Unlikely Virtues Provide Multidimensional Substantive Information about Personality

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Abstract

Examination of alternative LISREL models suggests that unlikely virtue items (which describe desirable, but implausible, behaviors) reflect a general dissembling factor and a specific, substantive personality factor. Peer correlates suggest that exaggerating specific virtues may provide valid personality information, but that indiscriminate exaggeration may reflect despotism.
Determining whether persons responding to personality inventories are providing honest or merely socially desirable answers has been a perenniel problem in the history of personality assessment through self-reports (Paulhus, 1986). One approach to addressing the problem has been to imbed within an inventory items describing "unlikely virtues" (Paajanen, 1988; Tellegen, 1982). Unlikely virtue items describe behaviors that are socially desirable, but literally implausible. Respondents who answer too many such items in the socially desirable direction are assumed to be lying, and their entire protocol is disqualified.

Test interpreters generally have been unconcerned about the content of unlikely virtue items. Elevated scores on unlikely virtue scales simply indicate that dissembling has occurred. Yet occasionally assessors have suggested that such scales reveal substantive information about personality (Gough, 1987). The present study examines whether unlikely virtue items should be conceptualized as unidimensional indicators of dissembling or as indicators of different substantive dimensions of personality.

Method

Subjects

Subjects were 142 introductory psychology students (62 male, 80
female). They received extra credit for participating in the study.

**Measures**

Subjects completed a version of the Hogan Personality Inventory (HPI; Hogan, 1986) that was augmented with six unlikely virtue scales written so that the content of each corresponded to one of the six primary HPI scales (Johnson & Horner, 1990; see Appendix). The HPI's scales were designed to assess five broad dimensions of personality that many researchers regard as a comprehensive, universal taxonomy (Digman, 1990, p. 424): I. Extraversion/introversion (HPI Sociability and Ambition); II. Friendliness/hostility (HPI Likeability); III. Conscientiousness (HPI Prudence); IV. Neuroticism/emotional stability (HPI Adjustment); and V. Intellect (HPI Intellectance). The theoretical basis for the HPI can be found in a chapter by Hogan (1983); evidence for the reliability, validity, and other psychometric properties of the HPI can be found in the manual (Hogan, 1986).

**Analyses**

To test the degree to which the act of endorsing unlikely virtues is a unitary or multidimensional process, confirmatory factor analyses comparing alternative models of linear structural relationships were tested with LISREL VI (Jöreskog & Sörbom, 1986). Four models were
The first model, based upon a correspondence epistemology (cf. Johnson, 1981; Ruben, 1977) assumes that endorsements of personality items are either objectively true (valid) or false (invalid), depending upon whether the endorsed item corresponds to the actual, objective state of affairs. Note that this view further assumes that one can determine the "actual, objective state of affairs" in order to evaluate the truth of the claim made by the item endorser. The epistemological underpinnings of the first model suggest the name Radical Realism.

The structural equations for the Radical Realism Model (see Figure 1) show a single latent variable representing "general unlikely virtuousness" (i.e., a disposition to make socially desirable claims that do not correspond to the actual, objective state of affairs). This latent variable is completely independent from the six latent variables representing the substantive personality dispositions underlying the six standard HPI scales. (The relationships among the latent variables Intellectance, Ambition, and Sociability and between Adjustment and Likeability are suggested by both socioanalytic theory and empirical research--cf. Hogan, 1986).
The second model, which I call Radical Constructivism, is based upon a coherence rather than a correspondence epistemology (Johnson, 1981). This model assumes that we cannot directly know "the actual, objective state of affairs;" rather, we construct models of reality. Furthermore, these models are socially, rather than individually, constructed (cf. Berger & Luckmann, 1966). Because radical constructivism denies the existence (or, at least, importance) of "the actual, objective state of affairs," the validity of personality item responses cannot be judged against such a criterion. The validity of claims can only be judged according to the degree to which they cohere with the social consensus. Thus, claiming an unlikely virtue is not a function of a general disposition to lie. The Radical Constructivism model assumes, rather, that responses to unlikely virtue items are guided by the same substantive personality dispositions that underlie the any personality item. That is to say, someone who is regarded by others as intellectual will endorse both standard and unlikely virtue Intellectance items.

The structural relationships in this model are shown in Figure 2,
which shows latent General Unlikely Virtuousness completely disconnected from any measured variable, and each unlikely virtue scale influenced by a single, content-relevant latent variable (e.g., latent Intellectance underlies both measured unlikely Intellectance and measured standard Intellectance).

Figure 3 shows illustrates two variations of a mixed Realist-Constructivist model. Both versions posit a joint influence of substantive personality dispositions and general unlikely virtuousness on the endorsement of unlikely virtue items. These models suggest that persons are most likely to endorse, say, unlikely Intellectance items if they are both regarded by others as intellectual (and are therefore high on latent Intellectance) and are generally prone to make claims that others will regard as implausible (and are therefore high on General Unlikely Virtuousness).
Mixed model 3A differs from mixed model 3B in that the former assumes general unlikely virtuousness to be completely independent from the substantive personality dispositions, whereas the latter allows the LISREL program to determine the best fitting model allowing for relationships between general unlikely virtuousness and the other dispositions.

Results and Discussion

The fit for the Radical Realism Model was poor (\( \chi^2(51) = 314.5, p < .001 \)). The fit for the Radical Constructivism Model was hardly better (\( \chi^2(51) = 159.3, p < .001 \)). The two mixed models fit the data well. Mixed model 3A showed an adjusted goodness-of-fit of .89 (\( \chi^2(45) = 43.38, p = .54 \)), and mixed model 3B showed a fit of .90 (\( \chi^2(39) = 42.37, p = .33 \)). These results indicate clearly the superiority of a mixed over a radical realist or constructivist model.

The two mixed models do not differ in goodness of fit, making it difficult to determine whether "general unlikely virtuousness" should be regarded as a unique dimension apart from the allegedly comprehensive five-factor model (Digman, 1990) or as a derivative of the five factors. Two considerations suggest the latter interpretation. An earlier exploratory factor analysis of these data (Johnson & Horner, 1990) found a
five-factor solution with the unlikely virtue scales loading mostly on the same factors as their standard scale counterparts; no general unlikely virtuousness factor was found. Maximum likelihood estimates of correlations between latent variables in mixed model 3B indicate that general unlikely virtuousness is positively related to Intellectance ($r = .29$), Ambition ($r = .17$), and Sociability ($r = .19$) and negatively related to Likeability ($r = -.29$). According to Hogan (1986), the high scores on the Intellectance, Ambition, and Sociability scales constitutes a "leadership syndrome," marked by flamboyance, competitiveness, and status-seeking. Low Likeability scores indicate, however, a tendency to be inconsiderate, cold, and rude. This suggests that someone who scores high across the six unlikely virtue scales and is therefore manifesting general unlikely virtuousness is a potential ruthless leader or despot who is willing to lie and exaggerate about any personality characteristic in order to enhance his or her reputation.

What about persons who are more selective about the unlikely virtues they endorse? A previous analysis of peer rating correlates of the unlikely virtues (Johnson & Horner, 1990) found a clear convergent-discriminant correlation matrix between the standard HPI and unlikely virtue scales, viz., ratings of Intellectance correlated significantly with
unlikely Intellectance scores but nonsignificantly with the other unlikely virtue scores, etc. In other words, the individual unlikely virtue scales are capturing some valid variance, defined by correlations with peer ratings.

This study was designed to show that determining whether responses to personality items are valid is a difficult task involving epistemological issues as well as complex multivariate considerations. On the one hand, it would appear that radical realism and radical constructivism are both poor models for understanding the validity of item responses. The better fitting models indicate that responses to unlikely virtue items are influenced by both a separate general unlikely virtuousness latent variable and a substantive personality latent variable. This suggests that persons are sensitive to the difference between plausible standard personality items and the more implausible unlikely virtue items, but are willing to endorse selectively some unlikely virtue items that cohere with the image they are attempting to construct. Even the protocols of persons responding indiscriminately to all unlikely virtue scales are interpretable--they reflect the actions of people who are ambitious but interpersonally insensitive. To prejudge the endorsement of unlikely virtues as mere lying would appear to ignore possibly valid (and
valuable) psychological meanings of such endorsements--meanings which one might continue explore empirically.
References


Author Notes

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Appendix: Unlikely Virtue Items

Intellectance

6. I am smarter than most people.
42. Sometimes I think I am a genius.
78. I always got high scores on tests in high school.
114. Every subject in high school came easily to me.
150. Some people think I am brilliant.
186. I have an unusually broad range of knowledge.
222. I have unusually deep insight into things.
258. In my own way, I am an intellectual giant.
294. I am extremely well-read in the arts, humanities, and sciences.
330. I am a modern Renaissance man (or woman).

Adjustment

12. I never worry.
48. I feel perfectly relaxed when meeting new people.
84. I never feel guilty.
120. I never feel depressed.
156. I am always in perfect health.
192. I never get upset.
228. I can do anything I set my mind to.
264. I never have trouble making decisions.
300. I have never been dissatisfied with my life.
336. I have no psychological problems whatsoever.

Prudence

18. I was extremely well-behaved as a child.
54. I never do anything on impulse.
90. I do not break even minor laws.
126. I have never been in any kind of trouble.
162. I have never done anything unsafe.
198. I always fulfill my obligations.
234. I have always done what was expected from me.
270. I have always kept my word.
306. I never even think about doing things that are wrong.
342. I always do what is right, even if I suffer for it.
Ambition

24. No one manages people better than I do.
60. I am an extremely talented and gifted leader.
132. My work will bring me an international reputation.
168. I have never given up.
204. People will talk about my achievements for generations.
240. I will make an extraordinary contribution to mankind.
276. People have been extremely impressed with my leadership.
312. I can win any game I choose to play.
348. I think I am special, better than most people.

Sociability

30. I could talk to people all day long.
66. At parties everyone wants to talk to me.
102. I can't stand to be alone.
138. For me, just being with people is the meaning of life.
174. Everyone I meet seems to be attracted to me.
210. Nothing is more important to me than socializing with people.
246. I am the most sociable person I know.
282. Being able to work with people is more important than salary.
318. I have more friends than most people.
354. I am with other people all the time.

Likeability

36. Everyone liked me in high school.
72. I care more about others than I do about myself.
108. I am extremely easy to live with.
144. I love all people.
180. No one has ever really disliked me.
216. I am one of the nicest persons you will ever meet.
252. I feel sympathetic rather than angry toward people who wrong me.
288. When injured I turn the other cheek.
324. There is no such thing as being too trusting.
360. I never argue with people.
Figure 1. Radical Realism Model

\[ \xi_1 = \text{latent Intelectance} \]
\[ \xi_2 = \text{latent Adjustment} \]
\[ \xi_3 = \text{latent Prudence} \]
\[ \xi_4 = \text{latent Ambition} \]
\[ \xi_5 = \text{latent Sociability} \]
\[ \xi_6 = \text{latent Likeability} \]
\[ \xi_7 = \text{latent General Unlikely Virtuousness} \]

\[ \lambda_{11} \]
\[ \delta_1 \]
\[ x_1 \]
\[ x_2 \]
\[ x_3 \]
\[ x_4 \]
\[ x_5 \]
\[ x_6 \]
\[ x_7 \]
\[ x_8 \]
\[ x_9 \]
\[ x_{10} \]
\[ x_{11} \]
\[ x_{12} \]

\[ \phi_{14} \]
\[ \phi_{24} \]
\[ \phi_{45} \]

\[ x_1 = \text{measured Intelectance} \]
\[ x_2 = \text{measured Adjustment} \]
\[ x_3 = \text{measured Prudence} \]
\[ x_4 = \text{measured Ambition} \]
\[ x_5 = \text{measured Sociability} \]
\[ x_6 = \text{measured Likeability} \]
\[ x_7 = \text{measured unlikely Intelectance} \]
\[ x_8 = \text{measured unlikely Adjustment} \]
\[ x_9 = \text{measured unlikely Prudence} \]
\[ x_{10} = \text{measured unlikely Ambition} \]
\[ x_{11} = \text{measured unlikely Sociability} \]
\[ x_{12} = \text{measured unlikely Likeability} \]
Figure 2. Radical Constructivism Model

\[ \xi_1 = \text{latent Intellectance} \]
\[ \xi_2 = \text{latent Adjustment} \]
\[ \xi_3 = \text{latent Prudence} \]
\[ \xi_4 = \text{latent Ambition} \]
\[ \xi_5 = \text{latent Sociability} \]
\[ \xi_6 = \text{latent Likeability} \]
\[ \xi_7 = \text{latent General Unlikely Virtuousness} \]

\[ \delta_1 = \text{measured Intellectance} \]
\[ \delta_2 = \text{measured Adjustment} \]
\[ \delta_3 = \text{measured Prudence} \]
\[ \delta_4 = \text{measured Ambition} \]
\[ \delta_5 = \text{measured Sociability} \]
\[ \delta_6 = \text{measured Likeability} \]
\[ \delta_7 = \text{measured unlikely Intellectance} \]
\[ \delta_8 = \text{measured unlikely Adjustment} \]
\[ \delta_9 = \text{measured unlikely Prudence} \]
\[ \delta_{10} = \text{measured unlikely Ambition} \]
\[ \delta_{11} = \text{measured unlikely Sociability} \]
\[ \delta_{12} = \text{measured unlikely Likeability} \]

Note: To maintain clarity in the diagram, arrows representing relationships between latent variables have been omitted.
\[
\begin{align*}
\xi_1 &= \text{latent Intellectance} \\
\xi_2 &= \text{latent Adjustment} \\
\xi_3 &= \text{latent Prudence} \\
\xi_4 &= \text{latent Ambition} \\
\xi_5 &= \text{latent Sociability} \\
\xi_6 &= \text{latent Likeability} \\
\xi_7 &= \text{latent General Unlikely Virtuousness}
\end{align*}
\]

Figure 3. Mixed Realist-Constructivist Models A and B

Note: To maintain clarity in the diagram, arrows representing relationships between latent variables have been omitted. Model B differs from A in that relationships are proposed between General Unlikely Virtuousness and the other latent variables.