Dissembling on the Hogan Personality Inventory during Simulated Personnel Selection

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Abstract

Seventy-eight subjects completed the Hogan Personality Inventory under normal instructions and then as if applying for the following four positions: Truck Driver, Bomb Disposal Technician, Psychiatric Counselor, and Manager. For each occupation except Truck Driver, scores on a criterion-keyed scale gathered under dissembling instructions were significantly higher than scores gathered under normal instructions. Additional analyses indicated that ability to dissemble is neither affected by the social desirability of the items nor is predictable from baseline personality scores. Whether dissembling affects the utility of the HPI in personnel selection remains unknown; research that can answer that question is described.

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The Problem

Johnson (1986) has recently suggested the conditions under which job applicants might successfully dissemble on personality tests during personnel selection. Johnson had a group of subjects complete the California Psychological Inventory (CPI; Gough, 1975) under normal instructions. They re-took a short version of the CPI (Burger, 1975) six times as if applying for six different jobs: Police Officer, Dentist, Architect, Religious Counselor, Business Manager, and Cashier/Short-Order Cook. Johnson found that under all six dissembling conditions, mean scores on all four scales changed in the direction of general social desirability (higher for Self-Control, Dominance, Socialization; lower for Flexibility).

Johnson concluded from these results that, on the whole, would-be dissemblers tend to be insensitive to the fact that certain personality traits that are desirable in a general sense may be undesirable in certain jobs. Hence, they are only partially successful at creating desirable impressions on personality tests that are criterion-keyed to specific occupations. The degree of successful dissembling for an occupational position would appear to depend upon how many personality traits valued in that occupation are also socially desirable in a general sense.

For example, research has shown that highly rated police officers score high on Self-Control, Dominance, and Socialization, and low on Flexibility. Therefore, scores from persons responding to the CPI in a generally socially desirable manner will ( spuriously) resemble scores of
highly rated police officers. Highly creative architects, however, tend to score low on Self-Control, high on Dominance and Flexibility, and low on Socialization—a pattern opposite of general social desirability on three of the four scales. CPI scores derived from persons attempting to dissemble for the architect position therefore tended to resemble the CPI scores from creative architects less than CPI scores gathered under straight-take conditions.

The present research describes whether Johnson's (1986) findings will generalize from the CPI to personality inventories constructed specifically to assess occupational success potential, such as the Hogan Personality Inventory (HPI; Hogan, 1986). The HPI contains 43 clusters of 3 to 7 highly similar items called homogeneous item composites (HICs). The 43 HICs can be clustered into longer scales according to the needs of the person using the inventory. One higher-level clustering technique reported by Hogan involves selecting from the 43 HICs those that show the most significant correlations with occupational performance criteria, and then summing the HICs into a single scale to be used in personnel selection (e.g., Hogan, Hogan, & Busch, 1984). The present research tests the degree to which scores on HPI scales constructed with this empirical strategy are affected by attempts to dissemble.

One question not directly tested in Johnson's (1986) study is whether dissembling subjects' perceptions of desirable item responses are mere reflections of general social desirability or whether these perceptions are at all specific to the occupational positions they are applying for. A re-examination of Johnson's data does confirm Johnson's assertion that
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scores during dissembling conditions change in the direction of general social desirability. However, Johnson fails to note that the degree of change tended to be quite different across occupations. For example, Self-Control increased significantly in all cases from a 36.2 under normal instructions, yet the dissembling scores on this scale varied from a 48.1 for Business Manager to a 59.4 for Religious Counselor.

The present study therefore, in addition to testing whether Johnson's (1986) results will replicate with the HPI, directly tests whether score changes during dissembling reflect only the patterns of general social desirability of the HICs comprising the scale or whether score changes follow patterns that are specific to each occupation.

Procedure

Subjects

Subjects were 78 undergraduate students (34 male, 44 female) enrolled in an introductory psychology course. All received extra credit points for participating in the study. Additional extra credit points were offered to the individuals who made the highest scores under the four employment testing conditions.

Personality Assessment

The first stage of assessment had subjects complete under standard instructions the Hogan Personality Inventory, described in the introduction of this paper. The second stage of testing involved four retakes of the HPI, completed by subjects on their own over a two-week period, to minimize fatigue. Subjects were instructed to respond as if they were applying for four jobs studied by Hogan (1986) and described by him in his manual for
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the HPI: truck driver, bomb disposal technician for the Navy, counselor for a private psychiatric hospital, and middle-level manager. Order of retakes was randomized to eliminate any possible order effects.

Analyses

Item responses for all tests were computer-scored, producing 43 different homogeneous item composite (HIC) scores. All HICs that Hogan (1986) reported to be significantly related to job performance were then clustered into occupational performance potential scales—one for each of the four occupations. Correlated t-tests were used to determine whether subjects, when instructed to dissemble, could significantly improve their scores on these four performance scales over standard-instruction conditions.

A second set of analyses divided each of the four occupational scales at the median social desirability value of HICs on the scale, forming four occupational half-scales comprised of HICs with relatively lower social desirability and four occupational half-scales comprised of HICs with relatively higher social desirability. The differences in score changes from the normal to dissembling conditions were compared for high- and low-social desirability half-scales by the procedure suggested by McNemar (1969, pp. 96-99) for comparison of correlated changes. The hypothesis that subjects are responding merely to general social desirability predicts that high-desirability half-scales would show greater score changes from normal to dissembling conditions than low-desirability half-scales. The hypothesis that subjects are responding to item content predicts the null result; i.e., score changes from normal to dissembling conditions should be
the same for both half-scales.

In a final set of analyses, similar to those reported by Johnson (1986), the four sets of full occupational scale scores gathered under dissembling conditions were correlated with all HIC scores gathered under normal instructions, with the appropriate normal-instruction occupational score partialled out (see Lord, 1963). This analysis tested whether individual differences in dissembling ability could be predicted by personality scores gathered under standard instructions.

Results

Results of the first set of analyses, shown in Table 1, indicate that subjects failed to dissemble successfully for the truck driver position, but did improve their scores significantly during dissembling for the bomb disposal technician, psychiatric counselor, and manager positions.

The second set of analyses found no statistically significant differences between scores derived from generally socially desirable HICs and scores derived from less socially desirable HICs.

The last set of analyses involved a large number of partial correlations—43 for each occupation, or 172 total correlations. Pure chance would generate, on the average, 8.6 correlations apparently significant at the .05 level. The four apparently "significant" correlations in this last set of analyses can be regarded as chance results.
Discussion

The present data contradict Johnson's (1986) doubt about people's ability to tailor their self-presentations on personality inventories to occupation-specific standards of desirability. Subjects dissembled successfully for three of the four occupations, and dissembling appeared to be independent of the general social desirability of the items. Perhaps Johnson's (1986) methodology was not fully appropriate to test his hypotheses. He used CPI scales that are not keyed to job performance criteria, and hence do not predict job performance as well as HPI scales. Furthermore, he used short-form versions of the CPI scales, which probably further reduced their reliability and validity. Finally, he administered six retests with six different dissembling instructions in one testing period—an onerous task for even the most willing and able subject.

One of Johnson's (1986) findings was replicated with the HPI—i.e., that individual differences in the ability to dissemble successfully apparently cannot be predicted by personality scores gathered under normal instructions. Developing a technique for assessing and predicting a person's talent for dissembling remains a problem for future research.

One should not hastily conclude that susceptibility to dissembling reduces the HPI's utility in personnel selection. Hogan (1986) argues that self-enhancement (claiming a desirable identity) is a function of social skill, and because social skill is valued in most occupations, individual differences in self-enhancement ability actually add valid variance to HPI test scores. Hogan's position has received indirect support from previous research demonstrating that self-enhancement on the CPI is a function of
the adjustment (Canter, 1963) and psychological sophistication (Dicken, 1960) of the test-taker. The present study fails to provide support for Hogan's position however, because individual differences in dissembling success were uncorrelated with the standard HPI scales, many of which purport to measure social skill.

A fair assessment of the relationship between dissembling (self-enhancement) and the predictive validity requires additional research. The present study needs to be repeated with samples of adults who are employed in different occupations and who possess varying degrees of on-the-job experience. Performance criteria can be regressed on both scales gathered under straight-take instructions and scores gathered under instructions to dissemble. This would provide a direct test of whether self-enhancement increases or decreases the utility of the HPI.

One additional consideration might be considered in future research. A full understanding of dissembling effects will require an examination of item characteristics (ambiguity, subtlety, etc.) as well as the situational contingencies of the testing and characteristics of the persons tested (cf. Burkhart, Gynther, & Christian, 1978). Item characteristics, overlooked in the present study, may be an important moderator variable to examine in future research on dissembling.
These occupations were selected because they sample nicely from the most widely used taxonomy of the occupational universe (Holland, 1985). In Holland's terms, a truck driver is a Realistic-Conventional-Enterprising type; a bomb disposal technician is an Investigative-Realistic-Conventional type; a psychiatric counselor is a Social-Investigative-Artistic type; and a manager is an Enterprising-Social-Conventional type.
References


Table 1

**Personality Score Changes when Dissembling for Different Jobs**

<table>
<thead>
<tr>
<th>Job Position</th>
<th>Straight-Take Mean</th>
<th>Straight-Take SD</th>
<th>Dissembling Mean</th>
<th>Dissembling SD</th>
<th>Pearson r</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck Driver</td>
<td>134.0</td>
<td>19.4</td>
<td>131.9</td>
<td>32.3</td>
<td>.16</td>
<td>-0.52</td>
</tr>
<tr>
<td>Bomb Technician</td>
<td>38.4</td>
<td>6.6</td>
<td>40.3</td>
<td>5.7</td>
<td>.03</td>
<td>2.03*</td>
</tr>
<tr>
<td>Counselor</td>
<td>76.5</td>
<td>14.0</td>
<td>81.9</td>
<td>12.4</td>
<td>.24*</td>
<td>5.28**</td>
</tr>
<tr>
<td>Manager</td>
<td>59.1</td>
<td>9.6</td>
<td>71.3</td>
<td>9.4</td>
<td>.23*</td>
<td>9.11**</td>
</tr>
</tbody>
</table>

*Note. N=78; significance of rs and ts based on 77 df.  
*p < .05  
**p < .01 (both two-tailed).*