

How to Measure Sociopolitical IQ

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Building and maintaining relationships is a fundamental requirement of virtually every leader. Successful leaders possess more than technical skill; they usually demonstrate political savvy, remain self-aware (Church, 1997), and have well-developed social skills (Hogan, Curphy, & Hogan, 1994). Indeed, an unwillingness to take seriously the social and/or political aspects of organizational life is a common reason why leaders fail (cf. Hogan, 1994). Therefore, this paper discusses the development of a compound personality scale that measures these core socio-political qualities. Research using such a measure will add to the field's understanding of leadership and improve our ability to identify successful leaders.

The leadership research usually tries to isolate and then specify leaders' behaviors (Fleishman, 1953), intelligence (Yukl & Van Fleet, 1992), needs (McClelland & Burnham, 1976), skills (Bass, 1990), power (French & Raven, 1959), charisma (Weber, 1947), or methods of influence (Mowaday, 1978). One limitation of previous studies is that they mistakenly treat leadership as an individual difference variable, rather than a process through which influence occurs and results are achieved (cf. Yukl & Van Fleet, 1992). By first conceptualizing leadership in terms of a process, components can be identified and research can explore individual differences that underlie these more specific aspects of leadership.

The process of leadership requires a leader to assume a variety of social roles. This is a dynamic process and it is probably inaccurate to characterize leadership as a static role. The ability to take on varied roles was first described by Mead (1934) and is composed of two elements: empathy and social skill (Hogan & Hogan, 2002). Empathy allows a leader to understand others and put himself/herself in another person's position, thus permitting the leader to understand the perspective from which direct reports are operating. Although being empathic is necessary, it is an insufficient criterion for adopting different roles. The second aspect of role taking ability is social skill, which refers to the leader's ability to verify the accuracy of their empathic judgment and to execute a plan of action. The process of role taking allows a leader to relate more closely to direct reports and build a stronger and longer lasting team—the very essence of leadership (Hogan, Curphy & Hogan (1994). Role taking ability does not develop in a vacuum; it is more likely the product of our evolutionary past.

Leadership has always been (and will always be) important, so it is unfortunate that many of today's discussions of leadership neglect its origin. In our evolutionary past, small-group living provided a survival strategy because of increased access to food, shelter, and protection from predators (Hogan, 1983). Evolution selected those characteristics that promoted group living (e.g., cooperation, acceptance, and conformance) (Baumeister & Leary, 1995; Brewer & Caporael, 1990). Within these small groups, leadership emerged as way to coordinate member

activities, ward off competitors (i.e., other groups), and maximize the likelihood of the group's survival.

Effective leadership provides a strategic advantage over less organized groups (Hogan & Holland, 1999). The primary purpose of leadership is to generate enthusiasm for the group's mission and persuade group members to set aside personal goals, for a period of time, so as to advance the group's interests (Hogan, Curphy, & Hogan, 1994). Leadership promotes group success and also helps group members: (a) meet basic needs; (b) get along; and (c) survive (cf. Schwartz & Bilsky, 1990).

One consequence of group living is the emergence of social and political obstacles. Although people want to pursue their own agenda regardless of the group's purpose (Hogan, 1991), effective leaders have to identify individual members' interests (empathy), show respect for the uniqueness of each person's goals (social skill), and persuade people (social skill) to rally around goals important for the greater good of the group (cf. Pfeffer, 1992). In other words, successful leaders must be socially perceptive (i.e., identify each individual's needs and wants), show concern for group members' welfare, and make politically astute decisions (i.e., balance competing agendas with integrity and build commitment to a greater cause). Hogan and Hogan (2002) refer to role taking ability as Sociopolitical Intelligence (SPIQ).

SPIQ is a psychological syndrome that is assessed using elements from the Hogan Personality Inventory (HPI; Hogan & Hogan, 1995) Ambition, Sociability, and Intellectance scales. Based on construct-validity evidence, Hogan and Hogan (2002) conclude that leaders who receive higher scores on SPIQ seem rewarding to deal with, concerned about others, and upbeat.

SPIQ underlies social skill and manifests as the leader's ability to build and maintain a team. Preliminary research provides some support for the validity of the SPIQ scale in applied settings. Hogan and Holland (1998) found that SPIQ predicted supervisor ratings of retail managers' (N = 25) performance with regard to: Leadership (.52), Management Skills (.53), Administrative Skills (.73), Technical Skill (.45), and Communication Skill (.66). Moreover, based on a sample of 140 managers, Hogan and Ross (1998) reported SPIQ-overall performance correlations on the order of .65. However, as Hunter and Schmidt (1990) point out, results from individual studies are subject to large variations in validity coefficients due to sampling error and are best evaluated using meta-analytic procedures.

The SPIQ construct arose from our evolutionary past as role taking ability and manifests as a leader's ability to build and maintain a team. Leaders who show score higher on the SPIQ scale seem rewarding to be with, concerned about others, and upbeat. Moreover, preliminary data suggest that the SPIQ scale is related to leaders' overall performance, as well as with more specific facets of job performance. Our question concerns the validity of the SPIQ scale across jobs and organizations.

Method

Criteria for Inclusion

The sample consisted of 24 independent studies ($N = 3,917$) from publications, conference presentations, technical reports, chapters, and dissertations between 1992 and 2002. Studies met three criteria for inclusion. First, all studies included the Hogan Personality Inventory (HPI; Hogan & Hogan, 1995). This strategy helped avoid coding errors (e.g., misclassifying facet scales into inappropriate Big-Five factors) and facilitated the creation of the SPIQ scale (cf. Hogan, Hogan, & Roberts, 1996). As Warr, Miles, and Platts (2001) noted, most Big-Five measures converge at the primary scale level, but there is less agreement about the subscales. Second, samples consisted of employees of the organization in which the research occurred. Finally, studies included productivity/personnel indices (e.g., absenteeism, productivity, or commendations) or supervisor evaluations of job performance.

The Hogan Personality Inventory

The HPI assesses characteristics that facilitate or inhibit a person's ability to get along with others and achieve work-related goals (Hogan & Hogan, 1995). It is an untimed 206-item questionnaire designed to predict occupational performance. The inventory contains seven primary scales that correspond conceptually and empirically to the Big-Five factors (see Table 1).

Table 1

Empirical Links Between Hogan Personality Inventory Scales and the Big Five.

HPI Scale	Big-Five Factor	Correlation Coefficients
Adjustment	Neuroticism	$r = .66$ to $r = .81$; Median $r = .73$
Ambition	Extraversion	$r = .39$ to $r = .60$; Median $r = .56$
Sociability	Extraversion	$r = .44$ to $r = .64$; Median $r = .62$
Likeability	Agreeableness	$r = .22$ to $r = .61$; Median $r = .50$
Prudence	Conscientiousness	$r = .39$ to $r = .59$; Median $r = .51$
Intellectance	Intellect/Openness	$r = .33$ to $r = .69$; Median $r = .57$
School Success	Intellect/Openness	$r = .05$ to $r = .35$; Median $r = .30$

Note. Coefficients summarize HPI relations with the NEO PI-R (Goldberg, 2000), Goldberg's (Goldberg, 1992) Big-Five Markers (Hogan & Hogan, 1995), Personal Characteristics Inventory (Mount & Barrick, 1995), and the Inventario de Personalidad de Cinco Factores (Salgado & Moscoso, 1999).

As shown in Table 2, the primary scales are composed of 41 facet scales. Facet scales are small clusters of items which, when combined, compose the primary personality scales. The number of facets range from four (School Success) to eight (Adjustment), and the number of items range from

three (eight scales) to six (No Guilt and Likes People). The HPI Manual (Hogan & Hogan, 1995) reports reliability and validity data. Overall, the HPI primary scales demonstrate adequate psychometric qualities (Axford, 1996; Lobello, 1996), with internal-consistency coefficients ranging between .71 (Likeability) and .89 (Adjustment) and test-retest coefficients ranging from .74 (Prudence) to .86 (Adjustment and School Success). The facet scales internal consistency coefficients range from .29 (Sensitive) to .82 (Leadership), and test-retest coefficients between .34 (Not Autonomous) and .86 (No Somatic Complaints).

Table 2

Hogan Personality Inventory Facet Scales

Primary Scale	HIC	Primary Scale	HIC
Adjustment	Empathy	Prudence	Moralistic
	Not Anxious		Mastery
	No Guilt		Virtuous
	Calmness		Not Autonomous
	Even Tempered		Not Spontaneous
	No Somatic Complaints		Impulse Control
	Trusting		Avoids Trouble
	Good Attachment		
Ambition	Competitive	Intellectance	Science Ability
	Self Confidence		Curiosity
	No Depression		Thrill Seeking
	Leadership		Intellectual Games
	Identity		Generates Ideas
	No Social Anxiety		Culture
Sociability	Likes Parties	School Success	Education
	Likes Crowds		Math Ability
	Experience Seeking		Good Memory
	Exhibitionistic		Reading
	Entertaining		
Likeability	Easy to Live With		
	Sensitive		
	Caring		
	Likes People		
	No Hostility		

Procedures for Computing the SPIQ Scale

Hogan and Hogan (2002) outlined the composition of the SPIQ construct. According to Hogan and Hogan, is composed of subscales from the HPI Ambition (No Social Anxiety and Self Confidence), Intellectance (Culture and Ideas), and Sociability (Entertaining) scales. We combined these subscales within each study included in the archive maintained by Hogan Assessment Systems and then computed correlation coefficients between the newly formed SPIQ scale and performance criteria. We used these coefficients to evaluate the validity of the SPIQ scale.

Procedures for Computing Validity Coefficients

Hunter and Schmidt's (1990) meta-analytic procedures were used for analyses. Studies used zero-order product-moment correlation coefficients. Corrections were made for sampling error, unreliability in the predictor and criterion measures, and range restriction in the predictor. From these procedures, results yielded: (a) sample-weighted correlation coefficients; (b) true and operational validity coefficients; and (c) the percentage of variance accounted for by sampling error and artifacts.

For the predictor, we computed internal consistency reliability and range restriction values within each study. In studies lacking the requisite information, we constructed artifact distributions (see Hunter & Schmidt, 1990) to estimate reliability and/or range restriction values. This approach corresponded to previous meta-analytic reviews (e.g., Barrick & Mount, 1991; Hogan & Holland, 2001; Hurtz & Donovan, 2000; and Tett, Jackson, & Rothstein, 1991).

Similarly, some studies did not include criterion reliability estimates or have sufficient information to obtain them. Therefore, we constructed two artifact distributions—subjective and objective criteria—to complete the criterion reliability matrices. First, in accordance with Barrick and Mount (1991), Hogan and Holland (2001), Hurtz & Donovan (2000), and Tett et al. (1991), we used Rothstein's (1990) single-rater reliability estimate of .508 to complete the reliability distribution for subjective performance evaluations. Second, consistent with Hogan and Holland (2001) and Salgado (1997), we used an objective performance criterion reliability of 1.00. Note that assuming perfect reliability is more conservative than using .55 as recommended by Hunter, Schmidt, and Judiesch (1990).

Finally, we averaged within study correlation coefficients to avoid biasing results by allowing a sample to contribute more than one correlation coefficient to each analysis (Hunter & Schmidt, 1990). This strategy ensured that each sample contributed only one correlation per predictor scale. Also this procedure includes both positive and negative correlation coefficients, and does not use absolute values.

Results

Before evaluating the validity of the SPIQ scale, we computed descriptive statistics to assess the psychometric properties of the newly formed scale. Based on archival sample of 30,438 employed adults, the average score on SPIQ (22 items) is 13.93 with a standard deviation of 4.23. The internal

consistency of the SPIQ scale is .74. Moreover, there are no meaningful differences on the SPIQ in terms of demographic group (gender, race, and age).

Table 3 presents the meta-analytic results of the SPIQ scale across studies. The sample-weighted validity of the SPIQ scale with overall performance is .23, with an estimated true correlation of .39. We were somewhat surprised by the magnitude of the true validity of SPIQ with overall performance. Previous research (Hogan & Holland, 2001; Holland, 2001) has consistently demonstrated that the validity of personality scales improve when aligned with criteria. Therefore, we expected the SPIQ scale to predict overall performance, but at a slightly more suppressed level. In keeping with the theme of aligning predictors and criteria, we also meta-analyzed the SPIQ scale in relation to construct-aligned criteria. For this analysis, we selected only Leadership criteria from the validation studies. As illustrated in Table 3, the estimated validity of SPIQ increases in magnitude. The sample-weighted correlation increases from .23 to .27 (17%) and the estimated true validity increases from .39 to .47 (21%).

Table 3
Meta-analysis of SPIQ with Overall and Leadership Criteria

SPIQ and Criterion	K	N	r_{obs}	p_v	p	% VE	90% CV
SPIQ with Overall	24	3,817	.23	.35	.39	62	.26
SPIQ with Leadership Ratings	24	3,817	.27	.42	.47	100	.47

Note. K = number of studies; N = total number of participants within K studies; r_{obs} = sample-weighted correlation; p_v = operational validity (corrected for range restriction in the predictor and criterion unreliability only); p = estimated true correlation (same corrections as for operational validity with the addition of predictor unreliability); % VE = percent of variance explained; and 90% CV = credibility value.

The results presented in Table 3 lead to two general conclusions. First, the SPIQ scale is both a valid and generalizable predictor across management jobs. In fact, the estimated true validity of the SPIQ scale rivals that of other, more research occupational scales such as Integrity (Ones, Viswesvaran, & Schmidt, 1993) and Customer Service (Frei & McDaniel, 1998). Second, the results of this study provide additional support for aligning personality-based predictors and job performance criteria. The finding that the magnitude of the validity coefficients increase after aligning predictors and criteria supports earlier results presented by Hogan and Holland (2001) and Holland (2001).

Discussion

SPIQ is a psychological syndrome operationalized by combining subscales from the Hogan Personality Inventory (HPI: Hogan & Hogan, 1995) Ambition (No Social Anxiety and Self Confidence), Intellectance (Culture and Ideas), and Prudence (Mastery) scales (Hogan & Hogan, 2002).

This is the profile of a leader who seems rewarding to work with, concerned about the welfare others, and to be upbeat and self-confident. The results of this study suggest that the SPIQ scale is both a fair (based on demographic group comparisons) and valid predictor of leadership performance.

Regardless of whether the criterion is “overall performance” or “leadership,” SPIQ is a valid predictor. Consistent with previous research (e.g., Hogan and Holland, 2001; and Holland, 2001), the results of this study show that the validity of the SPIQ scale improves when aligned with relevant performance criteria. In addition, the estimated true validity of the SPIQ scale rivals the validities of other personality-based syndrome scales such as Integrity (Ones et al., 1993) and Customer Service (Frei & McDaniel, 1998).

SPIQ represents one of the most promising leadership-related research streams conducted to date. Unlike earlier research, SPIQ is linked to a theoretical framework, and early empirical evidence supports its application. SPIQ provides one way in which an individual’s sociopolitical competency can be reliably assessed and predict real-world leadership effectiveness.

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