

Measuring Faking Using the Overclaiming Instrument

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Faking on Personality Tests

- Faking on personality tests continues to be a serious concern, particularly as recent research has indicated that such faking occurs in up to 30% to 50% of cases involving actual job applicants (Griffith, Chmielowski, & Yoshita, 2007)

Attenuation of Personality Test Scores

- Applicant faking impacts:
 - **Criterion-related validity**
 - Bing, Whanger, Davison, & VanHook (2004)
 - Holden (2007, 2008)
 - **Hiring decisions**
 - Mueller-Hanson, Heggstad, & Thornton (2003)
 - Rosse et al. (1998)
 - **Construct validity**
 - Schmit & Ryan (1993); Stark et al. (2001)
- Thus, reducing faking is an important concern for personnel selection experts

Faking

- Socially desirable responding has been characterized with two dimensions
 - Self-deception (SDE) occurs when one unconsciously holds an overly positive view of oneself, and overestimates his or her possession of positive traits, beliefs, etc.
 - Impression management (IM) can be defined as a conscious attempt to present oneself in an overly positive light
 - Impression management is typically used synonymously with faking given its intentional character

Established Measures of Faking

- Traditional measures of faking assess socially desirable responding using self-reports
 - Sample item from Paulhus' BIDR
 - I always apologize to others for my mistakes.
 - Sample item from Marlowe-Crowne SD Scale
 - Before voting I thoroughly investigate the qualifications of the candidates.

Established Measures of Faking

- However, there is a growing consensus that popular measures of socially desirable responding (i.e., self-deception and impression management) do not measure individual differences in faking
 - Bing, LeBreton, Davison, Migetz, & James (2007)
 - Ellingson, Sackett, & Connelly (2007)
 - Griffith & Peterson (2008)
 - Holden (2007, 2008)
- Scale items are largely a function of factors such as neuroticism, extraversion, and conscientiousness
 - Smith & Ellingson (2002)

Attenuation of personality test scores

- Accounting for faking (as measured by socially desirable responding scales) does not improve the validity of personality test scores
 - Hough & Oswald (2008)
- Socially desirable responding scales do not suppress unwanted systematic error variance in personality test scores due to intentional response distortion (i.e., faking)
 - Thus they do not serve as viable suppressors (Borkebau & Ostendorf, 1992; Ones et al., 1996; Smith & Ellingson, 2002).

What We Need Are...

- Alternative measures of individual differences in personality test faking that are:
 - (a) convenient to administer in a selection context
 - i.e., a paper-and-pencil measurement rather than requiring a computer for administration
 - (b) easy to score in comparison to other statistical methods for detecting faking
 - i.e., IRT, Computer-measured response times
 - (c) reliable in terms of quantifying faking responses
 - (d) capable of enhancing personality test score validity
 - via suppressing the unwanted variance in personality test scores that is a result of faking among job applicants

Overclaiming Is:

- “. . . a concrete . . . [operationalization] . . . of self-enhancement based on respondents’ ratings of their knowledge of various persons, events, products, and so on. Because 20% of the items are nonexistent, responses can be analyzed with signal detection formulas to index both response bias (over-claiming) and accuracy (knowledge).” (Paulhus et al., 2003, p. 890)
 - To paraphrase Mark Twain: “It ain’t what you don’t know that gets you into trouble. It’s what you [claim to] know for sure that just ain’t so.”

Overclaiming vs. Bogus Items

- Bogus items appear to the applicant to be assessing experience with job-relevant tasks, knowledge, or abilities, but refer to non-existent entities
 - Have been used to detect faking of biodata and account for effects of response distortion (e.g., Anderson, Warner, & Spencer, 1984; Pannone, 1984)
- However, bogus items are job-specific and must be developed for each job and/or organization prior to use
 - e.g., “matrixing solvency files” and “dusting votres”
- Overclaiming is more general
 - Can be administered within a broader range of test batteries including personality tests, and other assessments

OCQ-150 (Paulhus, 2003)

- 150 items, with 15 for each of the following 10 categories:
 - historical names and events, fine arts, language, books and poems, authors and characters, social science and law, physical sciences, life sciences, 20th century culture, and consumer products
 - 120 items represent extant books, authors, events, etc., that individuals should be able to recognize and be somewhat familiar with (Hirsch, 1988)
 - 30 of the items (3 for each of the 10 categories) are foils
 - Items coded 1 (Never heard of it) to 5 (Very familiar)
- Example items from physical science category
 - Hydroponics – Represents an actual term
 - Cholarine – Represents a foil

Overclaiming (Paulhus, 2003)

- Responses can be analyzed to index both:
 - Accuracy (knowledge) based on non-foils
 - A measure of cognitive ability
 - Response bias (overclaiming) based on foils
 - Faking
 - Paulhus et al. (2003) have used other signal detection formulas to calculate response accuracy and bias (e.g., hits relative to false alarms)

Overclaiming and Faking

- Scores on the overclaiming instrument, like scores on self-reports (whether of socially desirable responding or of personality, etc.) are nearly *always* tainted with individual differences in self-deception
- However, overclaiming on foils should provide an objective and actuarial measurement method that captures individual differences in intentional response distortion (i.e., faking)
 - primarily **when** test takers are motivated to intentionally distort item responses by the situation because. . .
 - that's when individual differences in faking are present and thus **can** be measured

Overclaiming and Faking

- When an individual scores high on the overclaiming instrument under the motivation to fake, the score is indicative of both
 - (a) self-deception *and*
 - (b) intentional faking
 - as the person is responding in a manner that indicates he/she is claiming to know that which *truly* does not exist and cannot be known
- When an individual scores high on a self-report of impression management, the score is indicative of
 - (a) self-deception (as that is omnipresent in all self-reports)
 - (b) self-perceptions of actual desirable traits that the person may truly possess, *and*
 - (c) intentional faking

Bing et al. (2011, *OBHDP*)

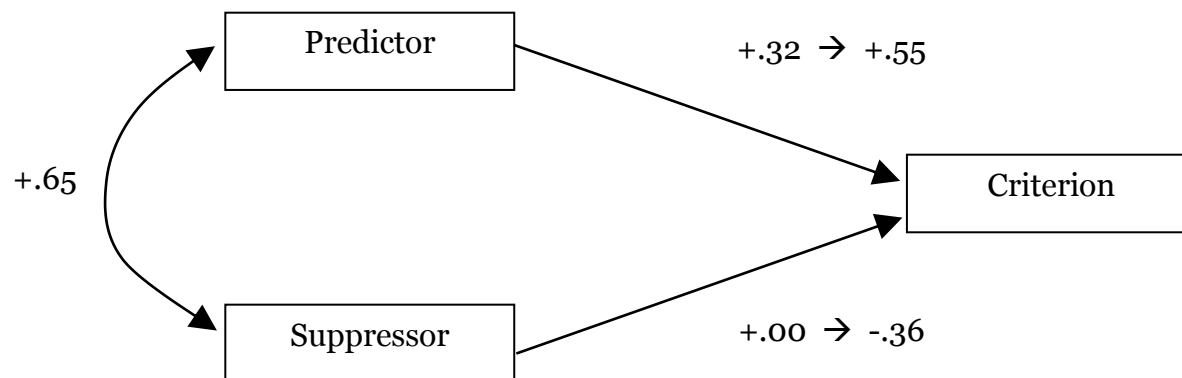
- Conducted a between-subjects criterion-related validity study
 - Student participants were randomly assigned to general research or applicant instructions conditions directly prior to completing predictor measures
 - The external performance criterion was measured approximately nine months later

Hypotheses

- *H1. The motivation to fake from applicant instructions will lead to higher overclaiming to foils in comparison to overclaiming obtained under general instructions.*
- *H2. Under the motivation to fake from applicant instructions overclaiming to foils will serve as a suppressor by meeting the following requirements:*
 - *H2a. Overclaiming to foils will be positively related to achievement striving.*
 - *H2b. Overclaiming to foils will be unrelated to the performance criterion.*
 - *H2c. Overclaiming to foils will suppress criterion-irrelevant variance in achievement striving, which will increase the positive relationship between achievement striving and the performance criterion when overclaiming is included in the prediction model.*
 - *H2d. Overclaiming to foils will become negatively related to the performance criterion in the presence of achievement striving, leading to an increase in the prediction of the performance criterion.*

Example Classic Case of Suppression

$$\Delta R^2 = .07$$



In this illustrative example $N = 200$. The double-headed arrow represents the correlation between the predictor and suppressor variables. The standardized regression weights (Betas) from the regression equations are depicted before and after the second step in which the suppressor variable was added. This represents a classical case of suppression in which the suppressor is correlated with the predictor, uncorrelated with the criterion, and yet increases the amount of variance explained in the criterion when added to the regression equation ($\Delta R^2 = .07, p < .01$).

Method

- Sample 1: N = 200 for 'honest' condition
- Sample 2: N = 208 for 'applicant' condition
 - Admission to a desired university instructions (from Bing et al., 2004 & Schmit et al., 1995)
- Measures:
 - Achievement striving (AS; Costa & McCrae, 1992)
 - Overclaiming (150 items, 30 of which are foils)
 - Self-deception / Impression management (SD/IM; Paulhus, 1984)
 - Used for alternative and comparison testing for suppression
- Registrar data for control variable and criterion:
 - ACT/SAT scores (control variable)
 - Grade point average (GPA)

Results: Applicant Simulation Condition

- H1: Means were significantly higher for overclaiming (and AS & SD/IM) in applicant condition
- H2: Overclaiming served as a suppressor:
 - H2a: Overclaiming correlated with AS (.47**)
 - H2b: Overclaiming was uncorrelated with GPA
 - (.03, n.s.)
 - H2c: When adding overclaiming to the equation:
 - The Beta for AS increased from .32 to .44
 - H2d: Overclaiming's .03 correlation changed to a significant beta ($\beta = -.24$) in the regression equation, increasing significantly the prediction of performance
 - $\Delta R^2 = .044, p < .01$

Results (continued)

- Thus, H1 & H2a-H2d were supported under the condition of applicant faking
- Analyses in the ‘honest’ condition, as expected, did not result in a suppression effect
 - There is no systematic faking for overclaiming to capture/measure in the honest condition—hence no suppression effect in the honest condition as overclaiming correlated with AS at only $.14^*$ (vs. $.47^{**}$ in ‘applicant’ condition)
- SD/IM scales in both the ‘honest’ and ‘applicant’ conditions (as expected) did not result in suppression and did not improve prediction of performance (n.s. results for SD/IM in regression equations)

Summary

- Overclaiming to foils (but not SD/IM) can serve as a suppressor when the motivation to fake is present
- The inclusion of overclaiming to foils in a prediction equation serves to automatically correct personality test scores for individual differences in faking given the significant negative beta-weight with predicted performance
 - It is significant, and thus a valid (i.e., job-relevant) predictor of performance
- This faking “correction” performed via using the suppression regression equation for selection decisions (i.e., basing hiring decisions on Y-predicted) has the potential to improve the validity of selection systems and the accuracy of hiring decisions when using personality measures

Comparison of Predictions

- Imagine two candidates competing for a scholarship, one of whom endorses a substantial number of foils in an attempt to appear particularly learned (Candidate A), whereas the other responds candidly (Candidate B)
- Prediction equation:
 - $\text{Predicted GPA} = 1.208 + (.045)*\text{ACT} + (.280)*\text{achievement} + (-.096)*\text{overclaiming}$

Comparison of Predictions

- Assume both Candidates A and B have ACT scores of 30, and achievement striving scores of 4
 - Candidate A obtains a score of 3.8 on overclaiming to foils
 - Candidate B obtains a score of 1.2
- Their respective predicted GPAs would be 3.31 and 3.56
 - With a cutpoint of 3.5 on predicted GPA
 - Candidate B who did not fake nearly as much would be eligible for the scholarship
 - Candidate A would not be eligible
- Without including overclaiming on foils, those who fake on achievement striving items will be rewarded in comparison to those who do not fake

Overclaiming Short Form Creation

- 8 foils of the original 30 were selected based on:
 - (a) negligible or negative correlations with GPA
 - (b) adequate item-total correlations (i.e., .60 or above) with the full 30-item scale
 - (c) adequate variance (i.e., item variance of 1.70 or higher), and
 - (d) acceptable content (i.e., could not be potentially offensive or sensitive to job candidates)
- These eight items were randomly mixed with 17 real overclaiming items that:
 - (a) had significant correlations with ACT scores
 - (b) correlated at least positively with GPA
 - (c) had at least adequate item-total correlations with the original 120-item scale (i.e., .40 or above), and
 - (d) acceptable content

Item	Foil or Real
Houdini	Real
Charlotte Bronte	Real
meta-toxins	Foil
myth	Real
Antigone	Real
cholarine	Foil
alliteration	Real
Gail Brennan	Foil
Queen Shattuck	Foil
Lewis Carroll	Real
free will	Real
Dale Carnegie	Real
Murphy's Last Ride	Foil
sentence stigma	Foil
Bay of Pigs	Real
hyperbole	Real
The Aeneid	Real
euphemism	Real
double entendre	Real
consumer apparatus	Foil
blank verse	Real
shunt-word	Foil
art deco	Real
Artemis	Real
a cappella	Real

Overclaiming Short Form Results

- This 25-item overclaiming short form was administered along with bogus items and self-reports of self-deception and impression management to 475 job incumbents
- Internal consistency reliabilities (alphas) for this overclaiming short form were
 - .87 for overclaiming real items
 - .77 for overclaiming foils

Overclaiming Short Form Results

- Exploratory factor analysis was conducted using principal axis factoring with an oblique rotation, allowing the factors to intercorrelate
 - Overclaiming foil items converged onto the first factor together (i.e., demonstrate convergent validity) and . . .
 - Were distinct from bogus items, as well as from self-deception and impression management (i.e., demonstrate discriminant validity)

Overclaiming Short Form Results

- Respondents also completed self-reports of the Big Five personality traits using the 50-item IPIP (Goldberg et al., 2006)
- Personality data on the job incumbent respondents was also collected from close acquaintances of those job incumbent respondents using a peer-report version of the 50-item IPIP (Goldberg et al., 2006)

Overclaiming Short Form Results

- Even when respondents were asked to respond honestly, a substantial amount of the variance in self-reported self-deception and impression management was strongly related to respondent's ratings of their Big Five personality traits
- When personality ratings were obtained from acquaintances, personality remained significantly related to impression management and self-deception, but to a much smaller degree to overclaiming on foils and bogus items
 - Even when personality is rated by a source other than the job incumbent respondent, self deception and impression management capture substantial personality variance
 - Not the case for overclaiming on foils and the bogus item technique



Questions?