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Truth or Lie: Applying Indirect Methods to Detect Deception

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Background
The present study explores the relationship between social awareness, type of questioning, and deception detection. Following are important definitions of concepts and tools used in this research:

- We are able to bias someone’s perception of another person by the way a question is worded (Questionnaire design; Ulatowski, 2013).
- Direct Question: An explicit measure of deception detection. Direct questions focus on personality characteristics associated with deception (DePaulo, 2018).
- Indirect Question: Lie detection does not access implicit knowledge, but simply focuses the perceiver on more useful cues. Indirect questions focus on biases, verbal, and body language (Street & Richardson, 2015).
- Deception Detection Experts: People who are naturally adept, who have undergone extensive training, or who are professionally experienced at recognizing and interpreting behavioral signals of deception (Levine et al., 2014).
- Social Awareness: Mental events in which one forms a mental representation of either oneself or another person (Sheldon, 1996).
- Social Awareness Inventory (SAI) assesses individual differences in social awareness of emotion demonstrated by others (Sheldon, 1996).

Hypotheses

Hypothesis 1: Indirect questioning as compared to direct questioning of an interviewee’s dishonest responses will produce more accurate determinations of dishonesty that correspond with research-supported correlates of dishonesty.

Hypothesis 2: Questions designed to detect bias about or expectations of dishonest behavior will be more accurately related to the dishonesty of the interviewee in the video than those questions related to interviewee verbal and nonverbal characteristics. Specifically, biased expectations about an interviewee’s occupation (e.g., occupation) would affect determinations of honesty.

Methods

Participants (N=130) were administered an informed consent and a basic demographic questionnaire asking about age, gender, school year, and race. Participants randomly assigned to direct or indirect question conditions, viewed 4 short videos, featuring male and female actors truthful or lying, and answered a series of questions for each video.

Direct Questions: Participants (N=67) answered 12 direct questions about an actor in each video.

Example of a direct question: "Does it seem the person being interviewed could be trusted?"

Indirect Questions: Participants (N=63) answered 19 indirect questions about an actor in each video.

Example of an indirect question: "Does this person seem like they would make a good coworker?"

All participants completed the Social Awareness Inventory

Results and Discussion

Table 1. Means and Standard Deviation for Type of Indirect Questions (N=62)

<table>
<thead>
<tr>
<th>Type of Indirect Questions</th>
<th>Descriptive Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (P)</td>
</tr>
<tr>
<td>Actors’ Body Language</td>
<td>.43</td>
</tr>
<tr>
<td>Actors’ Verbal Responses</td>
<td>.38</td>
</tr>
<tr>
<td>Viewers’ Perceived Biases</td>
<td>.55</td>
</tr>
</tbody>
</table>

Figure 1. Assessment of Actors’ Deception by Observers Using Direct and Indirect Tests

- Dependent Variable: Mean accuracy in detecting honesty or deception when prompted with either indirect questions or direct questions.
- Analyses of the data produced a significant interaction between type of test and video, p = .008, and a main effect of type of test, direct versus indirect, p < .0005. As can be seen in Figure 1, accuracy in detecting truth or deception was always greater when participants responded to indirect questions about the actor in each video than when they responded to direct questions about the actor. However, compared with other conditions, there was less difference between direct and indirect test effects when participants were evaluating a female actor lying in the video.
- Analyses of the effect of type of indirect question revealed that questions that are presumed to invoke participants’ expectations (e.g., occupation) about the honesty of person being interviewed had the greatest effect on accurate deception detection, p = .001 (See Table 1).

Conclusion

- Continuing analyses will focus on potential interactions between gender of actor and type of indirect questions asked of the participants to detect any differences between (a) body language of the actor (e.g., nervousness, fidgeting), (b) responses of the actor to questions from an interviewer in the video, and (c) expectations and biases of the participant about variables indicating the honesty of the actor (e.g., occupation).
- Further analysis will also examine the extent of social awareness of the participant as related to accurate detection of deception.