

Personality and Job Performance: A Research Overview

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1998

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Two assumptions of competency-based human resource management (CBHRM) are that practitioners can identify the knowledge, skills, abilities, and other attributes (KSAO's) required in a given organizational role and, subsequently, measure or assess the degree to which these KSAO's are possessed by individuals. Most competency models, and the competency profiles that result from applying them, contain elements that are related to aspects of the individual's personality. Research has consistently shown that, in addition to knowledge, skills and abilities, personality - one of the "O's" in KSAO - is an important predictor of job performance, particularly contextual performance and person-organization fit.

There is not, however, a formal system or set of instruments in place for assessing personality, as related to job performance, in the Canadian federal public service. This has traditionally been done by a variety of means under the rubric of assessing an individual's *personal suitability* for a given role or job. There is an extensive literature examining the role of personality in relation to job performance, both in applied and academic settings. The purpose of this paper is to provide an overview this research, and its implications in the context of CBHRM and personnel assessment.

Personality and Job Performance

Prior to the late 1980's, it was generally assumed that the link between personality and job performance was tenuous at best. Research findings were inconsistent. In the last decade there have been a series of advances which unequivocally demonstrate that personality, as assessed through standardized instruments, has a predictive relationship with job performance approaching, and in some cases exceeding, that of cognitive ability. The greatest single advance in personality research has been the emergence and broad acceptance of the Five Factor model of personality, commonly referred to as the "Big Five" (Digman, 1990; Hogan, Hogan, & Roberts, 1996). The Big Five are bipolar dimensions of personality that have been found to form the taxonomic (and factorial) core of personality models and also capture lay-persons descriptions of personality as found in everyday language. The Five Factors are presented on the following page.

Table 1: The Big Five Taxonomy of Personality

Big Five Factor	Alternate Names	Sample Associated Trait Descriptions <i>- Positive Pole</i>	Sample Associated Trait Descriptions <i>- Negative Pole</i>
<i>Extroversion</i>	Surgency, Assertiveness	Sociable, Gregarious, Assertive, Talkative, Active, Ambitious, Expressive, Energetic, Enthusiastic, Outgoing	Quiet, reserved, Shy, Retiring, Taciturn, Inhibited
<i>Conscientiousness</i>	Conformity, Dependability	Careful, Thorough, Responsible, Planful, Persevering, Achievement Oriented, Efficient, Self- disciplined, Diligent	Inconsistent, Impulsive, Undisciplined, Unreliable
<i>Emotional Stability</i>	Neuroticism	Calm, Relaxed, Self- Confident, Steady, Easy-going	Anxious, Depressed, Angry, Worried, Insecure, Tense, Vulnerable, High- strung
<i>Agreeableness</i>	Likeability, Friendliness	Courteous, Flexible, Cooperative, Tolerant, Caring, Trusting, Supportive, Altruistic, Sympathetic, Kind, Modest	Spiteful, Self-Centred, Self- Aggrandizing, Hostile, Indifferent, Cold, Coarse, Mean- spirited
<i>Openness to Experience</i>	Culture, Intellectance, Inquiring Intellect	Imaginative, Creative, Curious, Cultured, Sharp-witted, Broad- minded, Inventive, Insightful, Complex	Simple, Concrete, Narrow, Imitative, Unimaginative

Since the introduction and general acceptance of the Five Factor model in the early 1990's, research examining the link between personality and job performance has intensified. Almost a decade of research in academic and applied settings has accumulated supporting the assertion that personality can be reliably measured and is a valid predictor of job performance for most jobs. Recent research has demonstrated that personality assessment contributes unique information to the prediction of job performance, over and above that offered by methods such as cognitive ability testing and managerial assessment centres (Goffin, Rothstein, & Johnston, 1996). Two widely cited meta-analyses (Barrick & Mount, 1991; Tett, Jackson, & Rothstein, 1991) present

evidence from over 200 studies examining the personality-job performance link and conclude that, at the broadest level, conscientiousness is positively related to job performance across the majority of mainstream job types (the exception being the most creatively demanding "jobs" such as artist and musician, where high levels of conscientiousness can be detrimental to performance).

The predictive utility of personality assessment is enhanced when job type and personality constructs are matched, either based on the findings of previous research, rational analysis, or a thorough personality oriented job analysis (Raymark, Schmit, & Guion, 1997). This is to say, different jobs demand different personality profiles (Hogan, 1996). For example, studies have shown that for sales jobs, extroversion and agreeableness are highly predictive of performance. For blue-collar workers conscientiousness and agreeableness show a positive relationship to job performance while extroversion and openness to experience are shown to be unrelated or in some cases negatively related to performance.

Hogan's (Hogan, 1996; Tokar & Swanson, 1995; Tokar & Fischer, 1998) approach achieves this matching by using Holland's (1985) Six Factor Occupational Themes (RIASEC - Realistic, Investigative, Artistic, Social, Enterprising, Conventional) to determine personality requirements of a given job. For example the dominant Holland Occupational Theme for a truck driver is Realistic/Conventional, therefore the personality for best fit in this case would be an individual with higher than average conscientiousness (low impulsiveness) and emotional stability. A more recent method that shows promise for determining the personality requirements for a given position is the Personality-Related Position Requirements Form - *PPRF* (Raymark, et al., 1997).

Personality and Leadership

There is an extensive history of research examining the link between personality characteristics and effective leadership. Personality characteristics have been shown to predict overall leader effectiveness in terms of business outcomes, the ability of the leader to build an effective team, subordinate ratings of leader effectiveness, and executive derailment. Furthermore, personality is also predictive of emergent leadership - that is, early identification of leadership potential. Generally, it has been demonstrated that, in terms of the Big Five personality model, Extroversion (Surgency), Agreeableness, and Emotional Stability are highly predictive of leaders' performance. (Hogan, Curphy & Hogan, 1994).

Research using the Myers-Briggs Type Indicator has shown that there is a marked shift in characteristic MBTI types as one moves up the corporate ladder. For example, NT (Intuiting-Thinking) types are over-represented at higher levels of management and ST's (Sensing-Thinking) are over-represented at lower management levels. This makes

sense when one considers the differences in role demands between middle and senior management positions - i.e., the tasks at senior levels, such as visioning and strategy formulation tend to be more abstract versus the more concrete tasks found at lower management levels. These abstract types of tasks require a more intuitive approach for successful completion (Gardner & Martinko, 1996).

What can structured personality assessment add to personnel decision-making?

Recent research has clearly demonstrated that personality is a valid predictor of job performance, particularly when the unique personality requirements of the job have been accurately identified. Personality assessment is extremely useful in predicting contextual job performance as opposed to technical aspects of job performance (contextual performance being described, typically, as the "soft side" of work - interpersonal effectiveness, person-organization fit, etc.). In current public service staffing practices, personality comes in to play either explicitly or implicitly in decision-making, usually through personal suitability factors. For example, if one were to ask a hiring manager or job incumbent to list the attributes of a good performer in a given job, many of the characteristics listed would be personality constructs (e.g., reliable, curious, even-tempered, etc.).

Indeed, the La Relève Competencies for ADM's and Senior Executives contain many elements that can be intuitively mapped on to the Big Five taxonomy. This is because the competencies describe mainly contextual factors of effective performance at senior levels, rather than explicit technical and skill aspects of the ADM and Senior Executive role. Table 2 presents a hypothetical relationship between the 14 competencies and the Big Five taxonomy.

Table 2 -La Relève Competencies Mapped to the Big Five Model of Personality

La Relève Competency	Related Big Five Construct (Hypothesized)
Cognitive Capacity	Openness to Experience
Creativity	Openness to Experience
Visioning	Extroversion , Openness to Experience
Action Management	Conscientiousness, Emotional Stability
Organizational Awareness	Openness to Experience
Teamwork	Agreeableness, Emotional Stability, Openness to Experience
Partnering	Agreeableness, Conscientiousness
Interpersonal Relations	Extroversion, Agreeableness
Communication	Extroversion
Stamina / Stress Resistance	Emotional Stability
Ethics and Values	Conscientiousness
Personality	Emotional Stability, Conscientiousness
Behavioural Flexibility	Openness to Experience, Agreeableness
Self Confidence	Emotional Stability

Why isn't standardized personality assessment used more often in the Federal Public Service?

One might argue that structured personality assessment combined with other validated assessment methods (e.g., cognitive ability, assessment centres, structured interviews) might enhance HR practitioners' ability to match individuals to jobs or roles. There is strong research evidence that personality assessment contributes unique knowledge about the individual that can be used to make more accurate predictions of job performance.

The PSEA and the Standards for Selection and Assessment make provision for the use of personality assessment instruments in the staffing context (section 12(1) of the PSEA and 1 and 2 of the Standards). To the extent that aspects of personality can be shown to be job relevant (i.e., *bona fide* occupational requirements), performance related, and the method of assessment adheres to the guidelines and criteria set forth in the PSC document, *Testing in the Public Service of Canada*, personality assessment is allowed. However, there is little history of using these types of instruments in the federal Public Service outside of a research context. Some of the possible reasons for this trend are outlined below.

1. Part of the reluctance to assess personality using standardized instruments reflects a lag between the state of research on the subject and the state of application. Many HR professionals to operate under the unfounded assumption that personality can not reliably predict job performance. However, it is interesting to note that these same practitioners have few qualms about assessing personality characteristics, using less standardized methods, under the banner of "personal suitability".
2. The use of standardized personality assessment instruments has had a low acceptance rate among HR decision-makers and managers. This is perhaps related to a perceived lack of face validity of these instruments.
3. There are few HR personnel qualified to validate, administer, and interpret standardized personality assessment instruments.
4. Until recently, little was known about personality-oriented job analysis. However, recent developments in this area hold promise (e.g., Raymark, et al., 1997).
5. There is a lack of clear policy guidelines on assessing personality in the federal Public Service context .

6. The status of standardized personality assessment with respect to jurisprudence (appeals, etc.) is currently untested.

Concluding Remarks and Directions for Future Research

Based on evidence from current research, it can be concluded that structured personality assessment for the purpose of predicting job performance is promising, and provides an area of exploration and further research by the PSC. Given that the majority of competency initiatives result in profiles that contain, sometimes explicitly, competencies that are personality based, an examination of methods for identifying and assessing these competencies is warranted. There are a number of avenues for further research.

1. The PSC has data holdings from the CAP program that contain almost 20 years of personality assessment results. Over the years, various instruments were used as part of the assessment protocol for this program (e.g., the Jackson personality inventory, the 16PF, and more recently, the NEO inventory). In addition, similar data exist in the MTP and AETP archives. Although these tools were administered to prospective candidates, the resulting data have never been used as part of the selection process. Therefore, this is a completely uncontaminated data set. These data present a rare opportunity for both exploratory research and hypothesis testing with respect to the relationship between personality and job performance in the federal public service.
2. There have been several recent developments in personality based job analysis, the purpose of which is to reveal the personality characteristics that contribute to successful job performance. One tool that shows promise, the Personality-Related Position Requirements Form - *PPRF* (Raymark, et al., 1997), is currently being offered to researchers for further validation. The Research Directorate could run a pilot validation study using this instrument.
3. There are numerous instruments available that purport to measure the Big Five and, more explicitly, claim to have utility in employee selection. A further examination of these various tools for applicability to the public sector is warranted. The most promising instruments emerging from this review could be the focus of local pilot validation studies.

Note: Most readers will have been exposed to the Myers-Briggs Type Indicator (MBTI), as it is one of the most popular personality-type instruments. The MBTI is based

on one specific theory of personality (Jungian), which does not readily correspond to the broader and more robust Big Five model of personality. There is a literature that examines the Myers-Briggs Typologies as related to managerial performance (Gardner & Matinko, 1996) . This MBTI would be considered in any research undertaken.

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