.

In order to gain deeper insights into what aspects are related to rapport, it is important to look at how rapport can be built. Abbe and Brandon (2014) point out seven aspects for building and maintaining rapport. According to the results of Abbe and Brandon (2014), the seven techniques include *Immediacy Behaviour, Active Listening, Mimicry, Contrast, Self-Disclosure,* and lastly, establishing a *Common Ground*. The seven techniques display that rapport building is a complex mechanism that may require different behaviours for different interviewees.

Even though rapport is important for the success of an investigative interview, police officers often fail to build and maintain rapport (Walsh & Bull, 2012). The reasons for the difficulties in building rapport have not yet been discovered. Nonetheless, one assumption could be, that rapport is not a universal technique that is effective for every interviewee. Therefore, tailoring the approaches might be necessary (Ackley, Mack, Beyer, & Erdberg, 2010) as the personality of the interviewee, might play a role in determining how much rapport can be built.

The largely unknown mechanism and the yet undeniable positive effect that rapport has on the quality of the interview underline the importance of further investigation on how rapport operates in investigative interviews and when it is most effective.

Humanitarian approach

When it comes to building rapport, one interview style that is especially important is the humanitarian or information-gathering approach, that is based on rapport. The goal of the approach is to gather as much information as possible rather than reaching a confession (Vrij et al., 2017). During the interview, the interviewer should have an open mind and dismiss the already known information (Bull, 2018). Moreover, the interviewee is allowed to talk without being interrupted and only after the suspect was able to present his or her side of the story, evidence and inconsistencies are brought to the table (Vrij, Hope, & Fisher, 2014).

According to the PEACE model, that was one of the first nationally recognized humanitarian models for interviewing in the UK, five stages are essential for the interview (Bull, 2018). The stages, that are acronyms of the word PEACE, include *Planning and Preparing* in the first phase and *Explaining and Engaging* in the second phase. The third

phase builds the main part of the interview as in the phase of *Accounting* (Clarifying and Challenging), the suspect can give a free narrative. This can be followed by more concrete questions of the interviewer (Bull, 2018). Moreover, the fourth stage includes *Closure* of the interview, while the last stage is used for an *Evaluation* of the process.

This approach has been shown to significantly decrease the number of false confessions. At the same time the amount of information that could be derived in the interview was increased (Vrij et al., 2017). Furthermore, a study by Holmberg and Christianson (2002), that investigated convicted murderers and sexual offenders, found evidence, that making use of humanitarian approaches causes significantly more complete and honest admissions of crimes and a decrease of denial compared to other techniques.

The success of the approach is largely connected to the phenomenon of rapport. This is supported by the fact that the techniques, used for building rapport that were proposed by Abbe and Brandon (2014), such as active listening and immediacy behaviour are largely applicable to the humanitarian approach. Moreover, the conversation is humanized and empathy and respect are expressed (Vrij et al., 2017), which can favourably influence the building of rapport. Thus, rapport plays a crucial role for the humanitarian condition and it is assumed that this approach is most effective in building rapport.

Accusatory approach

Another approach for investigative interviews is the accusatory approach. These harsh interrogations often include threatening an "adversarial nature" in contrast to the humanitarian approach (Vrij et al., 2017). Moreover, the goal of this technique is to reach confessions of the subjects rather than to gather facts (Vrij et al., 2017). This is often achieved through direct confrontation in the beginning of the interview as the first stage of the Reid technique (Horgan, Russano, Meissner, & Jacqueline, 2012). Further methods of the accusatory approach include manipulation of the beliefs about consequences and provoking guilt in the suspect (Vrij et al., 2017). One such technique often applied in accusatory investigative interviews is Maximization, which concerns emphasising the seriousness of the offense (Horgan, Russano, Meissner, & Evans, 2012). It is used to evoke guilt and create a more serious setting for the interview. On the other hand, Minimization is used to diminish the seriousness of the crime. It serves the goal to increase the believe of the suspect, that confessing will not be fatal, as the crime was not as serious (Horgan, Russano, Meissner, & Evans, 2012).

In comparison to humanitarian methods, accusatory approaches include some disadvantges. Harsh interrogation methods often lead to false information and decrease the

possibility to gain concrete and correct information (Vrij et al., 2017). This is supported by the fact that dominance of the interviewer and little use of rapport, which is associated with the accusatory approach, was connected to more denials. Based on this result, Holmberg and Christianson (2002) assume that the suspects need to feel respected and acknowledged, to share honest information. Additionally, the manipulative nature of the applied tactics, including confrontation and emotional provocation, were shown to increase the resistance of the subjects (Kelly, Redlich, & Miller, 2015). A long-known advantage of the approach is an increased likelihood of confessions (Horgan, Russano, Meissner, & Evans, 2012). But while more confessions are likely to occur, there is also a higher risk of false confessions in accusatory approaches (Meissner et al., 2014).

Furthermore, it is assumed that significantly less rapport is formed in accusatorial method, as the suspects feel less respected. Moreover, Abbe and Brandon (2014) point out that for building rapport active listening, immediacy behaviour as well as establishing a common ground are important. In the accusatory approach, those techniques are only applied after the resistance of the suspect has been broken. Additionally, giving time and space as well as building cooperative alliances is essential of rapport, which is contradicting the accusatorial approach. The suspects are often stressed and confronted harshly with facts and evidence the police have gathered. Therefore, it is more likely that resistance rather than cooperation, trust and rapport are built.

Personality

In the past lot of attention focused on the characteristics of the interviewer (De Fruyt, Bockstaele, Taris, & Van Hiel, 2006) as well as approaches and techniques, while neglecting the personality of the interviewer. Before being able to determine the effect, personality has, it is necessary to define the concept, which will be done in terms of the Big Five Model. The model assumes that there are five basic characteristics, including *Extraversion, Agreeableness, Conscientiousness, Openness and Neuroticism*, to describe individual differences (Roccas, Schwartz, & Knafo, 2002).

Firstly, people high on *Extraversion* can be described as "sociable, talkative, assertive and active" (Roccas et al., 2002). Second, *Agreeableness* can be conceptualized as cooperativeness, warmth, and good nature of a person. Moreover, people with high *Openness* scores, are imaginative, sensitive and intellectual (Roccas et al., 2002). The fourth trait *Conscientiousness* describes how "careful, thorough, responsible and organized" people are. Lastly individuals that score high in *Neuroticism* can be seen as "anxious, depressed, angry and insecure" (Roccas et al., 2002).

Looking at personality of the interviewee in the light of investigative interviews, little is known. Nonetheless, researchers have proposed that looking at the interviewee´s personality to tailor approaches can lead to more successful interviewing (Ackley, Mack, Beyer & Erdberg, 2010). An assessment of the personality can help to plan the interview as well as conduct it. More concretely Ackley et al. (2010) take into account frequently observed personality disorders in law enforcement such as narcistic, antisocial and borderline personalities. Next to personality disorders, also normal variations in personality matter, as reacting properly to the needs and statements of the communication partner is important for interviewing scenarios, such as in therapeutic settings (Knox, Hess, Petersen, & Hill, 1997).This can only be achieved if attention is paid to the personality of the interviewee, to be able to react to characteristics properly to achieve the best possible outcome. Personality characteristics that were found of special importance when trying to build rapport include Agreeableness and Extraversion. But also Openness, Conscientiousness and Neuroticism are proposed to have an influence.

Agreeableness. Firstly, Agreeableness, influences rapport building in communicational settings. Kang, Gratch, Wang and Watt (2008) used a virtual human assistant called *Rapport Agent,* which is computer program shown on a screen, was used to test how rapport is built with human participants. While the participant had the task to tell a story, the *Rapport Agent* engaged in attentive listening and nonverbal communication, which are essential elements of the humanitarian approach, to create rapport between them. In the study, agreeableness of the participants facilitated building rapport (Kang et al., 2008). Thus, the hypothesis is that Agreeableness facilities building rapport especially in the humanitarian condition.

Extraversion. The same study indicates similar results for Extraversion, meaning that building rapport with virtual humans is easier for extraverted people (Kang et al., 2008). Moreover, another study by Brixey and Novick (2019), tested whether humans would build more rapport with extraverted virtual agent compared to introverted ones. The researchers altered three components to test the hypothesis, namely word count, positivity, and formality. The extraverted agents were more talkative, more positive, and less formal within the conversation with the participant. The study shows that more rapport was built with the extraverted virtual agents than the introverted one (Brixey & Novick, 2019). As the interviewer in the humanitarian condition is similarly talkative and less positive it is assumed that the favourable influence of Extraversion on rapport is stronger in the humanitarian condition. It also indicated that Extraversion plays a role in how talkative participants are and

thus, how much information is shared. Concluding, the studies show that Extraversion of both, participant and virtual agent determine to what extent rapport is built.

Openness. Furthermore, there is little information about the characteristic Openness in connection to rapport in investigative interviews. Even though research shows that Openness mediates memory ability in information gathering approaches of investigative interviews, in which rapport is used (Madsen & Santtila, 2018), no direct connection to rapport is evident. Nonetheless, people that score high on Openness generally tend to be curious, intellectual and attentive, which on the first sight seems to be positive for building rapport within an interaction. Thus, even though little literature about Openness and rapport can be found, it is proposed that being open-minded would positively influence rapport building. This could be especially important for humanitarian approaches, in which giving the participant time to respond, and an open mind of the interviewer are important characteristics.

Neuroticism. Rather neglected characteristics of the five traits, are Neuroticism and Conscientiousness. Nonetheless, Neuroticism may act as an inhibitor of rapport. This supported by the fact that while Openness increases memory recall, Neuroticism is shown to decrease the amount of retrieved information (Madsen & Santtila, 2018). Moreover, people high on Neuroticism are emotionally unstable, insecure and often anxious, which at first sight, are characteristics that rather contrast bonding and positive communication. Especially anxiety is assumed to be a characteristic that is inhibiting fast bonding and smooth interactions. When looking at this trait in the light of the two interview styles, an emotionally instable and neurotic person might react vulnerable and confused to the accusatory condition, which often elicits stress. Thus, the result may be that less rapport is built for neurotic people in the accusatory approach.

Conscientiousness. Conscientiousness relates to being organized and planned. Someone that is thoroughly thinking about the interviewer and his aims and who is overthinking will be not likely to bond and build smooth interactions very fast. Moreover, analytical in contrast to emotional thinking may be an important aspect to consider when talking about how rapport is built. Especially the affect heuristic plays a role when looking at conscientious interviewees. The goal of the interviewee, that is a decision maker in this context is to choose the best possible outcome based on the probability of occurrence and the utility or consequences (Hilgendorf & Irving, 1981). While this assessment of the risk is partly based on analytical thinking, it is also influenced by affect, which is influenced by positive and negative feelings towards the interviewer. That means that the more positive the subjects feel about the interview, the lower they may assess the risk and the more willing they

may be to reveal information (Finucane, Alhakami, Slovic, & Johnson, 2000). This "reliance of risk as feelings" (Slovic & Peters, 2006) is conceptualized as the affect heuristic, because the risk does not change, just the perception of the suspect is altered by his favourable attitude. When looking at this effect for people high on Conscientiousness, it is likely that people with analytical and goal driven thinking will use reasoning instead of affect to come to a decision. They will pay less attention to the relationship to the interviewer and rather focus on facts, utility and probability. Thus, the hypothesis is that Conscientiousness will rather hinder rapport building as the focus is on analytically deciding. In contrast to that heuristic thinking is likely to favourably influence rapport.

Research Question and Hypothesis

In summary, rapport is one of the most important methods for retrieving information in investigative interviews. It is a complex and yet largely unknown and untested mechanism. Even though a lot of research deals with the phenomenon, it is relatively unexplored in the connection with the personality of the suspect, more concretely with the Big Five Model. In connection to personality current literature lacks studies to investigate what characteristics facilitate rapport building in investigative interviews in relation to the applied interview style.

This research, therefore, aims to investigate whether personality traits alter rapport building and to detect differences in rapport building in relation to personality in investigative interviews. Moreover, this will be tested in two conditions. One using the humanitarian, rapport building style, and on the other hand the accusatory approach. Thus, personality is tested as a moderation variable between Interview Style and Rapport Building (Figure 1). The research question for this aim, is "To what extent does the Personality of the Interviewee moderate the relationship between Interview Style and Rapport Building in Investigative Interviews?" The derived hypotheses are that while *Agreeableness, Extraversion* and *Openness* positively moderate the relationship between interview style and rapport, *Neuroticism* and *Conscientiousness* negatively moderate it.
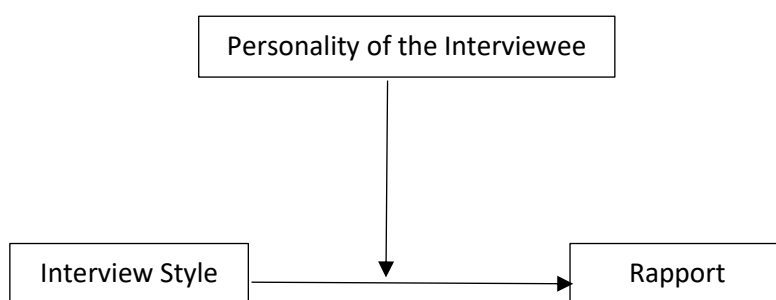
Figure 1. Conceptual Model of the expected moderation effect

Methods

Design

An experimental study with a between-subject design with the independent variable interview style was conducted. Participants were interviewed with either an accusatory or an humanitarian approach. The dependent variable under investigation was perceived rapport with the interviewer as rated by the participant. The moderation effect of personality, more concretely the Big-Five traits of Openness, Conscientiousness, Agreeableness, Neuroticism and Extraversion, was investigated in separate models.

Participants

A total of 50 participants took part in this research. All the participants were recruited through spreading a link through social media such as What's-App groups and Facebook groups of the University of Twente. Out of the sample, 26 participants (52%) were female, while 24 (48%) were male. The age was not distributed normally and displayed a Median of 21 years (20, 23). The participants were allocated evenly to one of the groups meaning that there were 25 participants per condition. Time slots alternated between the two conditions, so participants were therefore assigned to the condition that the time slot belonged to.

Materials

Interview scheme. To make the interviews as objective as possible and to create the same conditions for every interview, an interviewing scheme was used. The used scheme was one, that was created for similar research (Weiher, Watson, Luther & Taylor, 2018). It was created out of the knowledge derived about the methods of accusatory interviewing vs humanitarian methods. The main difference between the two interview styles is found in the Introduction of the interview.

The humanitarian approach is framed in terms of finding out as much information as possible. The interviewer also explains this to the participant in the beginning of the interview. Moreover, the included elements in this approach are empathy, understanding and being non-judgmental (Vrij et al., 2017). This is operationalized by pointing out the rights of the suspect: "I just want to go over some ground rules and guidelines for the interview today, alright?". Furthermore, openness is displayed through showing interest in the suspects point of view: "I wasn't there, so I don't know what happened, and I want you to have the chance to give your side of the story."

In contrast to that, the accusatory approach includes techniques believed to make a confession of the suspect more likely (Vrij et al., 2017). One important technique in the accusatory script is Maximization, which is a basic element of the Reid-technique (Horgan, Russano, Meissner, & Jacqueline, 2012). In this technique, the interviewer points out the seriousness of the crime to emphasize the importance of committing. Next to that, the Reid technique also applies the contrasting method of Minimization, in which the seriousness of the crime is diminished (Horgan, Russano, Meissner, & Evans, 2012). An example of that is: "I'm sure we would all be tempted to take a phone if it was just left lying out in the open like that. A lot of people probably would have done the same thing ". Through this technique, the consequences of the crime appear weaker, as the interviewer presents the crime as less serious. Both techniques are included in the Interview script. Moreover, the interviewer does not display openness and empathy but makes use of direct confrontation instead: "I am certain that you stole the phone". Also, the interviewer does not explain all elements of the procedure but dives into the topic more directly, by trying to blame the suspect and show dominance. This was based on the assumption that dominance is based on Direct Confrontation which is the first stage of the Reid technique (Horgan, Russano, Meissner, & Evans, 2012). Overall, the Introduction displays that the mind of the interviewer is already made up. The two schemes can be found in Appendix A.

Personality Questionnaire. The questionnaire contains questions for the variables of personality and rapport. Firstly, for personality, the framework of the Big Five was used to measure each of traits (Roccas et al., 2002). Moreover, the 10-Item short version of the Big Five Inventory (BFI-44) was made use of (Rammstedt & John, 2007), to prevent overburdening the participants with a long questionnaire. Research shows that especially in battery sets of items which have a similar scale, results decrease in quality as the length of the questionnaire increases (Herzog & Bachman, 2017). Next to the quality, research by Burchell and Marsh (1992) found evidence for lower response rates in longer questionnaires. For these reasons, the short inventory was used. The inventory measures each of the five traits with one reversed and non-reversed item on a five-point Likert scale with the response options of 5 = strongly agree, 4 = agree, 3 = neither agree or disagree, 2 = disagree, 1 = strongly disagree. The reversed items were recorded so that high value display high scores for that trait. An example item for the trait Extraversion is "I would describe myself as someone who is outgoing/sociable"

The test-retest reliability for the ten-item scale was measured based on mean stability test-retest correlation in two different samples. It reaches stable correlation coefficients of .75

on average in both samples (Rammstedt & John, 2007). Next, the external validity was measured in terms of convergent validity correlations between the self-report in the questionnaire and peer ratings of personality. The convergent validity correlation of self-report to peer ratings stays on a substantial level of an average correlation coefficient of .44 for the BFI-10 in comparison to .65 for the BFI-44. All in all, the inventory shows acceptable validity and a stable reliability value and is of advantage for purposes, when an inventory of 44 items is not realizable. In relation to the length complexity of the task, the BFI-10 was thus the best option.

Rapport Questionnaire. The dependent variable of rapport was measured via the Rapport Scale for Investigative Interviews and Interrogations (Rs3I) (Duke, Wood, Bollin, Scullin, & LaBianca, 2018). The Rs3I measures rapport based on six scales, namely attentiveness, trust/respect, expertise, cultural similarity, connected flow and commitment behaviour. The items of the six scales resulted in a total of 21 items to measure rapport. The scale is one of very few inventories to measure rapport in investigative interviews on a reliable and valid scale (Duke et al., 2018). It was measured on a five-point Likert scale with the response options of 1 = strongly agree, 2 = agree, 3 = neither agree or disagree, 4 = disagree, 5 = strongly disagree. An example for an item for the scale of *connected flow* is "The Interviewer and I got along well during the interview". The items were reversely scored afterwards so that high values equal high rapport.

The concurrent validity for the questionnaire was tested by Duke et al. (2018) through looking at the correlation between the actual interview style (rapport, neutral and pressure) and the scale. Rapport was rated higher for the participants in interviews based on rapport than for neutral or pressure interviews, speaking for a high validity of the inventory (Duke et al., 2018). In this study, the reliability of the questionnaire was assessed in terms of internal consistency through the measure of Cronbach's Alpha. The internal reliability reached a good Cronbach's Alpha coefficient of .88.

Vignette. To make an investigative interview possible, the participants received a scenario of crime, prior to the start of the research. To make it as easy as possible for the participants to identify with the suspect, a minor crime was chosen, that was easy to imagine and did not require specialist knowledge. In the scenario an iPhone was stolen out of a bag in a cafeteria. The scenario, that was written out of the perspective of the offender, provided a detailed description of the crime. This was important as it was the task of the interviewee to convince the researcher of his/her innocence. In order to do that, a sufficient amount of information is necessary, so that the suspect can build counter arguments and make use of the

detailed information. Also, the information must be plausible and fit to the information that the police already has gathered (Vrij, Leal, Mann, & Granhag, 2011). This would not be possible, without providing a detailed description of the crime for the participant. The whole vignette can be seen in Appendix B.

Procedure

Before the start of the study, the participants received a mail with the crime scenario. The goal was that the participants have enough time to read the vignette and imagine being the offender. Thus, a delay of at least a day between providing the participants with the vignette by mail and scheduling the interview was planned. In the same mail, the participants received a link to the information sheet and the informed consent. Once the participant agreed to take part in the research in the consent form, the research started by providing the participant with the personality questionnaire via a Qualtrics link. This was done beforehand to decrease the time that the participants spend on the second, longer questionnaire, as length may negatively influence the quality of the answers (Herzog & Bachman, 2017).

After that, the researcher called the participant at the scheduled time via Skype and explained the proceedings. After the researcher explained the procedure briefly and gave five minutes to read the vignette again, the interviewer joined the call and the investigative interview was conducted. It was the task of the participant to try to convince the interviewer of his innocence through explaining the existing evidence against them. The participants were interviewed according to one of the interview styles: accusatory or humanitarian.

Once the interview, that lasted approximately ten minutes, was over the interviewer left the call. The first researcher took over again and accompanied the participant through the questionnaire. This second questionnaire investigated rapport. Moreover, this part also included a questionnaire about the affect heuristic for a different research. It is not included in this research.

After the questionnaire, the participants were debriefed about the two conditions and any questions from the side of the participants were resolved.

Data Analysis

The responses of the two questionnaires were recorded in Qualtrics. IBM SPSS Statistics 24 was used for the analysis. The dependent variable of rapport was normally distributed as can be seen in Appendix C. Nonetheless, there was one large outlier. Thus, the analysis was done once including the outlier and one time without it. As there was no substantial difference the further analysis was conducted including the outlier, because the

reasons for the difference compared to the other participants was not clear.

First, to test the effect that interview style has on rapport without any moderators, an independent sample t-test was conducted. For this test, the mean scores of rapport were used.

Next, a t-test of independent samples was conducted with the grouping variable of interview style and the dependent variable of each of the personality traits to test if there is a difference in distribution of the personality traits. This was to test the effectiveness of the randomization.

Afterwards, to answer the research question, five separate moderation analyses using the Process Macro in SPSS were conducted. In these models, interview style was entered as the independent variable, Rapport as the dependent variable and each personality trait as the moderator. The SPSS Extension Process Macro makes use of Bootstrapping techniques and was used to test the interaction effect for each of the five personality traits separately in a more robust way. For the analysis, 5.000 bootstrap resamples were used. Bootstrapping produces an estimate of population values by exploring the different sampling distributions of the initial sample. Thus, more robust standard errors are produced in comparison with the standard error of the relatively small sample size. As a conclusion, one can gain a more accurate model of the population effect through the more accurate estimation of standard errors. The statistical significance for all tests was set up to $p < .05$.

Results

Effectiveness of Randomization

None of the five personality traits showed a significant difference between interview conditions. The values ranged from $t = 0.15$, $p = .87$ for the trait of Openness to $t = 1.46$, $p = .150$ for Agreeableness, indicating that the randomization was effective.

Independent sample t-test

First, an independent sample t-test was conducted. The results indicate that the mean of reported rapport was larger for the humanitarian approach ($M = 4.24$, $SD = 0.33$) than the mean of rapport in the group of people interviews with the accusatory approach ($M = 3.90$, $SD = 0.56$); ($t = 2.55$, $p = .015$). The effect size for this effect is d = 0.74.

Moderation of Personality on the Relationship of Interview Style and Rapport

As a summary of the five tested models, the results of the models and the effect of each of the three predictors are displayed in Table 1.

Neuroticism. While the overall model was significant and explained a significant proportion of the variance, the interaction effect was not statistically significant. Moreover, similar non-significant results were found for Neuroticism alone as a predictor. In contrast to that the results indicate that interview style significantly predicted Rapport in this model.

Agreeableness. The results of the model with Agreeableness were similar to those of Neuroticism. Again, the overall model explained a significant variance of rapport. Nonetheless, there was no significant improvement of the model through the Interaction effect of Agreeableness and interview style. Neither the interaction effect nor the direct effect of Agreeableness could be identified as a predictor of rapport. The only predictor with a significant influence was interview style.

Openness. In contrast to the first two models, this model did not explain a significant variance in rapport. Moreover, none of the three predictors influenced the rapport scale on a significant basis.

Extraversion. In the model with Extraversion as a moderator, the model generally indicated to predict rapport and to explain a significant variance. Nevertheless, all three predictors did not show a significant influence on rapport.

Conscientiousness. Lastly, also the interaction between Conscientiousness and interview style was not significant. Moreover, none of the three predictors had a significant effect on rapport in this model. Next to that, the overall model also indicated not to explain a

significant variance of rapport. As the results were not significant, the affect heuristic as a mediator was not tested additionally.

Table 1.

Predictors in the Moderation Analysis of Interview Style and Personality on Rapport

Model	Predictor	b	t	df	p	R^2	F	df	p
Neuroticism	Neuroticism	0.32	0.94	46	.739	**.17**	**3.20**	**3,46**	**.032**
	Interview Style	**17.89**	**2.21**	**46**	**.032**				
	Neuro*Interview	-1.86	-1.41	46	.164				
Agreeableness	Agreeableness	1.50	0.82	46	.415	**.31**	**4.03**	**3,46**	**.013**
	Interview Style	**34.27**	**2.15**	**46**	**.037**				
	Agreeable*Interview	-3.81	-1.79	46	.081				
Openness	Openness	-0.29	-0.27	46	.788	.14	2.57	3,46	.066
	Interview Style	13.33	1.20	46	.238				
	Openness*Interview	-0.91	-0.59	46	.557				
Conscient	Conscientiousness	-0.89	-0.70	46	.489	.13	2.45	3,46	.075
	Interview Style	-0.90	-0.40	46	.688				
	Consc*Interview	1.84	0.98	46	.334				
Extraversion	Extraversion	0.73	0.68	46	.502	**.19**	**3.50**	**3,46**	**.023**
	Interview Style	-1.33	-0.12	46	.904				
	Extra*Interview	1.23	0.81	46	.425				

*$p < .05$

Exploratory Analysis of Agreeableness

As the interaction was nearly significant for the trait of agreeableness, it will be further probed in an exploratory analysis, to get a clearer picture on the effect. To do that it was looked at the influence of agreeableness one standard deviation below the mean (low), the mean value (medium) and the influence of agreeableness one standard deviation above the mean (high).

While no significant influence of agreeableness on rapport at a high level could be found $t = 0.31$, $p = .76$, there was a significant influence for people scoring low $t = 2.82$, $p = .007$ as well as medium $t = 2.48$, $p = .017$ on agreeableness. The p-value for low agreeableness even persists after the Bonferroni correction with $p = .021$ and the value for medium agreeableness almost survives the correction $p = .051$.

What this means more concretely can be seen in Figure 2. where the interaction effect was tested using a simple slope analysis. Moreover, one can see that with rising levels of agreeableness, rapport decreases in humanitarian conditions, while it increases in the accusatory condition. More important is that there is a large difference in how effective the interview techniques are in building rapport for people low on agreeableness. In contrast to that this effect decreases with rising levels of agreeableness. The effect of interview style on building rapport is way smaller for people scoring high on agreeableness.
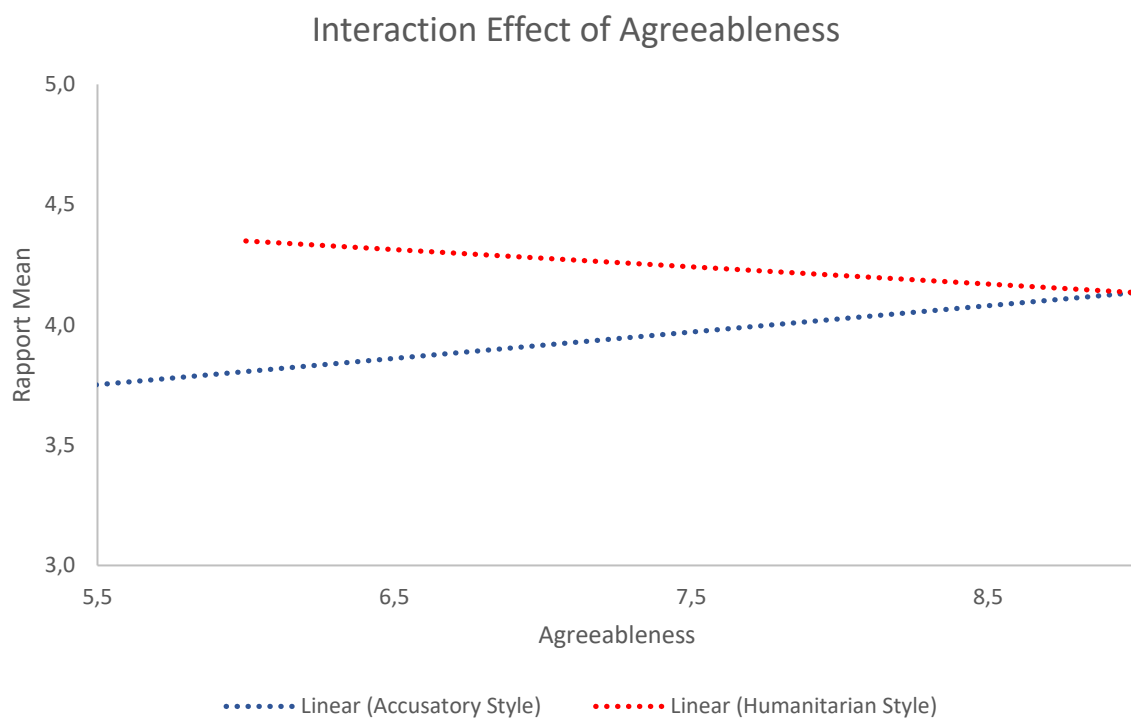
Figure 2. Simple Slope Test for the Interaction Effect between Agreeableness and Interview Style and the Influence of this on Rapport.

Discussion

Overview of the findings

In this research an effort was made to investigate in how far the personality of the interviewee explains the relationship between interview style and rapport in investigative interviews. On the basis of current literature, the hypothesis was that personality traits such as Agreeableness (Kang et al., 2008), Extraversion (Brixey & Novick, 2019; Kang et al., 2008) and Openness (Madsen & Santtila, 2018) positively moderate the relationship between interview style and rapport while Neuroticism and Conscientiousness negatively moderate it.

In contrast to the hypothesis, the results of the experiment did not indicate a significant influence of personality. Nonetheless, the main effect of interview style on the amount of rapport was significant. This means that more rapport was built in humanitarian approaches than in accusatory approaches in this sample.

Interview Style as a predictor. The independent t-test showed that the mean of rapport was significantly larger for the humanitarian approach than for the accusatorial one. This result is clearly in line with already existing literature on investigative interviewing approaches (Vrij et al., 2014, 2017; Walsh & Bull, 2012). This finding shows that the applied techniques such as Minimization, Maximization and Direct Confrontation in the accusatorial approach as well as showing empathy and being open in the humanitarian approach were effective in manipulating rapport in the sample. In connection to the favourable effect of rapport that other studies show (Collins et al., 2002; Drolet & Morris, 2000; Vrij et al., 2014), this result suggests that rapport is an important concept in investigative interviews that might be responsible for the difference in effectiveness between the two tested interview styles. Thus, further attention must be paid to underlying mechanisms to find out how rapport operates in the context of investigative interviews.

Moderation Analysis of Personality. None of the five models identified one of the personality traits as a significant predictor for rapport. Moreover, the proposed interaction effect between the traits and interview style was not significant in any of the models. Thus, there is no clear evidence that personality does affect how interview style influences building rapport with the interviewer. However, tendencies about a moderation effect of low Agreeableness could be observed in this sample, as will be further elaborated.

Extraversion. The results about the influence of Extraversion contrast already existing literature about the connection between rapport and the personality trait of Extraversion. While the results of this study indicate no effect of Extraversion on rapport or on the relationship between rapport and interview style, a study by Kang et al. (2008) shows that

Extraversion plays a significant role in building and maintaining rapport. Moreover, Brixey & Novick (2019) explain that Extraversion of both communication partners influences rapport.

When looking at the studies, one important difference becomes obvious. While they tested the influence of personalities in the context of rapport with virtual agents, this study aims to display the connection in investigative interviews. In the two mentioned studies, in which Extraversion is shown to positively influence rapport building, the setting was more similar to an everyday situation and was less serious. That means in contrast to other studies, this study was designed within a more formal setting, in which the participants had to pay attention to the consequences of their actions, and thus it was a high-pressure scenario. Contradicting that, in the study by Kang et al. (2008), participants had the task to tell a story and the virtual agent reacted through nonverbal communication. In this less serious setting, extraverted people were able to build more rapport, in contrast to this study. The second mentioned study deals with a similar set up and less serious context in which participants talked to a virtual agent and the agent was manipulated in terms of word count, positivity and formality, which influenced participants in rapport building (Brixey & Novick, 2019). In both studies, it was a low-pressure scenario of interaction compared to the context of investigative interviews. This is a clear difference to this current study.

The contrasting results of the studies may indicate that different mechanisms and factors play a role when looking at rapport in investigative interviews compared to a scenario with virtual agents. The setting is completely different. As it is a special situation in which people do not frequently find themselves in, maybe also different mechanisms come into play. This assumption is supported by the theory of trait activation, which assumes that every trait needs an arousal of a *trait relevant situation* to be activated (Tett & Guterman, 2000). Thus, it may be the case that this *trait relevant situation*, that activates the trait in the scenario of former studies, is missing in the case of investigative interviews. This is supported by the finding that high-pressure situations influence the process of trait activation for example for Neuroticism (Byrne, Silasi-Mansat, & Worthy, 2015). The study found that Neuroticism was higher in low pressure scenarios than in high pressure ones. Thus, this may raise the assumption that context is more important in high pressure scenarios, and personality traits could play a bigger role in low pressure scenarios. This would explain the contradictory results compared to former studies. The large situational difference between already existing literature and the performed study, makes it difficult to compare the effect of the personality trait Extraversion and draw clear conclusion. Clearly, the results contrast already existing

literature on this matter, suggesting that Extraversion plays a different role in investigative interviews than in other scenarios.

Agreeableness. Overall, there was no significant influence of Agreeableness or an interaction effect of Agreeableness and interview style on rapport. Nonetheless, the tests show a weak evidence against the null hypothesis, which was further investigated in an exploratory analysis. The exploratory analysis showed that in this sample scoring low or medium in Agreeableness did influence rapport significantly even surviving the Bonferroni correction. More concretely, there is a difference in rapport between the conditions of the accusatory and humanistic interview style for participants scoring low on agreeableness. While humanitarian approaches are most effective in eliciting rapport at low levels of Agreeableness, the accusatory approach is maximally ineffective for eliciting rapport for people low on Agreeableness. This difference declines with rising levels of Agreeableness as can be seen in Figure 2. Thus, one can conclude that the interview style becomes decreasingly important with rising levels of agreeableness.

This is especially interesting as agreeableness is of special importance for the topic of investigative interviews, because there seems to be a link between people low on Agreeableness and crime. Being less trustworthy and altruistic and often finding fault in others are risk factors for criminal behaviour and therefore for ending up in an investigative interview (DeLisis & Vaughn, 2016; Međedović, 2017). Thus, the result that at low Agreeableness, interview style matters the most is interesting as well as important to understanding how interviewees react to different approaches. Moreover, it can be a step towards improving the investigative interviews to achieve the best possible result even for people low on Agreeableness. More concretely these results indicate that the accusatory approach should not be used for interviewees low on Agreeableness. Instead, especially for people low on agreeableness, the humanitarian approach should be applied. Nonetheless, this result requires further research, as only weak evidence against the null hypothesis could be found.

When thinking about the question why agreeableness did not prove as a predictor and there was no significant interaction effect even though in an exploratory analysis there seems to be an effect for low Agreeableness, one has to think about the selected sample. For the research, mainly students were selected. Thus, the sample might not reflect characteristics of criminals very well. If at high levels, agreeableness does not have an influence, and the sample consists of a lot of participants scoring high on agreeableness, the results are less robust. As the evidence against the null hypothesis was not definitely clear, further research

needs to focus on this topic.

Openness. Next to the fact that Openness of the interviewee can have favourable influences on the amount of information retrieved, as it improves memory recall (Madsen & Santtila, 2018), there is little research about the effect of Openness on rapport. Nonetheless, it was proposed that Openness would favourably influence building rapport especially in humanitarian approaches, as having an open mind, being attentive and curious seem to be characteristics that can be helpful in bonding with somebody.

Based on the results, this hypothesis was rejected. Openness as well as the interaction between Openness and interview style did not affect rapport in this sample. Thus, even though Madsen and Santilla (2018) show that Openness does improve memory recall especially in humanitarian approaches to interviewing, this does not seem to be related to rapport directly. This is also supported by the finding that the trait Openness improves memory even in very different contexts independent from rapport, such as in adults with dementia (Terry, Puente, Brown, Courtney, Faraco, Carlos, & Miller, 2013).

Neuroticism. As no studies for Neuroticism in this context were presented, the assumption was built on the knowledge about the character traits and how they operate in other contexts. People scoring high on neuroticism are often insecure, and anxious and have difficulty with forming relationships quickly. Thus, it was assumed that this would especially hinder rapport building in accusatory approaches, as the techniques used in this approach may trigger neurotic traits that hinder building rapport and make it more difficult to stay emotionally stable than the methods of the humanitarian approach.

No evidence was found to support this conclusion. That means that people scoring high on Neuroticism did not build less rapport in accusatory conditions compared to people scoring low on neuroticism. In connection to interview style there is no interaction with Neuroticism. Moreover, also no direct effect could be observed, which means that Neuroticism plays a minor role for determining how much rapport is built in each of the two interview conditions in this sample.

Based on what is already known about rapport and Neuroticism, this seems contradictory to other studies. Other studies from different contexts indicate that neuroticism plays a major role in forming relationships. One example is the finding that mothers high on Neuroticism have difficulty with building a strong relationship with their child (Sperling, 1951). Even though this can provide a direction of the effect Neuroticism has on building rapport, there is also a large difference between the studies. While the study by Sperling (1951) focuses on years of relationship building, this study only takes into account the effect

of one interview. Furthermore, one can say that there is a lack of literature on the effect of Neuroticism in smaller situation and thus, needs to be further investigated. Nonetheless, the results of this study concerning Neuroticism are not in line with the hypothesis and the findings of other studies.

Conscientiousness. As there is also little literature for Conscientiousness and about its effect in investigative interviews, the hypothesis was based on general behavioural tendencies of people scoring high on Conscientiousness. It was assumed that people that operate analytically rather than emotionally would not be likely to operate through the affect heuristic. Thus, high levels of Conscientiousness would hinder how emotionally based the judgement of the interview is which in turn would hinder building rapport. Somebody who is thinking rationally would be likely to bond fast with his or her interviewer. In contrast to that people scoring low on Conscientiousness would be more likely to make use of the affect heuristic and the emotional clues provided in the humanitarian approach and therefore, build more rapport in the humanitarian than the accusatory approach.

This hypothesis could be rejected considering the non-significant results for Conscientiousness as a predictor of rapport as well as non-significant results of an interaction between Conscientiousness and interview style. This means that Conscientiousness does not make a difference in terms of building rapport when it comes to the two tested interview styles. As all of the results for Conscientiousness were not significant, testing whether the affect heuristic would moderate the relationship was not necessary.

Strength and Limitations of the study

This study incorporates some strong and weak aspects that future studies should consider. Over the last years, research made progress in finding out more about what techniques are effective in investigative interviews and how they operate. Also personality has been a focus of research on investigative interviews, such as traits of police officers that improve the outcome of the interview (De Fruyt et al., 2006). In contrast to that there is a lack of literature about how different personalities react to different techniques in investigative interviews. The personality of the interviewee and specifically looking at all of the Big Five Traits simultaneously, as well as its importance to the outcome of the interview has been neglected so far. Thus, this study explores an area of psychology that is relatively unexplored. At the same time the topic is of high relevance as on the one hand, rapport is shown to have favourable influences on the outcome of the interview especially in humanitarian approaches (Abbe & Brandon, 2013) and on the other hand nothing is known about the effectiveness for different personality types. Thus, this knowledge can help to improve the techniques of

investigative interviews without having to worry about the fit for different types of personalities. Especially the finding that Agreeableness at low levels hinders rapport building in the accusatory approach can be important for improving investigative techniques and to increase the effectiveness of the interview by only applying humanitarian approaches.

When it comes to the limitations of the conducted study, one aspect is the restriction due to the Corona Virus. As it was not possible to conduct the interviews in person in an experimental setting, the researchers were limited to the use of online platforms for the Interview. While Skype offers a good alternative to meeting in person, it is also said to have drawbacks. For example it is doubtful how far it is even possible to make a connection and build rapport with people you have never seen before, online (Deakin & Wakefield, 2014). Nonetheless, a significant difference in rapport was found between the two interview styles. This means that against the worry that the factor of online video platforms could hinder rapport building, it was possible, and the manipulation was effective. Thus, a direct comparison of online interviews and traditional interviews would be necessary to determine if less rapport than in traditional interviews was built. It is therefore, advised to investigate this effect in future studies.

Second, as mentioned before none of the interviewers had real life experience with conducting an investigative interview. This is an important limitation to keep in mind as this could significantly have influenced the perception the participants had about the interviewer and the building of rapport. Nonetheless, the interviewers were prepared and acted according to an interviewing scheme. Thus, efforts were made to decrease the effect of a lack of experience.

Next to these limitations, another aspect to keep in mind is that the content of the interviews was only an imagined crime. This makes it easier for the suspect not to feel pressured during the interview as the interviewee has nothing to lose. This might make it easier for the interviewee to build rapport with the interviewer, as less is at stake for them, pressure is low and the situation of a study is apparent. For the results this means that the amount of rapport could have been higher than it would have been in a real scenario and setting.

Lastly even though the reported effect size was medium to large for the independent t test (d = 0.74), which means that this study incorporated enough participants to show an effect, the small sample size of only 25 participants per cell is a limitation of the study. The reason for that is, that there is no precise estimate of the effect, as p values as a measure for testing hypotheses are largely dependent on the sample size (Johnson, 1999). Having a small

sample size can thus, increase the risk of falsely accepting the null hypothesis (Type II Error) and may also lead to an overestimation of the effect that is shown. That means that even though this study found an effect, one cannot be sure about the accuracy of the estimate. Thus, future studies should 1) make use of a larger sample 2) make use of confidence intervals for testing the effect.

Future Recommendations

Future research can add up to this study in various ways. First, the scope of this research was relatively small: conducting the study with a larger sample size might help to achieve more meaningful results and an accurate estimate.

Next to that, to exclude the possibility of an influence of the study design, future studies should try to improve the set up in the following ways. Firstly, the study should be conducted again with police officers that have experience in conducting investigative interviews. Also, bearing in mind ethical guidelines, an optimal setting would be to have true cases or more serious cases as a vignette. Furthermore, it is assumed that in this study, there was a problem in terms of the sample. Thus, the sample should be adjusted to the profile of criminals and especially to participants low on agreeableness.

Last, in an exploratory analysis of agreeableness, an influence of low agreeableness was observed. Nonetheless, there is no clear statement about the influence of agreeableness, as overall agreeableness did not prove as a significant predictor. This should be investigated further bearing in mind the results of the current study. Moreover, even though an effect of Agreeableness at low levels on the effect of interview style on rapport could be established, no conclusion about the effectiveness in terms of information elicited could be drawn. Thus, future research should investigate how far scoring low on Agreeableness also affects the success of the interview. Thus, especially agreeableness needs to be in the focus of future studies and add up to the findings of this study.

Conclusion

This study investigated a relatively neglected area of investigative interviews. Little is known about the effect of personality of the interviewee in this area of research. The most important finding is that while most of the traits play a small role for rapport in both interviewing styles, low agreeableness is indicated to have a negative effect on rapport in the accusatory condition. The results imply that, the police do not necessarily need to tailor their approaches to the personality of the interviewee, as the humanistic approach achieves more rapport for most personality types.

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The Appendices

Appendix A – Interviewing Schemes

1.1 Introduction: Information-gathering approach

Hello, my name is NAME and I'll be conducting your interview today. Can I ask how you would like me to refer to you during this interview? _____ OK, well please feel free to call me NAME. Now [participant's name], before we start talking about the events in question, I just want to go over some ground rules and guidelines for the interview today, alright? I want to let you know that this interview is being audio and video recorded. That is just for your protection and for mine, so that we get an exact record of what is said today, OK? Because we will need to transcribe these videos and also just for common courtesy, we're going to do our best to not interrupt each other. So, when you're talking I'm not going to interrupt you and I hope you can do the same for me. However, if throughout the interview you have any questions at all, please feel free to ask me. Also, if I ask you to repeat something, or ask some similar questions, it's because want to make sure I am as thorough as possible and get all the correct information. OK, just so we are on the same page, I will be interviewing you about the events in the café where a woman has had her phone stolen. The primary purpose of this interview is to obtain as much information as possible. So during this interview, it is important that you tell me everything without editing anything out and giving as much detail as possible. This is important because I wasn't there, so I don't know what happened, and I want you to have the chance to give your side of the story. OK, so we'll begin the interview now.

1.1.1 Interview questions

- Please tell me in as much details as possible about everything that happened in the cafe?

- Is there anything else you can tell me about what happened in the café from your point of view?

- Please describe to me in as much detail as possible what you saw in the cafe?

- Tell me how you felt during your time in the cafe.

Now I will ask you some more specific questions. You may have already answered them, but if that is the case, please answer them again.

- Can you explain why you turned to walk away from my two colleagues that arrested you?

- We have an eyewitness who says that they saw you standing around where the

phone was. Can you tell me what you were doing there?

- We have a second eyewitness who says he saw you acting strangely when talking to

your friend. Can you explain why this man may have considered your behavior

suspicious?

- Is there anything else you can tell us that might help us to understand what

happened at the café?

 [After questioning]. Thank you very much. I have all the information we need for now. You

can please stay on the call the researcher will rejoin the conversation.

1.2 Introduction: Accusatory-interrogation method

I need to talk with you about the theft of a phone at the cafe. I am certain that you stole that phone. This is a problem because it cost the owner a lot of money and has a lot of her sentimental/ private photos on it, and some data she won't be able to get back. Now, I am sure you didn't mean any harm when you took her phone. I'm sure we would all be tempted to take a phone if it was just left lying out in the open like that. A lot of people probably would have done the same thing. But I hope you can see why this is a problem.

1.2.1 Interview questions

- Please tell me in as much details as possible about everything that happened in the cafe?

- Is there anything else you can tell me about what happened in the café from your point of view?

- Please describe to me in as much detail as possible what you saw in the cafe?

- Tell me how you felt during your time in the cafe.

Now I will ask you some more specific questions. You may have already answered them, but if that is the case, please answer them again.

- Can you explain why you turned to walk away from my two colleagues that arrested you?

- We have an eyewitness who says that they saw you standing around where the phone was. Can you tell me what you were doing there?

- We have a second eyewitness who says he saw you acting strangely when talking to your friend. Can you explain why this man may have considered your behavior suspicious?

- Is there anything else you can tell us that might help us to understand what happened at the café?

 [After questioning]. Thank you very much. I have all the information we need for now. You can please stay on the call the researcher will rejoin the conversation.

Appendix B - Vignette

Vignette - iPhone stealing

At 10:00 you arrive at a local cafe and are looking forward to meeting a friend at 10:30.

Since you still have 30 minutes to kill, you are sitting at a corner table and playing candy crush on your phone. While looking around you see an open red handbag on a black table close to the toilets, with a brand new iPhone half lying out of it. You thought about getting that exact phone a while ago and started staring at the new iPhone in the bag.

You remember standing in the Apple store the other day, weighing if you could afford the shiny, white phone with this new amazing camera. You still feel angry when you think about how you were staring at the price tag and realizing that you could not afford it. Your eyes go down to your own phone which has had a really bad broken screen for a few months now which you've never been able to get repaired.

You start looking around to see if someone is around who owns the handbag.

At the far end of the café you see a family of two parents and two small children eating together, but they seem entirely occupied with each other and their food. There is also a workman in dirty clothes leaning against the serving counter slowly drinking coffee and chatting to the server. They also seem quite engrossed with each other.

Since you are almost alone in the cafe and all the other people seem occupied by their breakfast and conversations, you decide to stand up and walk towards the expensive red handbag .

The black table is only about 5 meters away, but it feels much further due to the nerves. You still try not to bring any attention towards yourself and you constantly check if someone is looking at you.

* BUMP * A woman with big brown glasses suddenly bumps into you. You startle and you feel your heartbeat going * THUMP THUMP THUMP * bumping out of your chest. The woman apologizes, smiles at you, then continues her walk. You have no idea how you managed to miss her when you were looking around. You take a deep breath and reach the table.

As you are standing in front of the table, you take a last look around to check if anyone is looking at you. The workman is walking straight towards the toilet which is right next to where you are standing, so you wait a few seconds until he passes. Up close he is a tall blond man, with an unshaven face but not a full beard. He is wearing high visibility clothing with a logo on the left chest, but you can't see what it looks like.

Once he enters the bathroom you quickly grab the iPhone out of the handbag and put it into the left pocket of your trousers . Your heart goes * BOOM BOOM BOOM *. You quickly walk back to your corner table and sit down with shaking hands. You wait another five minutes until your friend, Peter, finally arrives and simply hope that this will make you less suspicious.

During the whole meeting you cannot think of anything else as the phone in your pocket and you put your hands in your pocket just to touch it several times. It's got a cold touch to it. Your friend seems to notice that your mind is somewhere else and asks several times, if something was up. " Is everything alright? " You nod.

Suddenly, the owner of the handback returns . A middle aged woman with black hair, in an expensive black jacket, and designer jeans. She picks up her bag, pays at the counter and walks away. A minute or two later and you see her heading back toward the café through the window. You decide to tell Peter that you do not feel well and to leave. Both of you get up and hug goodbye. When leaving the cafe you feel suddenly relieved * Puh * and take a deep breath of fresh air.

You decide to head straight home to work out how to access the phone and see two policemen heading towards you. You walk the other way and quickly dispose of the phone in a bin.

"You! You are under arrest for stealing a phone"

is the last thing you can hear them say, before they take you to the police station. You're shocked. You decide that you will not confess to the crime and immediately start thinking of ways to explain what happened so that you do not get in trouble.

[END]

Appendix C – Normality Test for Rapport
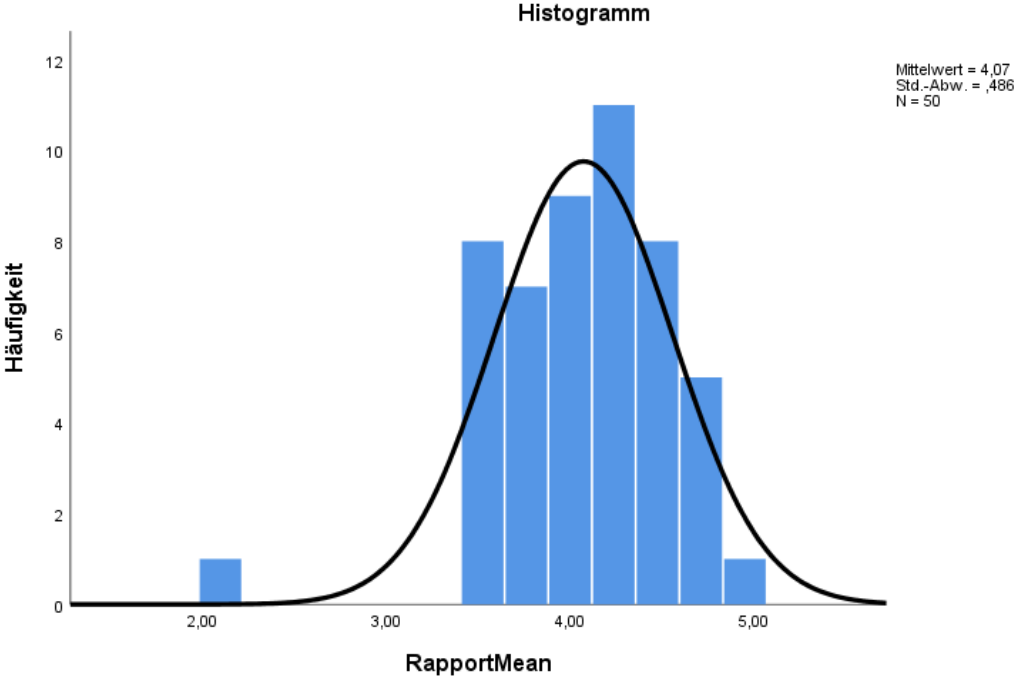
Figure 3. Total Rapport plotted in a Histogram.

Appendix D - Syntax File

<u>COMPUTE RAPPORT VARIABLE</u>

COMPUTE Rapport=Q1_RaTr + Q2_RaEx + Q4_RaCu + Q3_RaTr + Q5_RaEx + Q6_RaTr + Q7_RaCu +
Q8_RaAt + Q9_RaCom + Q10_RaTr + Q11_RaEx + Q12_RaEx + Q13_RaAt + Q14_RaFl + Q15_RaFl +
Q16_RaCu + Q17_RaCom + Q18_RaAt + Q19_RaFl + Q20_RaAt + Q21_RaCom.
EXECUTE.

<u>COMPUTE VARIABLE FOR PERSONALITY TRAITS</u>

COMPUTE NewNeuro=NeuRev + Neu.
EXECUTE.

COMPUTE NewCon=Con + ConRev.
EXECUTE.

COMPUTE NewAgr=Agr + AgrRev.
EXECUTE.

COMPUTE NewExt=ExtRev + Ext.
EXECUTE.

COMPUTE NewOpe=Ope + OpeRev.
EXECUTE.

<u>RELIABILITY OF RAPPORT QUESTIONNAIRE</u>

RELIABILITY/VARIABLES=Q1_RaTr Q2_RaEx Q3_RaTr Q4_RaCu Q5_RaEx Q6_RaTr Q7_RaCu Q8_RaAt
Q9_RaCom Q10_RaTr Q11_RaEx Q12_RaEx Q13_RaAt Q14_RaFl Q15_RaFl Q16_RaCu Q17_RaCom
Q18_RaAt Q19_RaFl Q20_RaAt Q21_RaCom
/SCALE('ALL VARIABLES') ALL
 /MODEL=ALPHA.

<u>RELIABILITY FOR THE PERSONALITY TRAITS</u>

RELIABILITY
 /VARIABLES=ExtRev Ext
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA.

RELIABILITY
/VARIABLES=Agr AgrRev
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA.

RELIABILITY
/VARIABLES=ConRev Con
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA.

```
RELIABILITY
/VARIABLES=OpeRev Ope
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA.

RELIABILITY
/VARIABLES=Neu NeuRev
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA.
```

Test for randomization of traits

```
T-TEST GROUPS=IntStyle(0 1)
 /MISSING=ANALYSIS
/VARIABLES=NewNeuro NewCon NewAgr NewExt NewOpe
/CRITERIA=CI(.95).
```

Median and Percentiles for age

```
FREQUENCIES VARIABLES=Age
 /NTILES=4
 /PERCENTILES=25.0 75.0
/STATISTICS=MEDIAN
 /ORDER=ANALYSIS.
```

T test for differences in conditions

```
T-TEST GROUPS=IntStyle(0 1)
 /MISSING=ANALYSIS
 /VARIABLES=Rapport3
 /CRITERIA=CI(.95).
```

Test for normality

```
EXAMINE VARIABLES=Rapport
 /PLOT BOXPLOT STEMLEAF HISTOGRAM NPPLOT
 /COMPARE GROUPS
 /STATISTICS DESCRIPTIVES
 /CINTERVAL 95
/MISSING LISTWISE
 /NOTOTAL.
```

Plot simple slope for agreeableness

```
DATA LIST FREE/
  IntStyle   NewAgr    Rapport   .
BEGIN DATA.
    ,0000    5,7591    34,3079
   1,0000    5,7591    46,6340
```

```
    ,0000    7,2200    36,5082
   1,0000    7,2200    43,2690
    ,0000    8,6809    38,7085
   1,0000    8,6809    39,9040
END DATA.
GRAPH/SCATTERPLOT=
 NewAgr   WITH    Rapport  BY      IntStyle .
```

Excluding Outliers

```
USE ALL.
COMPUTE filter_$=(RapportMean >= 3).
VARIABLE LABELS filter_$ 'RapportMean >= 3 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

Appendix E - Informed consent

Please tick the appropriate boxes	Yes	No
Taking part in the study		
I have read and understood the study information dated [DD/MM/YYYY], or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction.	☐	☐
I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.	☐	☐
I understand that taking part in the study involves answering questionnaires completed by the participant and taking part in an online interview.	☐	☐
I understand that the information I provide will only be used for the purposes of this study. It will be analysed and elaborated on in the reports written by the researchers. There will be no secondary use of the provided information.	☐	☐
I understand that personal information collected about me that can identify me will not be shared beyond the study team.	☐	☐

Signatures:

X_____   X_____   X_____
Name Participant   Signature   Date

I have accurately read out the information sheet to the potential participants and, to the best of my ability, ensured that the participant understands what they are freely consenting.

X_____   X_____   X_____
Name Researcher   Signature   Date

Study contact details:

Melissa Gencsoy: m.gencsoy@student.utwente.nl

Sophia Rieken: s.e.a.rieken@student.utwente.nl

Jordan: j.e.k.raß@student.utwente.nl

Contact Information for Questions about Your Rights as a Research Participant

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the Secretary of the Ethics Committee of the Faculty of Behavioural, Management and Social Sciences at the University of Twente by ethicscommittee-bms@utwente.nl

Information Sheet

This research will investigate how the variables of respect/trust/personality influence the risk perception and rapport in investigative interviews in respect to two interview styles, namely the accusatory approach and the information gathering approach.

The study itself consists of reading and emphasizing with a crime and taking part in an online interview (Skype) and an online questionnaire that measures the described variables.

Participating in this study does not put you at any risk and the study was previously reviewed and has been approved by the BMS ethics committee of the University of Twente.

You have the right to withdraw from participation at any time without giving any reasons for withdrawal.

All gathered data will be anonymized. It will not be used for any purpose other than the study and the reports written by the researchers. You have the right to request access to and rectification or erasure of your personal data at any time. All data will be automatically deleted the latest six months after this research is terminated.

For further questions or any complaints you can contact the researchers or the BMS ethics committee of the University of Twente:

BMS ethics commitee, ethicscommitee-bms@utwente.nl