Individual Determinants of Deception Detection Performance: Need for Closure, Attributional Complexity and Absorption

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Ask, K., & Granhag, P. A. Individual Determinants of Deception Detection Performance: Need for Closure, Attributional Complexity and Absorption. Göteborg Psychological Reports, 2003, 33, No. 1. An explorative study examined the extent to which individual differences on three personality dimensions can predict performance on a deception detection task. Preliminary research findings (P. Ekman, personal communication, October, 1999) suggest that good lie-detectors are characterized by flexible decision criteria, high attentional involvement in the judgment task, and reluctance to impressional primacy effects. In the present study, measures of attributional complexity, absorption, and need for closure served as indicators of these characteristics, and their relation to participants’ accuracy in a deception detection task was assessed. However, the results of regression analyses failed to show the predicted relationships; participants across levels of the personality dimensions performed only slightly above chance levels. In addition, none of the personality variables moderated the typically low relationship between accuracy and confidence in judgments. Explanations for the absence of the predicted effects are discussed, both in terms of limitations of the present study and in relation to theoretical concerns.

Keywords: Deception detection, individual differences, need for closure, attributional complexity, absorption.

A substantial body of psychological research shows that people’s ability to distinguish between truthful and deceptive statements in experimental settings is generally poor. In particular, three established findings point to the fallibility of the human observer as a lie-detector. First, with few exceptions, the proportion of correct answers on a dichotomous truth/lie-judgment task rarely exceeds 60%, where an accuracy level of 50% is to be expected by chance alone (Ekman & O'Sullivan, 1991). Second, people tend to be more accurate in detecting truths than lies. This can be attributed to a truth bias; that is, people are more likely to judge a communication as truthful than as deceptive. The preponderance of truth judgments, in turn, increases the probability of correctly identifying true statements, while at the same time reducing the chances of detecting deceptive statements (Vrij, 2000). Third, the confidence that lie-catchers assign to their own judgments has little predictive value as to whether a judgment is correct or not. That is, judges are generally no more confident in judgments that turn out to be correct, than in incorrect judgments. Instead, people tend to be overconfident, indicating that they have little insight into their own performance (DePaulo, Charlton, Cooper, Lindsay, & Muhlenbruck, 1997).

Unfortunately, these discouraging findings seem to hold not only for college students (i.e., the typical participants in deception experiments), but several groups of professionals that need to make deception judgments on an everyday basis seem to suffer from the same limitations. Contrary to what would be expected, people who frequently perform veracity judgments do not seem to benefit from their experience. For instance, psychiatrists, judges and police officers typically display a deception detection ability that is on a level with the performance of lay people, and that does not significantly exceed the level of chance (e.g.,
DePaulo & Pfeifer, 1986; Ekman & O'Sullivan, 1991; Köhnken, 1987; Vrij & Mann, 2001b). This is particularly troublesome since the consequences of incorrect veracity judgments are considerably more severe in professional settings than in everyday life. In addition, professional lie-catchers are generally more confident in their decisions than are lay people, although they perform at about the same level (DePaulo & Pfeifer, 1986). This suggests that, despite a higher experience with deception detection situations, professionals are less aware of their own limitations. Considering the inferior performance among many presumed experts, improving the deception detection skills of professional lie-catchers should be of highest importance.

Fortunately, there are exceptions to the poor performance generally observed in the laboratory. A few studies have demonstrated that some professional lie-catchers actually can spot lies consistently well. For instance, Ekman and O'Sullivan (1991) found that a whole 53% of the secret service agents under study made accurate judgments in at least 70% of the cases, and that 29% achieved an accuracy rate of 80% or higher. Similarly, Vrij and Mann (2001b), studying police officers, found that 29% of these made at least 80% correct judgments, and 9% were accurate in 100% of the cases. Furthermore, recent evidence indicates that the ability of people who perform exceptionally well is a relatively stable quality that generalizes across different settings and repeated testing occasions (P. Ekman, personal communication, October, 1999; Frank & Ekman, 1997). Taken together, these studies suggest that there are in fact a few people who are quite skilled at distinguishing between truths and lies.

In the interest of improving professionals’ ability to spot lies, it would be useful to know what distinguishes successful lie-catchers from others. By establishing stable individual determinants of deception-detection performance, guidelines may ultimately be drawn as to what strategies to employ when spotting lies. To date, however, there is an unfortunate lack of such explorative efforts in the deception literature, and as a consequence very little is known about the characteristics of good lie-detectors. The main objective of this paper is therefore to investigate a few individual variables that may be predictive of success in detecting lies.

Characteristics of Skilled Lie-Detectors

Preliminary findings by Paul Ekman (personal communication, October, 1999; Ekman, 2001), suggest that there are a few features that characterize the top percentage of lie-catchers. First, true experts are capable of keeping an open mind while taking part of a potentially deceptive statement, resisting from making a judgment until all available information has been evaluated. This is quite a notable skill considering the fact that most people exhibit a primacy effect when forming impressions of others; that is, one tends to “freeze” on an initial perception of the target person, and has difficulty “unfreezing” this perception when considering subsequent information (Belmore, 1987; Jones, Rock, Shaver, Goethals, & Ward, 1968). In a deception detection task, freezing on initial information will probably reduce the quality of the judgment, since the judge may then overlook diagnostic cues that appear at a later stage of the statement. Thus, it seems likely that resisting the primacy effect is a crucial component of successful lie detection.

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1 It can be argued that the most straightforward method of improving professionals’ deception detection ability would be to inform about reliable behavioral cues to deception. However, the accumulated body of research indicates that very few behavioral cues are truly informative of deception (see DePaulo et al., in press, for a meta-analytic review), and practical guidelines are therefore difficult to establish on these grounds.
Second, skilled lie-detectors seem to employ flexible decision criteria when making veracity judgments (Ekman & O’Sullivan, 1991; P. Ekman, personal communication, October, 1999). For instance, they often look for different cues to deception when observing different people, whereas non-experts focus on the same type of cues when detecting lies in different people. In support of this claim, Vrij and Mann (2001a) found that successful lie-detectors relied less on stereotypical beliefs (e.g., “liars fidget”, “liars look away”) than poor lie-detectors. Since any two liars rarely behave in the exact same manner, lie-detectors would certainly benefit from being flexible and seeking complex explanations to the behavior of the communicator.

Third, good lie-detectors have the ability to keep highly focused while observing a potentially deceptive communication (P. Ekman, personal communication, October, 1999). This is somewhat related both to the fact that they are able to avoid premature conclusions, and the fact that they employ flexible decision strategies; in order to keep an open mind, it is crucial not to lose concentration, since this could mean that relevant details go undetected. It is not clear, therefore, whether this third characteristic should be regarded as entirely independent from the other two. However, in this paper we choose to treat all three as separate features. In the following sections each of the three mentioned characteristics of good lie-detectors will be discussed in relation to established personality variables, namely the need for closure, attributional complexity and absorption. The relationship between these variables and the ability to detect deception will then be tested in the empirical section of this paper.

Open-Mindedness and the Need for Closure

To our knowledge, it is not yet established whether the open-mindedness held by true experts is specific to deception detection contexts, or whether they possess this quality as a stable trait that affects information processing in general. However, recent research in social cognition suggests that the latter may well be the case. The concept of need for closure refers to “the desire for a definite answer on some topic, any answer as opposed to confusion and ambiguity” (Kruglanski, 1989, p. 14). It thus represents a desire for a clear-cut opinion on a judgmental topic. The need for closure has been shown to differ across situations, depending on various factors such as task attractiveness (Mayseless & Kruglanski, 1987; Webster, 1993), time pressure (Kruglanski & Freund, 1983), environmental noise (e.g., Kruglanski & Webster, 1991; Kruglanski, Webster, & Klem, 1993) and mental fatigue (Webster, Richter, & Kruglanski, 1996). The need for closure also varies across individuals as a stable personality dimension. Thus, people differ consistently in the disposition to apprehend the world in clear-cut, unambiguous terms (Kruglanski, 1989). Kruglanski depicted a person’s degree of motivation for cognitive closure as located on a continuum ranging from a strong need for closure to a strong need to avoid closure. A person with a strong need for closure will “‘leap’ to judgment on the basis of inconclusive evidence, and exhibit rigidity of thought and reluctance to consider views other than his or her own.” (Kruglanski, 1996, p. 468). Conversely, a person with a high need to avoid closure (i.e., a low need for closure) will “experience considerable doubt and unwillingness to make a commitment to an opinion on an issue. Such a person may tend to suspend judgment instead, and may be quick to come up with competing alternatives to any definite interpretation or opinion that is offered.” (Kruglanski, 1996, p. 468).

Importing these assumptions into the deception detection domain, some predictions can be made as to how persons on the high and low ends of the need-for-closure continuum are likely to go about making deception judgments. A person with a high need for closure would form an early judgment of the communicator and have difficulties adjusting this judgment in response to subsequent information. Indeed, previous studies have shown that people with a
high (vs. low) need for closure exhibit more pronounced primacy effects in impression formation tasks (Webster & Kruglanski, 1994). By the same token, people on the low end of the need-for-closure dimension would resist from committing to a truth or a lie judgment on an early stage, entertaining both alternatives until all available information has been taken into account. The idea that persons low in need for closure would spend more effort elaborating on their decision receives support from research on the effects of need for closure on information processing. For instance, in studies where the need for closure was manipulated situationally, those with a low (vs. high) need for closure spent longer time completing an ambiguous task (Mayseless & Kruglanski, 1987, Study 2), generated more competing hypotheses (Mayseless & Kruglanski, 1987, Study 3), and sought more diagnostic information, capable of differentiating between competing alternatives, as compared to prototypical information (Kruglanski & Mayseless, 1988).

**Flexibility and Attributional Complexity**

The flexibility in the decision criteria employed by true experts suggests that they may possess more complex attributional schemata than others, and that they rely less on heuristic processing when making veracity judgments. If so, this should manifest itself in higher scores on measures of attributional complexity (Fletcher, Danilovics, Fernandez, Peterson, & Reeder, 1986) than the average lie-detector. Fletcher and his associates developed the so-called Attributional Complexity Scale (ACS) in order to capture individual differences in the propensity to generate complex explanations to the behaviors of others. The scale was constructed to measure seven attributional constructs that range along a simple-complex dimension: Level of interest or motivation, meaning that attributionally complex people possess higher levels of intrinsic motivation to explain and understand human behavior; Preference for complex explanations, implying that complex individuals generate behavioral explanations that contain a greater number of relevant causes; Metacognitive awareness, that is, complex individuals tend to think about the cognitive processes underlying behavioral attribution; Awareness of social influences, referring to the tendency of complex individuals to take the power of the social situation into account when forming causal attributions; Abstract or complex internal attributions – the degree of complexity in explanations involving internal traits, dispositions and beliefs; Contemporary external attributions, meaning that complex people acknowledge abstract, non-salient behavioral causes in a person’s environment; and finally awareness of external causes operating from the past. Fletcher et al. (1986) were able to validate these subdimensions as components of the general construct of attributional complexity.

Viewing the above from a deception-detection perspective, we predict that people high on the attributional complexity measure would perform better on a lie-detection task than people with simple attributional schemata. The rationale behind this prediction is that previous studies have shown that the reliance on rigid, stereotypic assumptions about liars’ behavior is associated with lower detection accuracy (Vrij & Mann, 2001a), and that successful lie-detectors provide flexible arguments when motivating their veracity judgments (Ekman & O’Sullivan, 1991).

**Vigilance and Absorption**

As mentioned, highly accurate lie-detectors seem to have the ability to keep focused on the communicator throughout the entire communication (P. Ekman, personal communication, October, 1999). Provided that this ability is not specific to deception detection contexts, but is
instead manifested in a stable disposition for attentionally involving experiences, skilled lie-detectors could be characterized as possessing high levels of absorption. Concisely stated, absorption has been defined as “a characteristic of the individual that involves an openness to experience emotional and cognitive alterations across a variety of situations.” (Roche & McConkey, 1990, p. 92). This broad definition entails a few characteristics that are not immediately relevant to the present discussion, such as receptiveness to hypnosis and inclinations toward imagery and daydreaming. However, an important component of the absorption construct is the capacity for highly focused attentional processing. For instance, Davidson, Schwartz, and Rothman (1976) showed, using EEG measures, that high-absorption participants were better able than low-absorption participants to attend specifically to relevant information, and to selectively inhibit irrelevant information. As Tellegen (1981) pointed out, high-absorption individuals seem to have a preference for an “experiential” mental set, meaning that they are easily drawn into experiences that are attentionally involving.

Since a proneness to absorption is likely to facilitate the kind of suspended vigilance that highly accurate lie-detectors engage in, we predict that the performance on a deception detection task will be positively related to an individual’s degree of absorption. A similar prediction, although less specifically stated, was actually proposed by Qualls and Sheehan (1981; cited in Roche & McConkey, 1990) who stated that high- rather than low-absorption subjects should perform better on tasks that involve complex attentional performance, or on tasks that involve the rapid redirection of attentional focus. As deception detection is certainly a task that places high attentional demands on the observer, we believe that our prediction follows naturally from that of Qualls and Sheehan.

**Overview**

In this study, we investigated the value of three personality dimensions – need for closure, attributional complexity, and absorption – as predictors of performance on a deception detection task. Although the need for closure is sometimes manipulated situationally, we decided to measure all three constructs exploratively for three reasons: First, we were interested in predictors that are stable within the individual and not specific to certain situations. Second, manipulating one of the constructs may have unwanted effects on the other two measures. Third, the continuous data obtained when administering questionnaires were deemed as more appropriate, considering subsequent analyses, than categorical experimental data.

To reiterate, our theoretical assumptions can be summarized in three specific hypotheses:

**Hypothesis 1: Need for closure.** We predicted that (a) individual measures of need for closure (NFC) would be negatively related to the amount of time required for observers to reach a judgment; thus, participants with high (vs. low) levels of NFC would decide more readily whether or not a suspect is lying. As a consequence, we also expected that (b) NFC would be negatively related to the ability to detect lies; thus, we assumed that participants with low levels of NFC would perform better than those with high levels of NFC.

**Hypothesis 2: Attributional complexity.** A positive relationship between individuals’ degree of attributional complexity and deception detection performance was hypothesized. That is, attributionally complex participants were predicted to outperform simple participants.

**Hypothesis 3: Absorption.** Finally, individuals’ proneness to absorption was hypothesized as a reliable predictor of accuracy in deception judgments. We thus predicted that participants with high levels on the absorption dimension would obtain higher accuracy rates than those with low levels of absorption.
Method

Participants

Sixty-nine undergraduate students (22 males and 47 females) at the Göteborg University volunteered to participate in the study. Participants’ age ranged from 19 to 43 ($M = 24.1$). All participants received a movie ticket as compensation, and each had a chance to win an additional three tickets depending on their performance on the experimental task.

Materials

Suspect interviews. Eight videotaped interviews with participants from a previous study (Hartwig, Granhag, Strömwall, & Vrij, 2002) were used in the present study. Four of these participants were guilty of stealing 700 SEK (approx. $70) from a waiting room prior to the interview, whereas the other four were innocent. However, all eight had been instructed to deny having taken the money. Thus, during the interview four suspects told the truth, whereas the other four lied about the event in the waiting room. The length of the interviews ranged from 2 min 15 sec to 5 min 3 sec ($M = 3$ min 15 sec), and in total 26 min 2 sec of video material was used. In order to avoid unwanted effects of presentation order, two different tapes were constructed for this study, containing the eight interviews in random orders.

Personality questionnaire. For measuring the personality variables a booklet was created, consisting of three standardized scales. These were Swedish versions of the Need for Closure Scale (NFCS; Kruglanski et al., 1993; Webster & Kruglanski, 1994), the Attributional Complexity Scale (ACS; Fletcher et al., 1986), and the Tellegen Absorption Scale (TAS; Tellegen & Atkinson, 1974).

Procedure

Participants were tested in small groups of up to ten persons at a time. Before the session started they were instructed not to discuss any of the ongoing tasks until the end of the testing session. Short thereafter, a confederate to the experimenter entered the room, carrying a stack of papers. She introduced herself as a colleague of the experimenter and explained that she had been promised to hand out a questionnaire containing a personality scale under development. She went on explaining that a crucial step in validating the scale consisted in relating individuals’ scores on the scale to scores on other, already established personality measures. Therefore, it was told, two additional scales were included in the questionnaire. Before leaving the room, she asked the participants to help her by filling out the scales, and handed out the booklet containing the NFCS, the ACS, and the TAS. All participants complied with the request by completing the questionnaire.

When all participants were finished filling out the scales, the experimenter informed them that they would now turn to the study which they had originally agreed to take part in, and a paper with written instructions for the deception task was handed out. The text explained that they were to watch eight videotaped interviews from a previous study, and then a brief description of the events leading up to the interviews was given. It was further explained that their task was to judge, immediately following each interview, whether they believed that the communicator was telling the truth or lied about his/her role in the event. They would also be asked a few follow-up questions regarding their judgment. The

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2 For a detailed description of the scenario, see Hartwig et al. (2002).
instructions stressed that, for each interviewee, there is an equal chance that he/she is lying and telling the truth. To strengthen the appeal of this argument, it was explained that the eight interviews had been randomly selected from a larger pool with an equal number of deceptive and truthful statements. In order to enhance participants’ motivation to accurately judge the communicators, an incentive was introduced. The one participant who made the highest number of correct veracity judgments at each testing session would win a bonus of three movie tickets in addition to the one already granted as compensation. After reading through the instructions, participants were given a couple of minutes to examine the questions that would be asked in all interviews.

When all reading material had been collected, and any questions had been answered, the first interview was shown on a TV screen. Immediately following this presentation, participants were to answer a few questions concerning the interview. First, they were to indicate whether or not they believed that the suspect on the tape had told the truth. Second, they were asked to rate how confident they were in that judgment, on a 9-point scale ranging from absolutely uncertain (1) to absolutely certain (9). Third, participants were asked to report at what point during the interview they had decided as to whether the suspect was lying or not. This was to be indicated by placing a mark somewhere along a 12 cm horizontal time axis, representing the duration of the interview. This procedure was repeated following each of the eight interviews. After having judged the eighth interview, the observers were given a few questions concerning the eight judgments taken together. They were to rate on a 9-point scale how motivated they were to make accurate veracity judgments (1 = not at all motivated, 9 = very motivated). In addition, they were asked to make a global confidence judgment by estimating the number of interviews that they believed they had judged correctly.

Finally, after having identified the winner of the bonus tickets, participants were debriefed, paid and dismissed. Debriefing indicated that, just as intended, the personality questionnaire and the deception task were perceived as two unrelated tasks.

Results

Manipulation Check

First, we were interested in participants’ degree of motivation when performing the deception detection task. We treated the motivation rating at the end of the session as an indicator of this. As desired, the average rating was notably high (M = 7.9 on a 9-point scale), and 94% of the observers gave a rating of 6 or higher. Thus, we considered our participants to be highly motivated to make accurate veracity judgments. Moreover, the degree of motivation was not correlated with any of the personality variables; r = -.02 for NFCS; r = .09 for ACS; and r = -.01 for TAS (all ps > .45).

Accuracy and Distribution of Judgments

In line with previous research, participants’ accuracy in discriminating truthful from deceptive statements was only slightly above chance levels (M = 60.5%). The average number of correct judgments (M = 4.8) did, however, differ significantly from what would be expected by chance (i.e., 4 out of 8 correct), t(68) = 4.56, p < .001. The frequently documented truth bias, meaning that more statements are judged to be truthful than deceptive, was not found in the present data, since the proportions of truth judgments and lie judgments were almost identical (50.7% and 49.3%, respectively). Thus, the number of truth judgments was not significantly higher than the number of lie judgments, t(68) = 0.47, p = .64.
*Predictor Analysis*

Our main hypotheses concerned the relationships between observers’ degree of need for closure, attributional complexity, and absorption on the one hand, and accuracy in the deception detection task on the other. Before predictor analyses were performed, however, intercorrelations among scores on the NFCS ($M = 135.7$, $SD = 21.3$, $Mdn = 135$), the ACS ($M = 38.2$, $SD = 19.7$, $Mdn = 40$), and the TAS ($M = 20.8$, $SD = 6.3$, $Mdn = 21$) were computed. None of these correlations differed significantly from zero, $r_s -.02 < x < .18$.

In order to examine the predictiveness of the personality variables on judgment accuracy, these were included as predictors in a hierarchical regression analysis, with the number of correct veracity judgments as the criterion variable. In addition, participants’ age and sex served as predictors in a first step of the analysis. As Table 1 shows, neither the demographic variables nor any of the three personality measures were able to reliably predict participants’ performance on the deception task (all $p s > .20$). Thus, none of our hypotheses concerning judgment accuracy was supported by the data.

**Table 1**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\beta$</th>
<th>$p$</th>
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<td>.67</td>
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<td>Sex*</td>
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<td>-0.021</td>
<td>.87</td>
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<tr>
<td><strong>Step 2</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
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<td>0.043</td>
<td>-0.063</td>
<td>.63</td>
</tr>
<tr>
<td>Sex*</td>
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<td>.93</td>
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<tr>
<td>Need for closure</td>
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<td>0.009</td>
<td>-0.161</td>
<td>.22</td>
</tr>
<tr>
<td>Attributional complexity</td>
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<td>0.011</td>
<td>0.049</td>
<td>.72</td>
</tr>
<tr>
<td>Absorption</td>
<td>-0.004</td>
<td>0.032</td>
<td>-0.017</td>
<td>.90</td>
</tr>
</tbody>
</table>

*Note. $R^2 = .003$ for Step 1; $\Delta R^2 = .028$ for Step 2 ($p s > .60$).*  
*Male = 0; Female = 1.*
We considered the mark placed along the 12 cm time axis connected to each judgment an indicator of the time required for participants’ to reach a judgment. To quantify this estimate, the distance in centimeters between the starting point of the axis and the mark was measured and rounded to the nearest millimeter; thus, participants could obtain a score ranging from 0 to 12 with the precision of one decimal. When correlating this score with participants’ scores on the NFCS, the result was non-significant, \( r = -.01, p = .93 \). Thus, our predicted negative relationship between NFC and decision time was not confirmed. Subsequent analyses revealed that neither scores on the ACS (\( r = .11 \)) nor on the TAS (\( r = -.16 \)) were significantly related to decision time (both ps > .20). One significant result involving decision time was discovered, however. It was found that communications perceived as deceptive (\( M = 6.2 \)) were judged significantly more readily than communications perceived as truthful (\( M = 7.5 \)), \( t(68) = -3.61, p = .001 \).

**Confidence**

Two separate measures of confidence were collected in the present study: (1) the confidence assigned to each of the eight veracity judgments; and (2) the estimated number of correct judgments reported at the end of the testing session. On average, participants assigned rather moderate levels of confidence to their individual judgments (\( M = 5.3 \) on a 9-point scale), and estimated just above half of their judgments (\( M = 4.4 \)) to be correct retrospectively. Pearson product-moment correlations were computed to assess the relationships between the two confidence measures and the three collected personality measures. Only absorption had a significant, although weakly negative, relation to the number of estimated correct judgments, \( r = -.25, p = .04 \), suggesting that participants high (vs. low) in absorption were somewhat more modest in the estimation of their own performance. All other correlations were non-significant (\( r_s < \pm .15 \)).

**Confidence-Accuracy Relationship**

In order to investigate whether the subjective confidence of participants was indicative of the actual accuracy of their veracity judgments, the two measures of confidence were first correlated with each individual’s accuracy level on a between-participant basis. However, the number of correct judgments did not correlate significantly with either the mean judgment-specific confidence rating (\( r = -.09 \)) or with the estimated number correct (\( r = -.14 \)). Next, point-biserial correlations were calculated between the correctness of each judgment (incorrect = 0; correct = 1) and the confidence rating assigned to that same judgment. This procedure resulted in within-participant correlations, and each participant thus had a unique accuracy-confidence correlation coefficient. In order to allow for parametric significance testing, correlation coefficients were transformed to Fisher’s Zs; for presentational purposes, however, the following description will refer to the original \( r_s \).

The average confidence-accuracy correlation was -.03, which did not differ significantly from zero, \( t(68) = -0.81, p = .42 \). Individual correlations ranged from -.78 to +.64, indicating that some participants were quite realistic in their confidence judgments, whereas others had little monitoring of their own performance. To investigate whether any of the personality variables under study would moderate the strength of these accuracy-confidence correlations, separate correlations were computed between the Fisher’s Zs and scores on the NFCS, ACS and TAS. However, neither the need for closure (\( r = .17 \)), attributional complexity (\( r = .06 \)),
nor absorption \( (r = .07) \) was significantly related to the strength of participants’ accuracy-confidence correlations. In sum, the present data replicate previous findings of little or no relationship between subjective confidence and accuracy in deception detection.

**Discussion**

The major aim of the present study was to investigate the value of three personality variables – need for closure, attributional complexity, and absorption – as predictors of performance in deception detection. The hypothesized relationships were based on preliminary findings from studies of skilled lie-detectors (personal communication, October, 1999; Ekman, 2001), indicating that dispositions related to these personality dimensions are characteristic of people who are consistently successful in distinguishing between truths and lies. In the present data, however, the three individual variables were not able to predict the accuracy of observers judging videotaped suspect interviews. Neither did they seem to moderate the typically weak relationship between confidence and accuracy. Instead, participants across levels of need for closure, attributional complexity, and absorption generally obtained accuracy levels slightly above chance, and were unable to estimate the correctness of their own judgments.

There are at least three reasonable explanations why the results of this study failed to show the predicted relationships. One concerns a crucial design issue, whereas the other two pertain more to theoretical issues. To start with the former, it seems that the instructions used and the nature of the deception task may have actually eliminated the effects that our individual variables would normally have, particularly the need for closure. Recall that participants were informed in advance that their accuracy would be assessed at the end of the session and that high accuracy would be rewarded (i.e., the bonus tickets). Although this was originally considered appropriate for motivational purposes, relevant findings in the motivation literature suggest that such incentives may not have been well suited for our research questions. It has been demonstrated that when participants expect to have their accuracy evaluated, the typical effects of need for closure (e.g., primacy effects) are significantly attenuated (Freund, Kruglanski, & Schpitzajzen, 1985; Mayseless & Kruglanski, 1987). Since the circumstances surrounding the present deception task obviously induced a high degree of evaluation apprehension among the observers, it may be that this simply undermined the chances of observing any effects of preexperimental individual differences. In real life professional settings, on the other hand, there is rarely an objective measure of the actual truthfulness of a person’s statement, as is the case in experimental settings. Therefore, professional lie-detectors do not expect to have their degree of accuracy evaluated, and may be spurred by internal rather than external sources of motivation. As a consequence, the reliance on idiosyncratic processing styles may be higher in these situations. In other words, individual differences in the need for closure, attributional complexity and absorption may actually have more of an impact in real-life settings than in the laboratory. Manipulating participants’ degree of evaluation apprehension and accuracy motivation could be one way to demonstrate these differences in experimental settings.

A second explanation for the lack of significant predictors concerns the validity of the personality measures selected for the present study. Our intention was to evaluate constructs that adequately reflect the characteristics found by Ekman (personal communication, October, 1999; Ekman, 2001) to distinguish skilled lie-detectors. However, the selection of measures is inevitably somewhat arbitrary and is guided by the familiarity and availability of competing measures. Thus, there is a risk that the Need for Closure Scale, the Attributional Complexity Scale, and the Tellegen Absorption Scale do not adequately capture the open-mindedness,
flexibility, and capacity for focused attention that seem to be typical for the successful lie-catcher.

Third, a critical assumption central to the present design was that the characteristics of true lie experts are stable elements of their personalities, independent of setting and task. Of course, such stability is required if personality measures are to reliably predict the performance on a given task. However, it is not yet established whether these characteristics are completely independent of the context in which they are observed. It may be, for instance, that successful lie-catchers are better than others to adopt an open mind, to be flexible, and to keep focused specifically in relation to deception tasks. If so, research should instead focus on how good lie-detectors approach the judgment task, and how such an approach can be adopted by others in order to improve their ability to detect lies. Two promising sources of ideas in line with this argument exist in the literature on mind-sets (Gollwitzer, 1990) and motivated cognition (e.g., Chaiken, Giner-Sorolla, & Chen, 1996; Kruglanski, 1990; Pelham & Neter, 1995). If such efforts should prove beneficial, it would be reason for optimism as to the prospects of improving people’s ability to detect lies, since deception detection skills would not be entirely determined by stable personality factors.

When examining participants’ reports of decision time, it was found that lie judgments required less amounts of time than truth judgments. One plausible explanation for the observed difference relates to the type of behavioral cues attended to when observing a potentially deceptive statement. It may be that observers assume that the suspect is telling the truth unless some behavioral cue appears that is taken as an indicator of deception. Once such cue is observed, however, this is enough to render a perception of the communication as deceptive. Thus, whereas a lie judgment may rely on the occurrence of a single cue, a truth judgment may be inferred from the absence of such cues. If so, the suspended vigilance associated with truth judgments can account for the longer decision times reported. In order to empirically evaluate this speculation, however, further attention needs to be paid to the decision-making process leading to veracity judgments. In our opinion, therefore, process-tracing methods capable of tracking temporal trends in the evaluation of a communication seem like a promising lead to follow.

References


