Shifting focus: An examination of the impact of varying the target of lie detection questions

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INTRODUCTION

- Although the average lie detection accuracy is 54% (DePaulo et al., 2003), there is variability in performance
- The role of the instructions given to observers has received little attention to date
- Across lie detection studies, participants are given different instructions or ambiguous directions about lie detection (e.g., O'Sullivan & Ekman, 2004)
- There have been some studies, however, in which the observer was asked to focus on a specific element of the interview:
  - Observers have been asked to determine whether the *individual s*peaking was a lie- or truth-teller (e.g., Leal et al., 2010; Vrij, 1993).
  - They have been tasked with attending to the account of the *event/scene* and reporting whether it was 'true' or 'false' (e.g., Wright, Loftus, & Hall, 2001).
  - Observers have also been asked to pay attention to *cues* in order to make their judgments (e.g., analyze the presence of details; Evans et al., 2013).
- In the few studies on this topic, instructions have impacted decision-making (Reed, 1980). For example, observers were less accurate when asked to determine whether an *individual* was lying or telling the truth than when they were asked to monitor changes in an individual's behavior and speech (i.e., *cues;* Hart, Fillmore, & Griffith, 2009).
- We sought to determine the impact of instructions on lie detection. In previous studies, our observers were simply asked to determine whether the *individual* was lying or telling the truth. Lie detection decisions in the laboratory and the field, however, are not always about the veracity of an individual in general (i.e., a person's credibility as a whole).
- In this study, we explored how the target of the lie detection decision – the individual, details, or the event – affected observers' performance.

HYPOTHESES

- H1: We expected accuracy to be higher for observers of truth-tellers than lie-tellers
- H2: We hypothesized that accuracy would be higher when observers focused on details than the individual or event, because details are diagnostic of deception
- H3: We also expected that observers' accuracy would be higher for truth-tellers than lie-tellers in the individual and event instruction conditions due to an inherent truth-bias, but they would be equally accurate when viewing lie- and truth-tellers and using details as diagnostic cues.

METHOD

Participants

- Based on an a priori power analysis, 255 undergraduate students were recruited to achieve a medium effect size (i.e., 25) with 80% power
- **Gender of observers.** 147 females and 108 males
- **Average Age.** 20.74 years (SD = 4.26)
- **Ethnicity.** Observers self-identified as Arab (9.0%), Black (8.2%), Chinese (4.3%), Filipino (2.0%), Latin American (1.2%), South Asian (30.2%), South East Asian (6.7%), White (31.4%), and other (7.1%)

Materials

- **Video footage.** Individuals were randomly-assigned to lie or tell the truth about a video that they watched. Truth-tellers saw a typical office setting, whereas lie-tellers saw the same office setting with additional items that suggested that a terrorist attack was being planned. After the video, participants in both conditions were instructed to say that they saw a normal office setting (i.e., lie or tell the truth)
- **Instructions.** Observers received one of three sets of instructions
  - In the **details** condition, they were told to indicate whether they were lied to, or told the truth, about the details.
  - Observers in the **individual** condition were asked to report whether they were lied to, or told the truth, by the individual.
  - Finally, in the **event** condition, they were asked to identify whether they were lied to, or told the truth, about the event.

Procedure

Observers were tested individually, using laboratory computers. First, they read and signed a consent form. Then, they were randomly assigned to receive one of the three types of instructions. In all conditions, observers were shown a series of 10 video clips of individuals either lying or telling the truth about what they witnessed. Observers completed the dichotomous lie detection measure after each video (i.e., chose either 'the truth' or 'a lie').

DISCUSSION

- We found support for H1, but not for H2 or H3
- Overall, the target of the lie detection task instructions did not impact accuracy or confidence
- Our results may be limited by the fact that observers were not primed to pay attention to specific elements in the video (i.e., details, individual, event) as they were in other studies
- These results suggest that the lie detection task outcomes remain unchanged when the instructions are varied
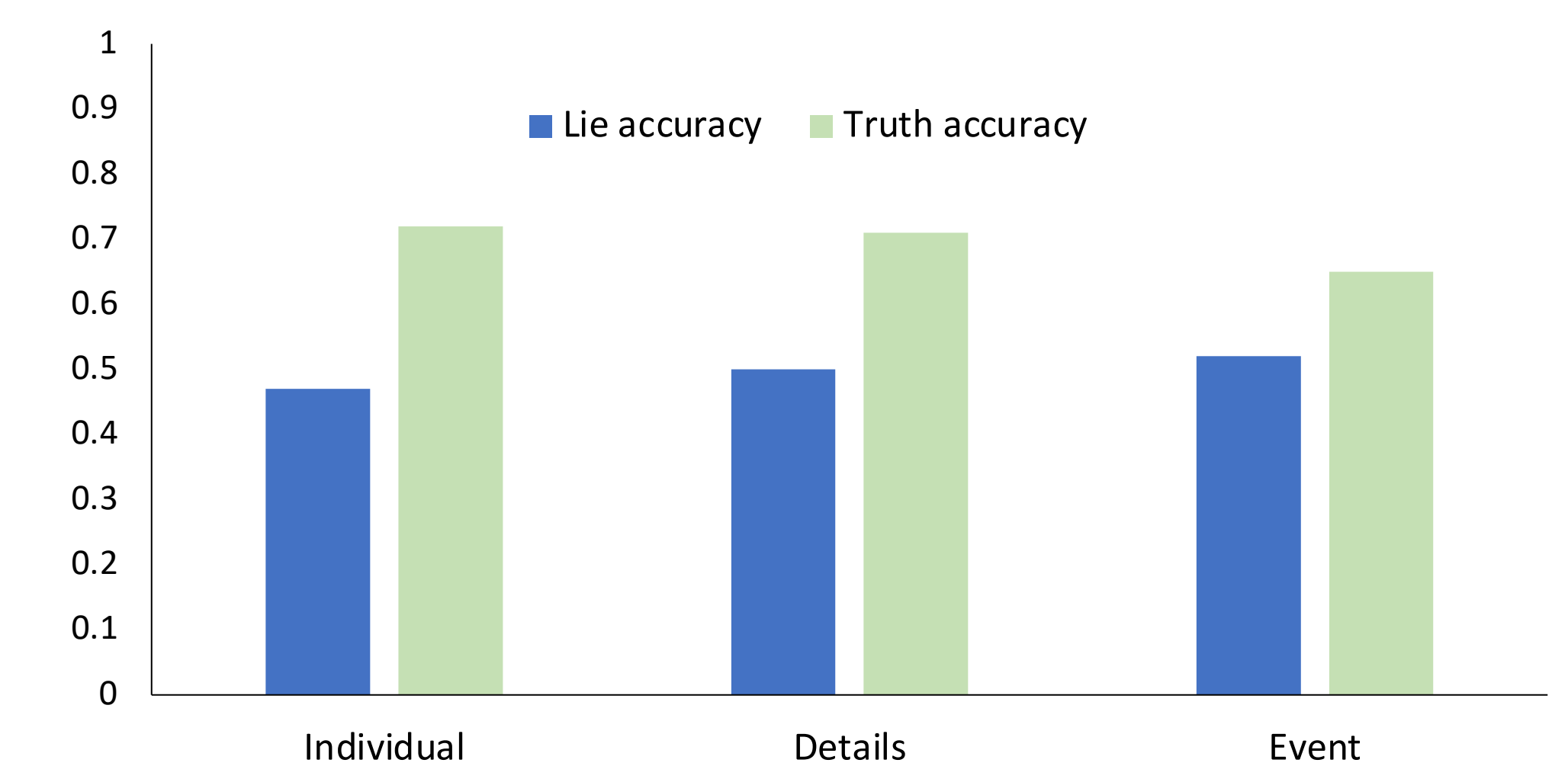
RESULTS

Study design

2 (Veracity: lie vs. truth) x 3 (Instruction: individual vs. details vs. event) mixed-factors design, with veracity as a within-subjects variable.

Accuracy

- Overall accuracy: $M = .59$ ($SD = .14$)
- **Main effect of veracity**, $F(2, 254) = 61.61$, $p < .001$, $\eta^2 = .33$,
- 95% CI [.23, .41]
- **No main effect of instructions**, $F(2, 254) = .28$, $p = .753$, $\eta^2 = .00$, 95% CI [.00, .02]
- **No interaction,** $F(2, 254) = 1.94$, $p = .145$, $\eta^2 = .02$, 95% CI [.00, .05]

Confidence

- Overall confidence: $M = 71.50$ ($SD = 11.65$)
- **Main effect of veracity**, $F(2, 254) = 11.03$, $p = .001$, $\eta^2 = .08$,
- 95% CI [.03, .15]
- **No main effect of instructions**, $F(2, 254) = .08$, $p = .923$, $\eta^2 = .00$, 95% CI [.00, .01]
- **No interaction,** $F(2, 254) = .21$, $p = .813$, $\eta^2 = .01$, 95% CI [.00, .02]

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