# Application of the Implicit Association Test (IAT) to a Study of Deception

Peter Frost, Michael Adie, Kristin Culver, Roland Denomme, Stacy Rivard and Angela Sibley

Southern New Hampshire University



#### Introduction

- · Hypothesis: Do people have a negative, implicit response to details associated with something they lied about during a simulated interrogation?
- · We used a procedure referred to as the Implicit Association Test (IAT).
- · Participants classified stimuli representing two concepts (e.g., a lie versus a truth) and identify attributes as good or bad words (e.g., happiness versus death). Reaction time was taken as an indicator of the strength of association between some object and evaluation of that object (Dasgupta & Greenwald, 2001).

### **Method**

Participants. The experiment included 51 undergraduate students from Southern New Hampshire University.

Materials.

- Study Questions. Participants were handed a list of eight questions about their university, each followed by a correct and an incorrect answer.
- *IAT.* The incorrect and correct responses were shown during the IAT using Inquisite 2.0. The evaluative attributes were eightpositive and eight negative attributes.

# **Method (Continued)**

Procedure

Study and Interview Phase. Participants studied the correct and incorrect answers to study questions. There were three conditions: no interview, truth, and deception. During a brief interview, participants in the truth condition answered the questions with the correct answer while participants in the deception condition responded with the incorrect answer. IAT Phase. Participants viewed the correct and incorrect responses they used during the interview. Participants associated incorrect items with negative attributes using a certain response key and correct items with positive attributes using a different response key. In another phase they did the opposite (incorrect items with positive attributes, correct items with negative attributes).

# **IAT Screen**

Correct Answers

**Incorrect Answers** 

or

or

Good

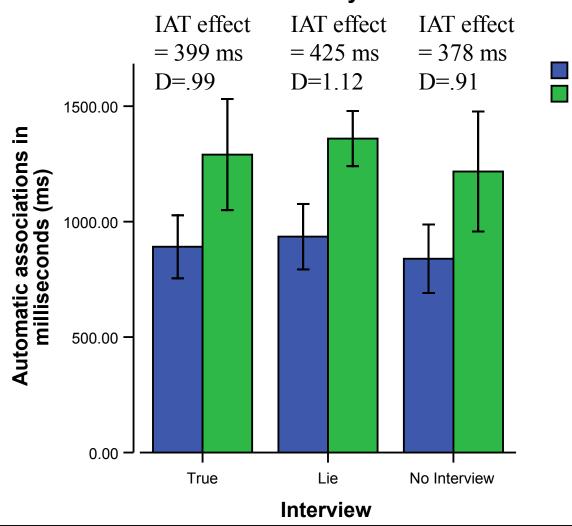
Bad

Manchester

#### Results

- · We calculated D, a measure of effect size, as described by Greenwald, Nosek, and Banaji (2003)
- · Latencies were log transformed in order to normalize the distribution and meet the assumptions for the inferential statistics used in this study.
- A significant main effect was observed for IAT combinations,
- $F(1, 48) = 213.06, p_{rep} = .96, \eta^2 = .08.$
- · Interview type and a combination by interview type interaction were not found to be significant (Fs < 1).

# Effects of interview type on implicit attitude towards accuracy of information



Correct+pleasant/Incorrect+unpleas. Incorrect+pleasant/Correct+unpleas.

Error bars: +/- 2 SE

#### **Discussion**

- Results indicated that participants harbored an implicit negative attitude towards incorrect details. They were faster at associating incorrect items with negative attributes and correct items with positive attributes.
- · However the magnitude of these IAT effects towards incorrect information was the same in all three conditions (the lie, truth, and no interview conditions).
- · People sometimes experience an implicit negative reaction to details they lied about, not because of the act of lying itself, but because of the inaccuracy of the information they provided.

#### References

Dasgupta, N., & Greenwald, A.G. (2001). On the malleability of automatic attitudes: Combating automatic prejudice with images of admired and disliked individuals. *Journal of Personality and Social Psychology, 81, 800-814.* 

Greenwald, A.G., Nosek, B.A., & Banaji, M.R. (2003). Understanding and using the Implicit Association Test: 1. An improved scoring algorithm. *Journal of Personality and Social Psychology*, 85, 197-216.

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