The Seven Factors of the Hogan Personality Inventory

Jeff Foster, Hogan Assessment Systems

Steve Nichols, Hogan Assessment Systems

Hogan Research Division

Introduction

Modern discussions of personality theory and structure often focus on trait theory (Thurstone, 1934; Tupes & Christal, 1961; Norman, 1963) and the Five Factor Model (FFM; Digman, 1990; Goldberg, 1992; John, 1990, p. 72; McCrae & Costa, 1987). Other approaches have fallen from prominence, such as early viewpoints promoted by European Depth Psychologists like Freud, Jung, and Adler, and interpersonal approaches defining personality in terms of social interactions, often promoted by the likes of Mead, Sarbin, and Goffman.

In this session, we will focus on another alternative: Socioanalytic Theory (Hogan, 1983). We will also present results from the Hogan Personality Inventory (HPI; Hogan & Hogan, 2007), demonstrating how it's seven factor structure not only facilitates prediction, but better explains why different personality characteristics predict performance for different jobs.

Socioanalytic Theory

Three sources influence Socioanalytic Theory. First, evolutionary theory postulates that modern humans are the product of biological evolution. This means we can learn about human nature by studying the conditions in which we evolved. Second are two tenets grounded in European Depth Psychology: (a) people are often unaware of why they act as they do and (b) childhood experiences shape adult personality. Finally, Mead's (1934) book *Mind, Self, and Society* emphasizes that our desire for social interaction is driven by biological needs, thereby tying personality development to evolutionary theory.

Evolutionary theory tells us humans always live in groups, and that those groups have a hierarchical structure. This suggests the most important problems we face are (1) achieving status to secure resources, which assures reproductive success, and (2) obtaining popularity to remain part of the group, which we depend on for survival. From these come a number of biological motives, such as the desire for social approval and to succeed over others. These motives are largely unconscious and vary in strength across people, which serves as the basis of individual differences and the foundation of the study of personality. Through understanding this foundation, we can better equip ourselves to understand how personality shapes everyday behaviors, such as those we exhibit at work.

The Hogan Personality Inventory

The HPI was the first measure of normal personality developed specifically to be used in occupational settings. Initial item writing began in the 1970's, and the most recent version, which contains 206 true/false statements, was implemented in 2015. Although aligned with the FFM, the HPI includes seven dimensions (see Table 1).

The development of the HPI followed three premises that differentiate it from most FFM inventories (Hogan & Hogan, 2007). First, because both status and popularity involve relationships with others, personality is best viewed through the eyes of observers. Although the HPI is self-report, both construct validity evidence and interpretation focus on how

responses impact a person's reputation. Second, responding to personality items is a form of social interaction in that answers reflect how an individual is likely to present themselves to others. In other words, they reflect individual strategies for gaining resources (i.e., getting ahead of others) and obtaining popularity (i.e., getting along with others). Finally, assessment has a job to do. In other words, the purpose of the HPI is to be prescriptive in that results predict meaningful outcomes. Again, validity evidence for the HPI centers on observer ratings and relationships with job performance ratings.

Distinctions from the FFM

The HPI generally shows moderate to strong correlations with aligned scales from FFM inventories (see Table 2). However, one primary distinction between the HPI and most FFM inventories is that the HPI divides FFM Extraversion into Ambition and Sociability. Sociability typically correlates more highly with other Extraversion measures, although this largely depends on the degree to which these scales contain components related to Ambition such as competitiveness, being goal-oriented, and the desire to be in leadership positions. In contrast, Ambition generally correlates higher with Conscientiousness from other inventories when Conscientiousness contains a higher degree of achievement orientation. As such, the HPI Ambition scale often overlaps with both Extraversion and Conscientiousness from FFM inventories.

Another important distinction between the HPI and most other FFM inventories is the inclusion of Learning Approach, although this can generally be considered a broad facet of Openness that deals specifically with learning new information in formal or classroom environments. As such, the Inquisitive scale from the HPI generally has higher correlations with other Openness scales, although Learning Approach is typically more predictive of training outcomes.

Empirical Evidence

The importance of Ambition is apparent when examining correlations between HPI scales and job related outcomes such as supervisory ratings of job performance. For example, meta-analytic validity evidence from the Hogan Archive (Hogan Assessment Systems, 2016), which contains data from over 350 criterion-related validity studies, shows differentiation in validity coefficients when broken out by EEOC job families. To help illustrate these differences, Table 3 presents results for Ambition, Sociability, and Prudence.

Two results stand out. First, the Ambition scale is more predictive across all job families when compared to the Sociability scale, indicating that for many jobs, prediction associated with Extraversion scales from FFM instruments may result from facets related to Ambition. Second, there is an inverse relationship between coefficients associated with Ambition and Prudence, where Ambition is most predictive when Prudence coefficients are lowest and Prudence is most predictive when Ambition coefficients are lowest.

These results highlight the importance of separating Ambition from Extraversion and Conscientiousness, not only for enhancing predictive validity, but for explaining such validity where it occurs. The predictive validity of Conscientiousness scales may depend, in part, on

their inclusion of facets relating to Ambition. Furthermore, the basis of these coefficients, such as whether they are driven by Prudence-related facets or Ambition-related facets, may vary based on job characteristics. In this session, we will present these results and discuss their implications for the use of personality assessments in work settings.

References

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Table 1. HPI Scales and alignment with the FFM

HPI Scale	Definition, the degree to which someone appears to have...	Aligned FFM Scale
Adjustment	Confidence and composure under pressure	Emotional Stability
Ambition	Initiative and competitiveness	Extraversion
Sociability	Extraversion and a need for social interaction	Extraversion
Interpersonal Sensitivity	Tact and the ability to maintain relationships	Agreeableness
Prudence	Self-discipline, responsibility, and thoroughness	Conscientiousness
Inquisitive	Imagination, curiosity, and creative potential	Openness
Learning Approach	An achievement orientation and value of education	Openness

Table 2. Correlations between HPI scales aligned scales from select FFM inventories.

	Hogan Personality Inventory						
	ADJ	AMB	SOC	INP	PRU	INQ	LRN
Inventory							
Goldberg Big Five	.70*	.55*	.44*	.56*	.36*	.33*	.35*
PCI	.69*	.39*	.64*	.61*	.59*	.57*	N/A
IP/5F	-.66*	.60*	.62*	.37*	.49*	.69*	N/A
NEO-PI-R	-.72*	.54*	.63*	.47*	.42*	.52*	.24*

Note. Data derived from the HPI Manual (R. Hogan & J. Hogan, 2007); *N*'s range from 154 - 679; * $p < .05$.

Table 3. Hogan Job Family HPI Meta-Analysis Correlations with Supervisory Ratings

Job Family	K	N	Ambition	Sociability	Prudence
Admin. and Clerical	23	2065	0.13	-0.05	0.20
Managers and Execs.	36	4414	0.32	0.10	0.11
Ops. and Trades	40	2697	0.10	-0.04	0.24
Professionals	13	1424	0.17	-0.04	0.10
Sales and Cust. Support	51	3763	0.28	0.12	0.06
Service and Support	29	2784	0.11	0.00	0.23
Techs. and Specialists	11	1404	0.13	-0.08	0.13

Note: Results are corrected for range restriction and unreliability in criterion-items, but not predictor scales; *K* = number of studies; *N* = number of participants across *K* studies.