Intentional distortion in personality assessment: Relationship with test format, culture, and cognitive ability

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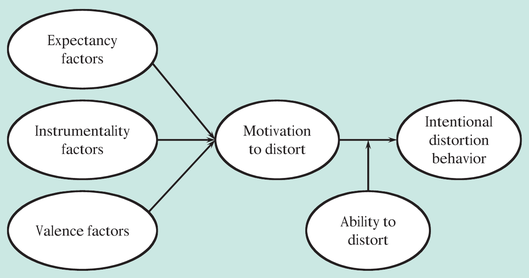
Introduction

Self-report personality questionnaires are widely used methods of assessment in high-stakes situations such as job selection. However, participants highly motivated to succeed often intentionally distort their results.

The most comprehensive model of intentional distortion (Ellingson & McFarland, 2011) is based on the VIE theory of motivation (Vroom, 1964). In this model, the predictors of intentional distortion work through three proximal motivational factors:



- Valence: affective reaction to a particular outcome of an action
- Instrumentality: belief that an action will lead to a particular outcome
- Expectancy: belief that one can perform the action

Actual ability moderates the motivation to intentionally distort (Ellingson & McFarland, 2011).

The forced-choice item format may be more resistant to intentional distortion than more widely used graded-scale format. One drawback of the forced-choice format is that it generates ipsative data (Closs, 1996). The recently developed Thurstonian IRT model (Brown & Maydeu-Olivares, 2011) is used to convert the ipsative (i.e., relative) scores to normative (i.e., absolute) scores. Because intentional distortion in high-stakes situations (e.g. job applications) is also allegedly influenced by cultural factors and cognitive ability, we are also testing these relations.

We assess the effects of three variables on intentional distortion:

Test format

Graded scale vs. forced choice

Culture

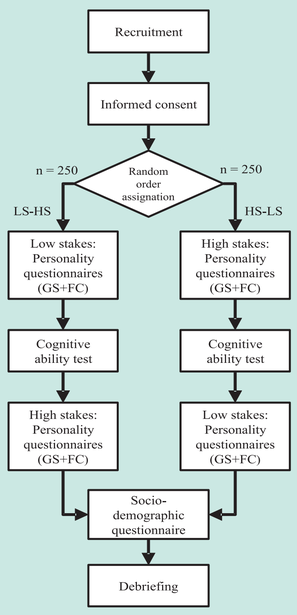
Different cultures are expected to have different attitudes towards intentional distortion

Cognitive ability

Levels of cognitive ability are supposedly related to ability to choose more desirable

Method

- Measures:
  - Big Five Inventory (graded scale)
  - Tailored forced-choice personality inventory
  - ICAR Sample Test (cognitive ability)
- Administered online in 3 countries
- Use Thurstonian IRT to recover normative scores from ipsative data obtained from forced choice questionnaire
- Compare scores from both formats under high- and low-stakes conditions to evaluate intentional distortion between formats and countries



Expected results

- Forced-choice format makes it harder to identify advantageous response patterns
- Forced-choice format might decrease expectancy beliefs

→ Test format: Forced choice lowers intentional distortion vs. graded scale

- Cultural attitudes toward intentional distortion might influence valence and instrumentality beliefs

→ Culture: Intentional distortion lower in UK, medium in Serbia, higher in Turkey

- Higher cognitive ability makes it easier to identify advantageous response patterns
- Higher cognitive ability might raise expectancy beliefs of successful distortion

→ Cognitive ability: Intentional distortion in forced choice higher with higher cognitive ability

Discussion

We expect to gain evidence of the robustness of the forced-choice format against intentional distortion, in addition to measuring the possible effects of culture and cognitive ability. Furthermore, Thurstonian IRT allows us to compare our results with graded-scale assessments. Limitations include the use of students as our population, lack of control over the testing environment, and the issue of sample equivalence across countries. Lack of control is standard in online assessment, which is the choice of most companies using personality assessment in selection (Kantrowitz, 2014). As online and pen-and-paper contexts may be equally susceptible to online distortion (Grieve & de Groot, 2013), it is necessary to test the effects of intentional distortion in online contexts.

More information on this project:

http://dx.doi.org/10.3389/fpsyg.2016.00933

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