Teach Me or Lie to Me: Effectiveness of a Deception Workshop

Drew A. Curtis & Chelsea Dickens
Angelo State University

INTRODUCTION

Your nose does not grow when you lie, thankfully. However, there are a number of indicators of deception (Vrij, 2008). People who held more accurate beliefs about these indicators of deception were better lie detectors (Forrest, Feldman, & Tyler, 2004). Yet, people tend to not be very accurate lie detectors and hold a number of false beliefs (Bond & DePaulo, 2006; Global Deception Research Team). Recently, a study has found that the implementation of a workshop has been effective for increasing accurate beliefs about indicators of deception and reducing negative attitudes toward deception for physical therapy students (Curtis, Huang, & Nicks, 2015). The purpose of the current study was to investigate the effectiveness of an educational workshop for enhancing correct beliefs and reducing negative attitudes.
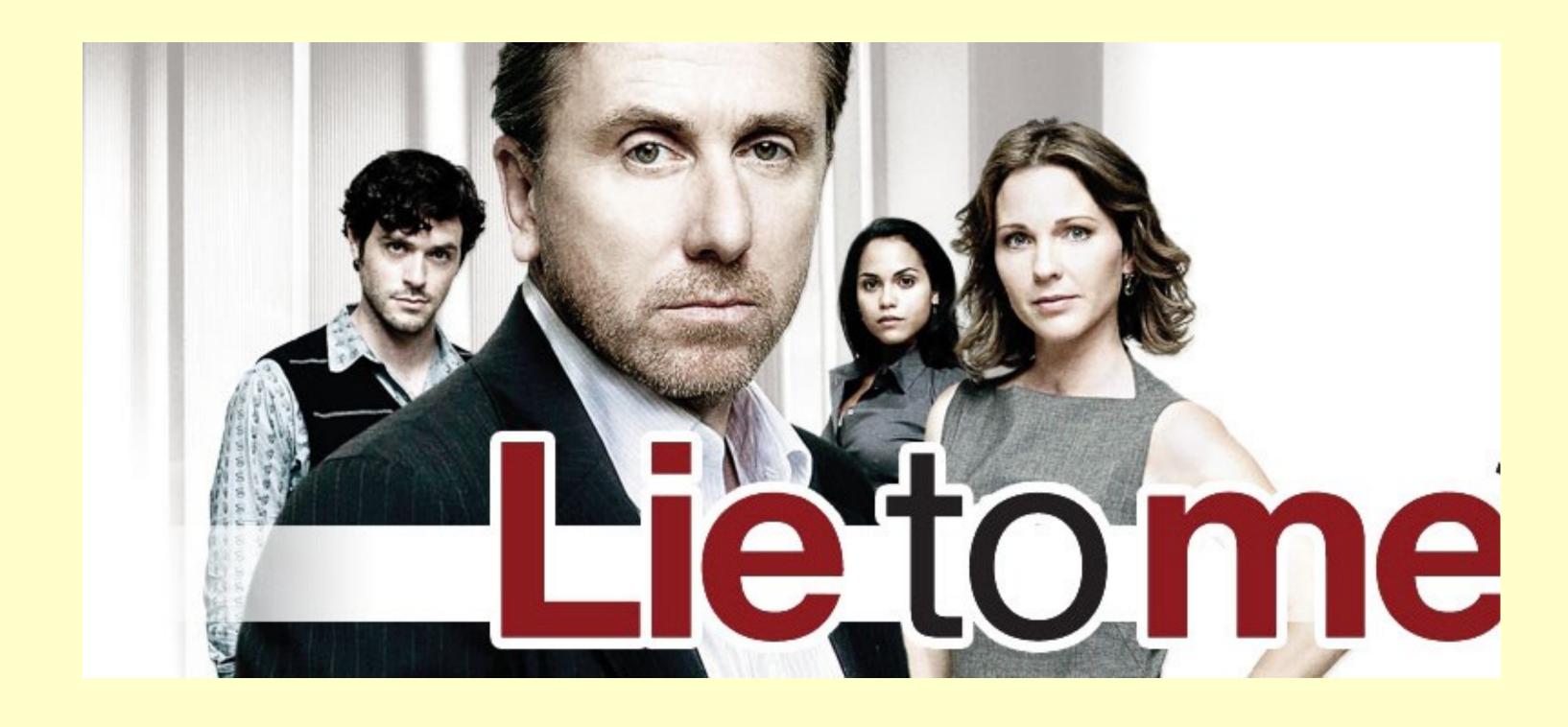
METHODS

There were 86 undergraduate students recruited for the study. Using a 2x2 mixed factorial design, participants were randomly assigned to the workshop condition or the control condition. The workshop condition consisted of participating in a 60 minute workshop aimed at teaching correct beliefs about indicators of deception and reducing negative attitudes toward deception; whereas, the control condition watch the pilot episode of the show Lie to Me. All participants completed pre- and post-tests consisting of: Demographic Questionnaire, the Detection of Deception Questionnaire (DDQ), the Others' Deception Attitude Measure (ODAM), and the Revised Lie Acceptability Scale (RLAS).

RESULTS

Using one-sample t-tests, each of the 28 indicators, per condition and time, were analyzed to determine if they differed significantly from a non-behavioral change anchor (Bonferroni = .002). During the pre-test participants held a small number of accurate beliefs for the 28 indicators (Workshop = 6, Control = 6, p <.002). The DDQ in the post-test phase revealed that participants who attended the workshop correctly identified 24 of the 28 indicators while the control condition correctly identified 8 of the indicators. A repeated measures ANOVA with condition as a between subjects factor revealed a statistically significant difference between the workshop and control condition for pre- and post-test attitudes toward deception, in which attitudes decreased in the post-test workshop condition (F (1,80)= 12.80, p = 0.001, partial eta squared = .14). Contrary to our hypothesis, a statistically significant difference was found between the workshop and control condition for pre- and post-test lie acceptability, in which the post-test workshop condition was more accepting of deception (F (1,84)= 6.67, p = 0.012, partial eta squared = .07).

CONCLUSIONS

The current study provides evidence that corroborates the effectiveness of using a workshop intervention for increasing accurate beliefs related to indicators of deception, reducing negative attitudes toward deception, and increasing lie acceptability. The study also reveals that watching particular shows on deception may promote false beliefs about deceptive behavior. Further implications will be discussed.

Student's Beliefs About Lying-related Changes in Behavior, Compared to a "No Change" Rating of 4.0 (Lie to Me)

Deception Variable	Pre-Video	Mean (SD)	t	Prior Research	Post-Video	Mean (SD)	t
Nonverbal Indicators							
Eye Contact	Decrease	2.88 (1.811)	-4.006*	No Change	Increase	5.60 (1.547)	6.683*
Eye Blinks	Increase	4.90 (1.031)	5.685*	No Change	No Change	4.50 (1.274)	2.544
Head Movements	Increase	4.95 (1.268)	4.868*	No Change	No Change	4.55 (1.468)	2.417
Smiles	No Change	4.62 (1.447)	2.772	No Change	Increase	4.79 (1.371)	3.714*
Hand and Finger Movements	Increase	5.12 (1.253)	5.786*	Decrease	Increase	5.36 (1.144)	7.689*
Arm Movements	Increase	4.79 (1.071)	4.752*	Decrease	Increase	4.98 (1.370)	4.617*
Leg and Foot Movements	Increase	5.02 (1.070)	6.199*	Decrease	Increase	4.86 (1.197)	4.217*
Postural Shifts	Increase	5.24 (1.031)	7.779*	No Change	Increase	5.40 (1.083)	8.404*
Shrugs	Increase	4.98 (0.975)	6.489*	No Change	Increase	5.60 (0.964)	10.722*
Gestures	Increase	5.10 (1.340)	5.297*	No Change	Increase	5.57 (1.063)	9.585*
Paraverbal Indicators							
Speech Interruptions	Increase	5.93 (0.894)	13.977*	No Change	Increase	5.17 (1.413)	5.352*
Pauses	Increase	5.55 (0.916)	10.949*	No Change	Increase	5.40 (1.398)	6.513*
Time Before Responding	Increase	5.19 (1.642)	4.700*	Increase	Increase	5.33 (1.408)	6.135*
Hectic Speech	Increase	5.31 (1.137)	7.466*	No Change	Increase	5.26 (1.308)	6.254*
Pitch	Increase	5.31 (1.220)	6.959*	Increase	Increase	5.02 (1.179)	5.628*
Answer Length	No Change	4.90 (1.786)	3.235	No Change	No Change	4.57 (1.684)	2.199
Verbal Indicators							
Short Explanations	No Change	4.52 (1.534)	2.213	Increase	Increase	4.83 (1.464)	3.690*
Plausible Descriptions	Increase	4.95 (1.168)	5.286*	Decrease	No Change	4.71 (1.582)	2.927
Logical Consistency	No Change	3.74 (1.849)	-0.918	Decrease	No Change	3.31 (1.615)	-2.77
Detailed Description	No Change	4.05 (1.886)	0.164	Decrease	No Change	3.90 (1.845)	-0.334
Unusual detail	Increase	5.48 (1.292)	7.403*	No Change	Increase	5.17 (1.305)	5.793*
Unnecessary detail	Increase	5.64 (1.322)	8.054*	No Change	Increase	5.05 (1.447)	4.690*
Description of Feelings	No Change	4.69 (1.585)	2.824	No Change	No Change	4.45 (1.329)	2.206
Describe what Someone's Said	No Change	4.10 (1.910)	0.323	Decrease	No Change	3.90 (1.723)	-0.355
Description of Interactions	No Change	4.05 (1.592)	0.194	No Change	No Change	3.69 (1.569)	-1.278
Corrections in Stories	Increase	5.71 (0.970)	11.454*	Decrease	Increase	5.29 (1.154)	7.222*
Claim Lack of Memory	Increase	5.67 (1.262)	8.557*	Decrease	Increase	5.71 (1.349)	8.238*
Story Contradictions	Increase	5.74 (1.127)	9.991*	No Change	Increase	5.83 (0.986)	12.054*

*p≤0.001

Student's Beliefs About Lying-related Changes in Behavior, Compared to a "No Change" Rating of 4.0 (Workshop)

Deception Variable	Pre-Workshop	Mean (SD)	t	Prior Research	Post-Workshop	Mean (SD)	t
Nonverbal Indicators							
Eye Contact	No Change	2.95 (2.220)	-3.124	No Change	No Change	4.16 (0.568)	1.857
Eye Blinks	Increase	5.30 (1.357)	6.333*	No Change	No Change	4.07 (0.334)	1.354
Head Movements	Increase	5.09 (1.291)	5.606*	No Change	No Change	3.82 (1.018)	-1.185
Smiles	No Change	4.02 (1.562)	0.096	No Change	No Change	4.00 (0.000)	0
Hand and Finger Movements	Increase	5.57 (1.228)	8.474*	Decrease	Decrease	2.32 (1.840)	-6.064*
Arm Movements	Increase	4.82 (1.244)	4.363*	Decrease	Decrease	2.23 (1.915)	-6.140*
Leg and Foot Movements	Increase	5.64 (1.203)	9.026*	Decrease	Decrease	2.25 (1.906)	-6.090*
Postural Shifts	Increase	5.27 (1.500)	5.629*	No Change	No Change	3.77 (0.859)	-1.755
Shrugs	Increase	4.95 (1.293)	4.896*	No Change	No Change	3.86 (0.632)	-1.431
Gestures	Increase	5.14 (1.287)	5.859*	No Change	No Change	3.98 (0.505)	-0.298
Paraverbal Indicators							
Speech Interruptions	Increase	6.11 (1.166)	12.027*	No Change	No Change	4.30 (0.823)	2.38
Pauses	Increase	5.57 (1.283)	8.107*	No Change	Increase	4.68 (1.325)	3.412*
Time Before Responding	Increase	5.45 (1.355)	7.122*	Increase	Increase	5.27 (1.648)	5.124*
Hectic Speech	Increase	5.57 (1.149)	9.051*	No Change	No Change	4.12 (0.823)	0.927
Pitch	Increase	5.89 (1.083)	11.554*	Increase	Increase	6.50 (0.762)	21.749*
Answer Length	Increase	5.18 (1.782)	4.399*	No Change	No Change	3.43 (1.591)	-2.369
Verbal Indicators							
Short Explanations	No Change	4.16 (1.964)	0.537*	Increase	Increase	5.95 (1.670)	7.764*
Plausible Descriptions	No Change	4.80 (1.760)	2.998	Decrease	No Change	3.36 (1.727)	-2.445
Logical Consistency	No Change	3.59 (1.933)	-1.404	Decrease	Decrease	3.16 (1.613)	-3.458*
Detailed Description	Increase	4.93 (1.822)	3.392*	Decrease	Decrease	3.00 (1.833)	-3.625*
Unusual Detail	Increase	5.59 (1.419)	7.435*	No Change	No Change	3.95 (1.430)	-0.211
Unnecessary detail	Increase	6.23 (0.743)	19.889*	No Change	No Change	4.09 (1.476)	0.409
Description of Feelings	No Change	4.45 (1.704)	1.769	No Change	No Change	3.55 (1.229)	-2.454
Describe what Someone's Said	No Change	4.09 (1.915)	0.315	Decrease	Decrease	2.64 (1.672)	-5.411*
Description of Interactions	No Change	4.14 (1.549)	0.584	No Change	Decrease	2.95 (1.670)	-4.153*
Corrections in Stories	Increase	5.57 (1.662)	6.258*	Decrease	No Change	3.14 (1.850)	-3.096
Claim Lack of Memory	Increase	5.91 (1.460)	8.675*	Decrease	Decrease	2.86 (1.679)	-4.490*
Story Contradictions	Increase	6.34 (1.077)	14.416*	No Change	No Change	3.84 (1.697)	-0.622

*p≤0.001