Profesionally Developed
and Validated Assessment Systems

Technical Manual

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General Background

Why measure personality for business purposes?

The results from a wide variety of well-designed research studies have shown very strong evidence that personality affects job performance and that the links between personality traits and job performance are even stronger than previously thought. This should not be surprising. Hiring managers routinely ask questions related to working independently, working with a team, getting along with others, being dependable, being motivated, and being able to deal with stress. These issues are all related to adult personality traits and can be measured by well-constructed personality inventories.

Personality inventories also enhance fairness in the hiring process as the differences between majority and minority candidates sometimes found on other types of tests usually are not found with personality measures (Hogan & Hogan, 1995). Furthermore, protected groups seem to perceive personality tests as more "fair" than other types of tests (Chan, 1997). Of additional interest is that there is now a strong consensus in what is thought of as the most accurate representation of personality structure. In other words, the five factor model (FFM), or Big Five, has a great deal of support as a good base from which to build a personality trait measurement instrument (Hogan, Hogan, & Roberts, 1996).

History and Description of the Big Five

Personality began to receive renewed interest from academic researchers toward the end of the last century (Hogan, 1991; Hollenbeck and Whitener, 1988; Hough, 1992; Rothstein, Jackson, & Tett, 1994; Schmit, Ryan, Stierwalt, & Powell, 1995). This development was largely due to the popularity of the Big Five theory, which has received widespread acceptance (Tenopyr, 1994). The beginnings of the Big Five conceptualization can be traced to the work of Fiske (1949), who reexamined Cattell's data and found only five factors, rather than the sixteen Cattell proposed and popularized (in the *16 Personality Factor Inventory*). Tenopyr (1994) cited research by Tupes and Crystal (1961) that supported Fiske's findings. These early discoveries were further bolstered by similar results from other investigations (Borgatta, 1964; Norman, 1963; Smith, 1967). In fact, Digman (1990) reported that in addition to the research cited above, analysis of the data from all major trait theorists (e.g., Eysenck, Guliford, Murray) showed they all fit nicely into five factor solutions similar to the Big Five.

Ultimately, it was Digman's (1990) landmark review chapter that brought the notion of a five factor personality structure into the mainstream of industrial/organizational psychology. He brought together the earlier research and demonstrated that the five factors had been replicated under a wide variety of measurement methods. For example, Borgatta (1964) obtained five stable factors across five methods of data collection while studying small group interactions. Additionally, several cross-cultural studies found factor structures strikingly similar to the Big Five. Research in the Philippines (Guthrie & Bennet, 1970), Japan (Bond, Nakazato, & Shiraishi, 1975), Germany (Amelong & Borkenau, 1982), and Israel (Birenbaum & Montag,

1986) supported the five factor structure. The five factor model was founded to be universal across fifty cultures in a study by McCrae and Terracciano (2005).

Despite the robustness of the Big Five, there has been some disagreement over the meaning of each dimension. According to Barrick and Mount (1991), disagreement should not be surprising given the broad nature of the factors. Nevertheless, they offered one of the most complete descriptions of the five factors. The first factor, *extraversion*, is generally associated with traits such as being sociable, gregarious, assertive, talkative, persuasive, spontaneous, and driven. The second factor is *emotional stability* and includes such traits as security versus anxiety, happiness versus depression, calmness versus anger, restraint versus impulsivity, and patience versus impatience. The third factor is *agreeableness*, which consists of traits such as being courteous, flexible, good-natured, easygoing, cooperative, forgiving, and soft-hearted. The fourth dimension is *conscientiousness* and is represented by traits such as being careful, thorough, responsible, traditional, conforming, procedural, organized, planful, and detail-oriented. The last dimension, *openness to experience (*also referred to as *intellectance)*, is associated with traits such as being imaginative, innovative, broad-minded, analytical, and intelligent. Other researchers (e.g., Carnivez & Allen, 2005 and Grucza & Goldberg, 2007) have found consistent factors and similar structures across a variety of different personality measurement instruments.

As technology advances in society so too does the method in which personality is evaluated. Paper-and-pencil testing, although a staple in organizational research, is becoming increasingly outdated as smartphones, tablets and personal computers become more sophisticated and readily available for job applicants to access. Multiple studies have shown favorable results in comparing internet-based Big Five testing with paper-and-pencil. Salgado and Moscoso's (2003) findings revealed that: both versions of the Big Five questionnaire (paper-and-pencil and internet-based) were equivalent in terms of distribution, reliability, and factor structure; and that examinees perceived the internet-based version of the test as more comfortable, less intimidating, and preferable to the paper-and-pencil version.

Meta-Analytic Research on the Big Five

The Five Factor Model (FFM) gained in popularity after positive findings in meta-analytic studies (Barrick and Mount, 1991; Tett, Jackson, and Rothstein, 1991). In the Barrick and Mount meta-analysis the relationships between the Big Five were investigated using five occupational groups (professionals, police, managers, sales, and skilled/semi-skilled) and three types of performance criteria (job proficiency, training proficiency, and personnel data). Generally, the results indicated conscientiousness was a valid predictor across all jobs and performance criteria. This positive finding combined with the relatively low correlation between conscientiousness and cognitive ability led the authors to call for research using a combination of these two predictors. Extraversion was an effective predictor of all criteria with two job types (managerial and sales). Such a finding was not surprising given the importance of social interaction for these positions. Openness to experience was only useful in predicting training success. This seems to be because individuals who scored higher on this dimension had more positive attitudes towards learning experiences in general.

Contrary to their hypothesis, emotional stability was not generally predictive of performance and showed relatively low correlations with the criteria. This result may have been due to a curvilinear relationship with performance or the possibility that emotional stability may be more susceptible to response distortion (an issue to be discussed shortly). Additionally, many of the studies concerned with emotional stability used the MMPI which made them problematic since that instrument was developed and normed for abnormal populations. However, later research (Saulson & Page, 2004) has shown that the FFM is very useful in the prediction of personality disorders and pathologies, especially high scores on neuroticism and low scores on agreeableness.

In the Tett et al. meta-analysis, several aspects of personality scale validity were investigated. Their general conclusion was that research results provide optimism concerning the use of personality measures in employee selection. More specifically the authors made several recommendations for future research in this area. For example, they stressed the importance of having theoretical links between personality and performance constructs. This point was crucial, as one would not expect validities of personality measures, with their broad array of traits, to generalize across jobs to the same extent as cognitive ability measures (Anastasi, 1985).

In fact, Tett et al. proposed that a lack of theoretical predictor-criterion links contributed to the poor results found earlier by Guion and Gottier (1965). Guion and Gottier even acknowledged the possibility in their article. Ultimately, Tett et al. found a much broader range of utility for personality measures than did Barrick and Mount. That is, they found that emotional stability and agreeableness may, in fact, be useful predictors. There could be a multitude of reasons for the differences found in these studies of the usefulness of the Big Five. Obviously, choice of study for inclusion is one possibility. Other potential influencing factors beyond choice of studies for inclusion in the meta-analyses may be at work. For example, composition of the sample (e.g., students, applicants or incumbents), instruments employed (as different tests measure the Big Five somewhat differently), and response distortion might have accounted for some of the variation in the results.

Meta-analytic research on the Big Five include not only trait-level examination but facet-level evaluation of Big Five traits (Judge et al., 2013; Tett, Steele, and Beauregard, 2003). These studies established evidence for criterion validity of narrow level traits on performance, effectively decreased past skepticism about the usefulness of personality measures in predicting job performance (e.g., Morgeson et. al., 2007), and also demonstrated both the importance and incremental validity of measuring multiple, narrow personality traits over and above broad traits. Conscientiousness (specifically the achievement striving and competence facets) is the strongest positive predictor of job performance, while extraversion (specifically the activity and assertiveness facets) and agreeableness (specifically the compliance and tender-mindedness facets) also seem to consistently positively predict job performance (Barrick & Mount, 1991; Hurtz & Donovan, 2000; Judge et al., 2013). To address these recent findings, the BCL (eTest Personality Profile) was designed and validated with both trait- and facet-level measurements taken into account.

Stability in Personality Testing

One concern with the use of personality tests in employee selection was that traits may not be stable, leading to difficulties predicting performance over the long term.

In terms of personality changes with age, Costa and McCrae (1986) reviewed several longitudinal studies and found few differences (Cattell, Eber, and Tatsuoka, 1970; Costa and McCrae, 1978; Leon, Gillum, Gillum, and Gouze, 1977; Siegler, George, and Okun, 1979). One exception was a study of college-age males where Mortimer, Finch, and Kumka found increases in sense of competence and decreases in sociability and unconventionality ten years after college (cited in Costa & McCrae, 1986). Thus, it would seem that some change is possible during developmental periods such as the transition to adulthood. However, even in this case the changes were very small (i.e., less than one quarter standard deviation).

While personality traits are relatively stable over time, there may be gradual changes in some traits over a lifespan. In a more recent update to this research on stability in personality testing, Srivastava et al. (2003) found that, rather than being set like plaster, some personality traits may gradually change over time. Specifically, conscientiousness and agreeableness showed increases throughout adulthood. Neuroticism decreased for women but did not change for men. The effect sizes for these changes were small to moderate, with only very small changes observed in extraversion and openness.

Additional research has shown that the changes seen over time may actually be the result of measurement error as opposed to true psychological change (Watson, 2004). Retest data of the Big Five demonstrated that highly correlated measures of the Big Five showed significantly different levels of stability, even over 2-month intervals during which any true change would be minimal. Results from this study also indicated that personality tests as measured by Big Five scales had medium to large short- and long-term stability correlation coefficients, respectively, and that they were significantly larger than the coefficients for affectivity stability scales. In concordance with the recommendations for improving stability of personality scales proposed by Watson (2004), the utilization of theoretically meaningful retest intervals, large sample sizes, and benchmark scales that permit comparative tests of stability, have been utilized in the creation of the instrument.

Impression Management in Personality Testing (Faking)

Another issue presumed to be a problem with personality testing is faking (Furnham, 1986; Furnham, 1990; Tett & Christiansen, 2007). That is, given the seemingly transparent nature of the instruments and the potentially high motivation of job applicants to distort responses in a self-serving manner, has faking been a problem undermining the use of personality tests? Investigations have attempted to answer this question for decades (Meehl and Hathaway, 1946). Several studies demonstrating that individuals could fake their personality inventories if requested to do so made this a problematic issue with the use of personality tests (Schwab, 1971; Velicer and Weiner, 1975), while another study indicated that those who fake the most will tend to make the worst employees as the amount of faking is negatively related to the personality trait being assessed (Griffith and Yukiko, 2007; Tett and Christiansen, 2007). Additional studies yielded evidence

suggesting that faking attenuates personality test validity in true hiring situations (as opposed to laboratory settings) (Tett et al., 1999; Ones et al., 1993; Hough, 1998).

Moreover, "the possibility of response distortion is often cited as one of the main arguments against the use of personality measures to aid in selection decisions" (Hough, Eaton, Dunnette, Kamp, & McCloy, 1990; Morgeson et al., 2007). Tett and Christiansen (2007) decried the criticism of personality testing in personnel selection and revealed that, although faking under true hiring conditions weakens personality test validity, personality testing validity is still sufficiently strong enough to warrant use of personality testing in hiring. The evidence appears to strongly indicate that faking is not much of a problem. However, in order to err on the conservative side, the BCL (eTest Personality Profile) was designed with several validity scales, and several new ones were developed in the recent re-norming of the instrument (see Validity Scale section).

Conclusion

From the earliest scientific studies to the most recent findings, there is consistent and widespread support for the use of personality measures as helpful components of employee selection and development/coaching. Well-constructed personality inventories have been shown to be valid, fair and consistent predictors of success in a wide range of jobs across a broad cross-section of employment settings. With this solid scientific basis for the use of personality testing in organizations, we now turn to the eTest battery of instruments.

eTest Background and Development

The eTest personality inventory was originally developed as an effort to provide an easy, accessible, business-relevant, and business-normed instrument to help in candidate selection and employee development. The goal was to create a good descriptive measure of normal adult personality, as well as empirical profile of performance-based scales. At the time of its conception and development, most of the mainstream commercially available psychological assessment measures were more clinically oriented and, although some of them could be adapted for the business environment, there was a need for something that would be more appropriate for candidate and employee assessment for selection and development. The tool was called the Business Check List (BCL) and has more recently simply come to be known as the eTest personality inventory. Since its introduction as a tool to help managers make better selection decisions with entry level candidates, it has evolved into a general-purpose personality inventory that has proven to be useful for mid-level and executive selection and development purposes.

The eTest battery was developed over a ten-year period as part of a standard test battery for full psychological assessments conducted by the licensed psychologists of Management Psychology Group (MPG). The initial sample for development and validation consisted of over 4,000 subjects in a wide range of jobs and industries.

The use of natural language to describe human traits is a cornerstone of personality measurement, first applied by Allport in 1936. Since then, it has been extensively used and refined in a wide variety of assessment instruments. The ACL (Adjective Checklist – Gough, 1983) is an example of this natural language format of assessment. However, since respondents were free to choose the number of items they endorsed as descriptive of them, the scoring, for our purposes, was problematic. Such ipsative instruments, while useful in certain situations, do not lend themselves to the type of statistical analysis useful for comparisons of individuals or for traditional validation studies. Also, the ACL had been developed as more of a research tool and was considered to be ideographic (focused on the individual, not developed for comparisons of traits between individuals). As the ACL was developed and refined, it became more slanted towards counseling and clinical uses than towards business and organizational applications, and several of the scales were clearly inappropriate (and illegal) in the emerging regulatory environment.

To preserve the positive and useful advantages of the adjective checklist format and to avoid the problems associated with the ACL, we decided to continue to use adjectives and descriptive phrases but to use a rating scale to indicate a person's amount of agreement or disagreement that any particular term described him or her. We originally called this instrument the Business Check List (BCL) to indicate that it was a more business-oriented adjective checklist. It is now referred to simply a the eTest Personality Inventory.

The original instrument consisted of 500 adjectives and descriptive phrases. After the initial pilot projects, we eliminated those items that virtually everyone either endorsed or rejected. For instance, the vast majority of normal people endorse the words *intelligent* and *honest* when faced with those adjectives as descriptors of themselves on a personality inventory. Therefore, they are useless as discriminators in any meaningful sense.

The current instrument consists of 317 items, each of which requires the respondent to indicate how accurately the term describes him or her.

There are three primary sets of scores generated by this instrument. The first group is from a factor analysis that reflects the **Structure of Personality** (the Big Five personality factors). The **Job Function Similarity** cluster of scores was obtained from correlating test results of over 800 people with demographic data about the type of job the person held or for which he/she was a candidate. Finally, the **Job Performance Predictions** were derived by correlating actual managerial ratings of over 5,000 people several months after they had taken the instrument. In addition to the normative scales mentioned above, there are several validity measures that can facilitate the proper interpretation of test profiles.

The full eTest battery consists of a 317-item adjective-checklist-format personality inventory and two cognitive measures. The cognitive measures consist of verbal knowledge (vocabulary) and a general deductive reasoning assessment. These components of the battery are described more fully in the following sections.

The eTest personality inventory has been taken by over 150,000 people as part of candidate selection, employee development, personal insight and career planning purposes. It is currently offered as a standard online instrument for selection and development and remains a component of the full psychological assessment process used by the licensed psychologists of Management Psychology Group.

This manual provides the rationale and background for the development of these instruments and clear evidence for their validity.

Factors Measured by eTest

A factor analysis of over 10,000 profiles confirmed that the eTest personality inventory reflects the Five Factor structure of personality observed by other researchers. These primary factors are **Extraversion, Emotional Reactivity, Behavioral Control**, **Agreeableness** and intellectual **Complexity**. These are often referred to as the Big Five personality factors.

These factors are considered to be traits. That is, they influence behavior in consistent ways in a wide range of environments. They are deeply ingrained behavioral patterns which endure over time. They are quite useful in helping people understand themselves and others, but they describe relatively broad patterns of preferences and behavior and some precision may be lost if we limit our analysis only to the Big Five. Therefore, we conducted a second factor analysis on each primary dimension to obtain a set of subscores, or facets, for each one. Although these facets are obviously correlated with each other and with the primary scale, they can help to further refine our understanding of the way each primary dimension may be manifested on the job. For instance, a high score on Control may reflect not only a high level of discipline (usually a good sign for job success), but it also may indicate an obsessive focus on details (sometimes a danger signal). Looking at the facets contributing to the primary factor score can be a great help in determining whether that particular score is likely to be a positive or negative in the work setting under scrutiny.

Scoring

The scores for eTest reports are in a Standard Ten (sten) format. Sten scores range from one to ten, with 5.5 being the midpoint. About 66% of people will score between 4.5 and 6.5 on a sten scale. The sten scoring system is used in psychometric several instruments. With personality inventories, the closer a score is to one or ten, the more likely it is that this reflective of a strong characteristic. For instance, a person with a one or two on extraversion is likely to be much more socially reserved and self-contained than a person with a nine or ten on this scale, who in turn is likely to be quite outgoing and social. In a normally distributed population of scores, the percentages of people at each sten score position are shown in the table below.

Percent	2.3%	4.4%	9.2%	15.0%	19.2%	19.2%	15.0%	9.2%	4.4%	2.3%
Sten	1	2	3	4	5	6	7	8	9	10

Primary and Facet Personality Scores

Extraversion. This is a well-researched and much-discussed primary personality factor. At the most basic level, this is generally viewed as an orientation towards the external world (people, things, events, etc.) or toward the internal world of thoughts, feelings and ideas. A large component of extraversion is the need for social contact versus a preference for solitary pursuits. High scorers on this measure describe themselves as *sociable, gregarious, extraverted, group-oriented,* and *expressive*. They do not use terms such as *quiet, low-key, shy* or *introverted* in their self-descriptions. Low scores are often indicative of a mild, reserved and relatively unexpressive social style. Since people in the general business population score high on measures of extraversion, an average score on this dimension suggests that the person will probably seem relatively extraverted when compared to people in general.

> ***Persuasive.*** This facet score may not reflect how persuasive the person really is, but it gives an indication of how well the person perceives him/herself to be. People who describe themselves with such terms as *leader, role model, persuasive, politically skilled, socially astute, convincing* and *optimistic* get high scores here.
>
> ***Talkative.*** People with a high score on this scale do not see themselves as *quiet, reserved, silent, soft-spoken, shy, subdued, mild, inhibited* or *restrained.*
>
> ***Actively Friendly.*** High scores on this facet are obtained by people who describe themselves as *sociable, talkative, witty, charming, outgoing, gregarious, chatty, lively* and *humorous.*
>
> ***Bold.*** People with high scores on this facet see themselves as *daring, adventurous, spontaneous, bold, driven, energetic* and *aggressive.* They do not see themselves as *non-confrontational.*

Emotional Reactivity. This factor has been identified by some researchers as anxiety, neuroticism and emotionality. It reflects the tendency to be tense, anxious, emotional or high-strung. However, since the instrument was normed on a generally well-adjusted group (businesspeople as a population typically score higher as a group on measures of psychological stability and emotional adjustment than do people in the general population), a high score on this measure doesn't necessarily indicate pathology or abnormality when compared to the general population. The facet scores are likely to be a better indicator of potential problems. However, if the primary score is extremely high, the person may be stress-prone, volatile or going through a particularly upsetting or anxiety-provoking experience. In the case of extremely high scores, always try to find out if they are an indication of State Anxiety (a response to a particularly stressful situation) or Trait Anxiety (a more generalized pattern of tension, emotional reactivity or anxiety).

People scoring high on the primary factor of Emotional Reactivity describe themselves as *tense, anxious, easily upset, impulsive, emotional* and *reactive.* Low scorers see themselves as *relaxed, calm, stress-tolerant,* and *complacent.*

> ***Worry-Prone.*** This is the sub-factor that is probably most strongly related to potential stress-proneness. People getting high scores here describe themselves as *nervous, worrying, insecure, frustrated, preoccupied, moody, uncomfortable, stress-prone, anxious, suspicious* and *self-punishing.*

Expressive. This facet reflects a theme of excitability and tendency to seek attention rather than the more uncomfortable aspects of the facet described above. People scoring high here see themselves as *status-seeking, attention-seeking, power-oriented, pleasure-seeking, ego-driven, excitable, extreme, impulsive, loud* and *emotional.*

Frustration-Prone. High scorers on this scale tend to show a direct, stubborn and hot-headed style of dealing with frustration, tension and anxiety. They describe themselves as *hard-headed, argumentative, controlling, impatient, stubborn, intimidating, hot-tempered, moody, brusque, agitated, headstrong,* etc.

Behavioral Control. This dimension is related to discipline, focus, tenacity and organization. High scorers tend to control their expressions of feeling and emotion and operate according to rules and structure. They often feel a keen sense of duty and responsibility. They tend to describe themselves as *disciplined, conscientious, tenacious, stubborn, inflexible* and *controlled.* Low scorers see themselves as *spontaneous, adaptable, undisciplined, careless* and not *detail-oriented.*

Disciplined. People with high scores on this facet choose terms such as *timely, prompt, prioritizer, follow-through, disciplined, organizer, advance planner, steady* and *task-focused* in describing themselves. They do not choose such descriptors as *procrastinator* or *untidy.*

Conforming. High scorers here see themselves as *conventional, traditional, conforming, conservative, by-the-book, rule-following, cautious, obedient, structured,* etc. They do not describe themselves with such adjectives as *unconventional, non-conforming, routine-hating* or *unstructured.*

Detail-Oriented. People who describe themselves as *precise, detail-oriented, exacting, inspecting, methodical, perfectionistic, procedural, monitoring, technical* and *structure-seeking* will get a high score on this sub-scale.

Agreeableness. People scoring high on this factor are likely to try to get along with others and to maintain harmonious relationships. They are typically approachable and cooperative, tending to describe themselves as *cooperative, likable, approachable, soft-hearted* and *easygoing,* and not to use adjectives such as *blunt, intense, driven, abrupt* or *direct* when describing themselves.

Tolerant. People who get high scores here describe themselves as *flexible, good-natured, warm, praising, generous, forgiving, tolerant, gentle, humorous* and *trusting.* People who seek to build and maintain harmonious relationships and who often have strong needs to be liked tend to get high scores on this scale.

Easygoing. High scorers are likely to use such terms as *laid-back, patient, leisurely, easygoing, mild, too nice, easy-to-know, good follower, accepting, peaceable* and *humble* in describing themselves. They are not likely to describe themselves as *intense, impatient* or *driven*.

Sympathetic. People scoring high on this facet describe themselves as *feeling-oriented, sentimental, affectionate, soft-hearted, sensitive, sympathetic, pleaser, warm* and *gentle,* etc. They show emotional warmth and supportive involvement with people. They may have difficulties making tough decisions regarding people.

Complexity. This factor is related to intellectual curiosity, openness to information, independence of thought and the ability to keep long-term objectives in mind. High scorers describe themselves as *strategic, free-thinking, dogged, reflective, imaginative, unconventional, intellectual,* etc. They don't generally use such terms as *tactical, complacent* or *apathetic* in describing themselves. Low scorers tend to be hands-on, to have focused interests and to have little inclination towards intellectual or academic issues.

> ***Strategic.*** People with high scores here choose terms such as *unflagging, dogged, unwavering, staunch, non-conforming* and *unconventional* to describe themselves. They don't describe themselves as *apathetic* or *complacent.*
>
> ***Planful.*** High scoring people on this factor describe themselves as *intellectual, reflective, thinking-oriented, methodical, precise, analytical, scholarly* and *deliberate.*
>
> ***Divergent Thinking.*** People with high scores on this dimension choose terms such as *creative, imaginative, inventive, visionary, free-thinking, innovative, resourceful, intuitive, curious* and *insightful* to describe themselves.

Job Functional Similarities

These scales were derived empirically by correlating eTest Personality Inventory profile patterns with demographic job function data. These scales indicate the similarity in self-perceptions between the candidate and people in several broad job function categories. These scores are not measures of aptitude or proficiency in the job function. For instance, a candidate may have a high score on the Creative Profile scale, indicating that he/she has many things in common with people in creative jobs (e.g., advertising and some marketing functions) but may show little or no genuine creativity on the job. Also, a person may have a low Administrative Profile score, indicating a lack of similarity with people in administrative roles, but still possess strong administrative skills and aptitudes.

Manager. People scoring high here are not necessarily good managers but they are typically more similar, at least in self-perception, to people who are in managerial roles than to those who operate as individual contributors. They are likely to be seen as forceful, demanding, routine-avoidant and insensitive. They typically choose such terms as *expert manager, delegator, forceful, leader, mentor, nervy, impatient* and *demanding,* among others, to describe themselves.

Sales. Although not a measure of sales ability, high scorers tend to be assertive, bold, stress-tolerant and socially dominant, characteristics associated with success in a broad range of sales environments. They describe themselves as *assertive, public speaker, bold, easy-to-know, attention-seeking,* etc. They do not choose such self-descriptors as *shy, social discomfort, reserved, overloaded, private* or *mild.*

Customer Service. High scorers are similar to people in customer service and support jobs where a premium is placed on cooperative, supportive and non-defensive contact with people. They are likely to describe themselves as *flexible, peaceable, good-natured, generous, unselfish, patient, mild, soothing, bending,* etc.

Factors Measured by the eTest Battery

Technical Orientation. This is an indication of similarity with people in technical positions. People scoring high on this scale describe themselves with such terms as *technical, scientific interest, analytical, precise, methodical, thinking-oriented, reserved, tolerant, scholarly, investigative, detail-oriented* and *procedural*, among others. They do not choose such descriptors as, e.g., *hyper, impulsive, talkative, emotional, attention-seeking* and *aggressive.*

Creative. People scoring high here see themselves similarly to the way people in roles requiring creativity see themselves. They describe themselves in such terms as *inventive, creative, honest critic, leader, energetic, follow-through, wide interests, reflective, warm, role model* and *intuitive.* They do not describe themselves as, e.g., *passive, subdued, apathetic, conforming* or *distractible.*

Administrative. High scorers are similar to people in general administrative roles. They tend to describe themselves with such terms as *administrative, reserved, peaceable, mild, unpretentious, conservative, good natured, timely, quiet, conscientious, good follower* and *steady.*

Job Performance Predictions

The following scales were developed by researching the statistical relationships between the personality inventory score patterns and actual job performance as rated by supervisors. Six to nine months after a person takes the instrument as part of a full psychological assessment or as a stand-alone interview guide generator, a performance rating for that person is sent to the hiring manager. This process provides a unique database for linking test scores to actual job performance. The higher the score, the more likely it is that the candidate will receive a favorable rating on the particular job performance dimension described below.

Dependability. People scoring high on this scale have profiles similar to those of people who are rated high by their supervisors/managers on dependability, conscientiousness, meeting deadlines and living up to commitments. They describe themselves in such terms as, e.g., *conscientious, perfectionistic, persevering* and *deferent.* They do not tend to describe themselves as *salesy, visionary, maverick, adventurous* or *intimidating.*

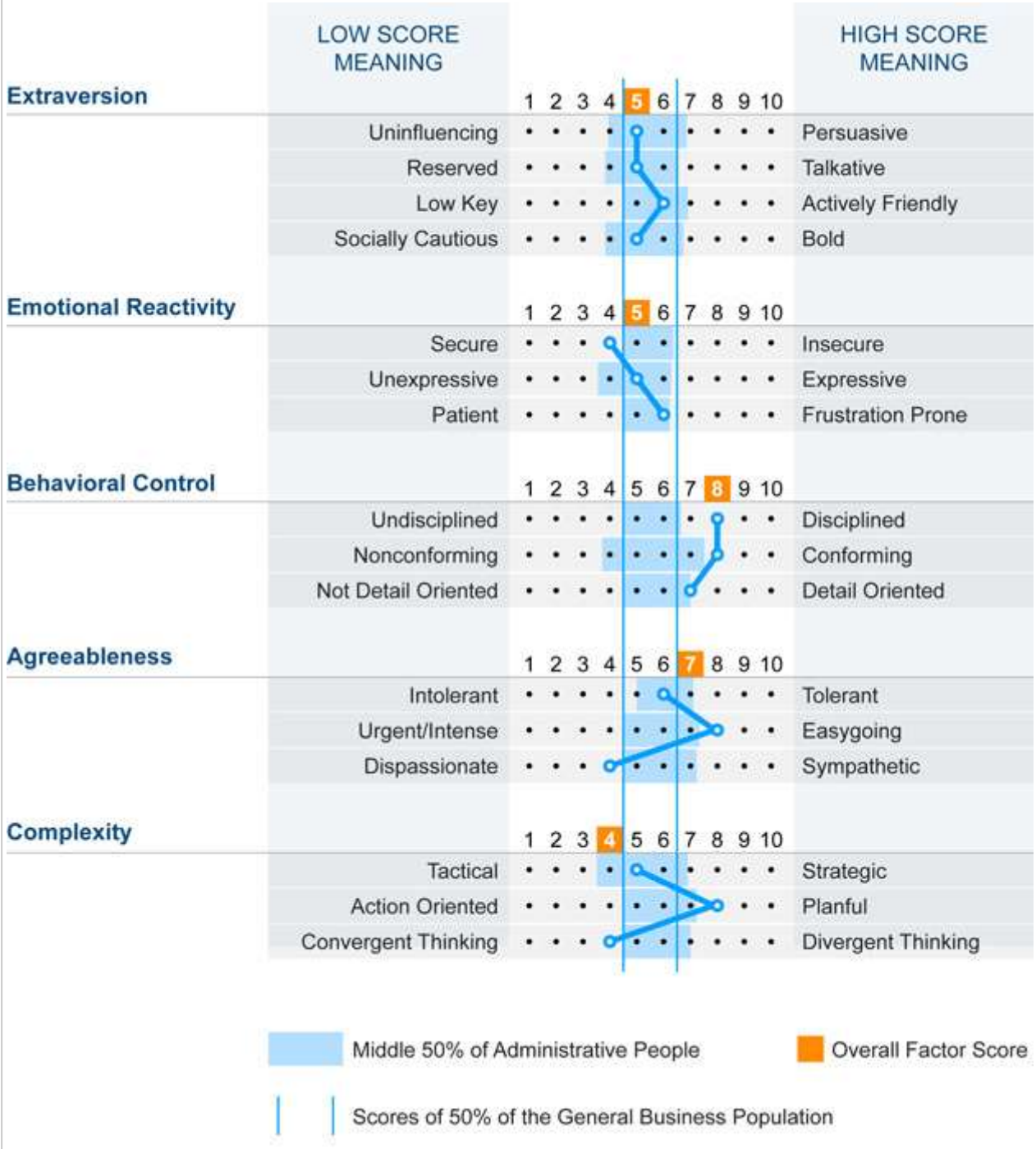
Motivation. High scorers are likely to be rated positively on being motivated and visibly demonstrating energy, effort and drive, but this may be more closely related to the *expression* of enthusiasm rather than motivation as such. They choose terms such as *driven, leader, expert, tenacious* and *energetic* in describing themselves. They don't generally describe themselves with words such as *passive, subdued, apathetic, conforming* or *soft-spoken.*

Interpersonal Skill. Individuals with high scores here have similar profiles to those of people who are seen by their superiors as having good interpersonal skills. They tend to describe themselves as, e.g., *deferent, rapport-building, secure, contented, warm* and *affectionate.* They don't often describe themselves as *suspicious, technical, moody, moralistic, shy, defensive,* etc.

Organizing Habits. People scoring high on this dimension have similar patterns of responses to those of people who are rated by their managers/supervisors as having good administrative, organizational and planning skills. They describe themselves with such words as *equitable, insecure, conscientious, perfectionistic, stress-prone, unwavering* and *committed.* They usually don't choose terms like, e.g., *accepting, salesy, soft-hearted, easy-to-know, adventurous* or *complacent* in their self-descriptions.

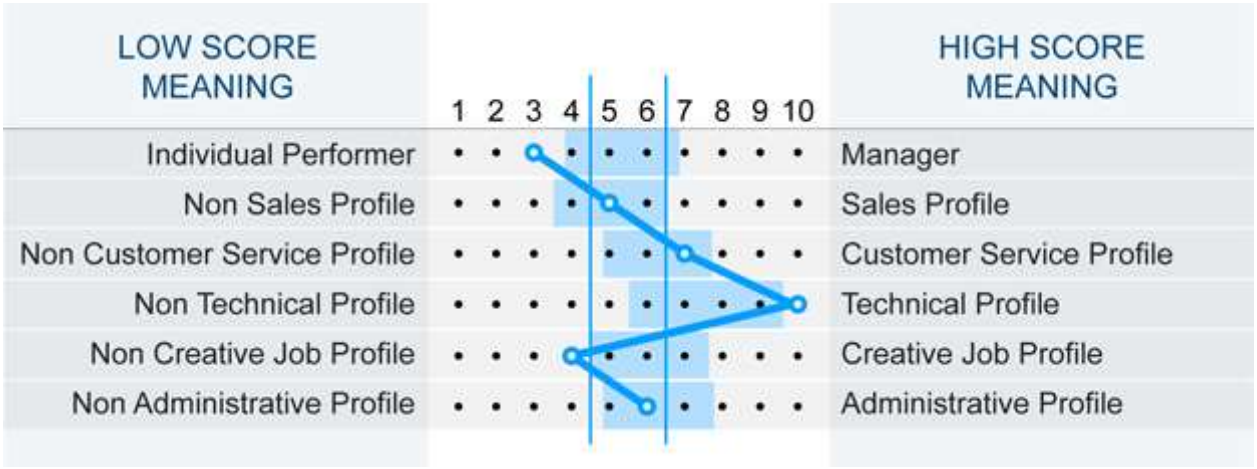
Stress Tolerance. This scale indicates the similarity of the person's profile with those of other people who are rated high on measures of confidence and stress tolerance. They describe themselves as, e.g., *politically sensitive, unstructured, power-oriented, intimidating, stress-loving* and *non-conforming.* They typically don't use terms such as *worrying, gentle, conforming, procedural, anxious* or *conflict-avoidant* in describing themselves.

Leadership. People with high scores here have similar results to those of people who are given high marks by their superiors on having a positive influence on others (both formal and informal). They typically see themselves as *complicated, intense, unwavering, tenacious, insightful, astute, demanding, assertive* and *power-oriented.* They don't usually describe themselves as *gentle, laissez-faire, soothing, passive, schedule-driven, apathetic, anxious* or *reserved.*

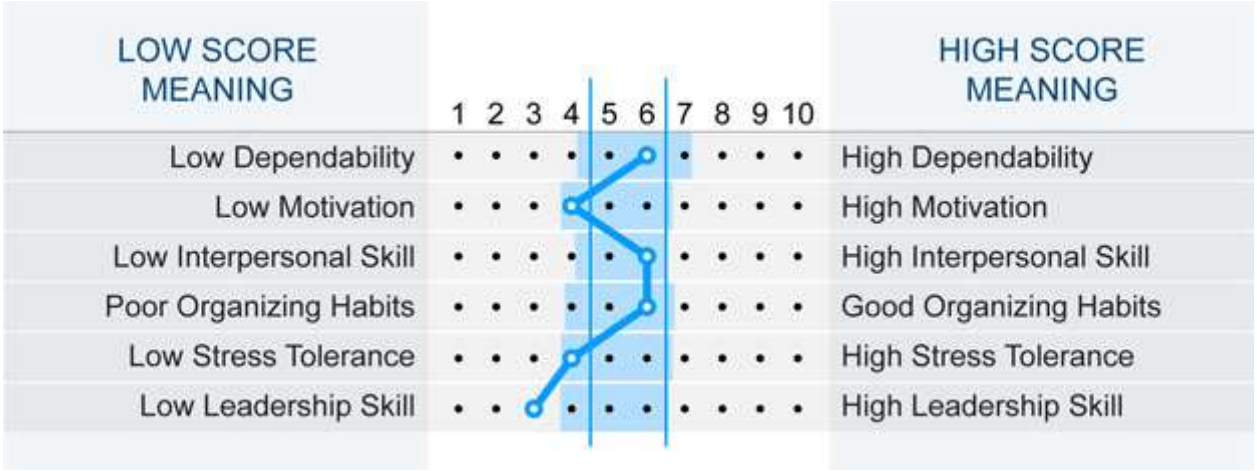


These scores reflect general personality factors which are likely to have an influence on behavior consistently over time in a variety of settings. The particular job this individual is being considered for has been studied and the central tendencies for people in the job are indicated on the profile above.

The **Functional Scales** were developed by correlating response patterns with demographic information. These scores indicate the amount of similarity (high scores) or dissimilarity (low scores) of a person's self-perceptions with those of people in different types of jobs. These scores DO NOT reflect a person's aptitude or ability to perform in such jobs. For example, people with a high score on the Sales Profile dimension see themselves the same way many salespeople see themselves. This doesn't mean that the person has the ability to sell. Also, low scores don't necessarily mean that a person won't be able to perform in that particular role. Extremely low scores do suggest, however, that the person may not have much in common with people in those roles and that he or she may not enjoy that kind of work.



The **Job Performance Scales** were obtained by correlating the response patterns of candidates with later on-the-job ratings of their performance in several categories. The score indicates the likelihood that this person will get a high rating on that particular measure of performance. Scores of 4 and above predict average to above average ratings. Scores of 3 or less should be investigated in further interviews and reference checks.



Validation

Reliability and Validity

Reliability deals with the consistency of test scores. There are several ways to measure validity (Anastasi, 1976). The issue of concern is error of measurement, or the amount of variation due to chance which can be attributed to a given score. The greater the reliability, the lower the error of measurement or variation due to chance. The reliability of the eTest Personality Inventory scale scores is high for the two major types of reliability: internal consistency (an indicator of how well the items measure the same trait) and test-retest reliability (a measure of how stable the scores of a test are over time). As mentioned previously, personality measures are generally very stable over long periods of time.

Internal Consistency

The most commonly used and accepted internal consistency reliability coefficient is known as Cronbach's alpha (1951). Cronbach's alpha is a special case of the Kuder-Richardson coefficient of equivalence. Essentially it is the average of all possible split-half coefficients. The alpha reliability coefficients for the eTest Personality Inventory scales are reported below.

eTest Big Five and Facet Scales	Alpha
Extraversion	**α = .94**
Persuasive / Matter-of-fact	α = .85
Talkative / Reserved	α = .86
Actively Friendly / Low-Key	α = .85
Bold / Socially Cautious	α = .76
Emotional Reactivity	**α = .93**
Insecure / Secure	α = .85
Emotionally Expressive / Emotionally Reserved	α = .83
Frustration-Prone / Patient	α = .80
Behavioral Control	**α = .91**
Disciplined / Undisciplined	α = .87
Conforming / Non-Conforming	α = .83
Detail-Oriented / Not Detail-Oriented	α = .79
Agreeableness	**α = .89**
Tolerant / Intolerant	α = .84
Easygoing / Intense	α = .73
Sympathetic / Dispassionate	α = .82
Complexity	**α = .91**
Strategic / Tactical	α = .63
Planful / Action-Oriented	α = .80
Divergent Thinking / Convergent Thinking	α = .78

Clearly the main personality scales here have high alpha reliability, demonstrating the strong integrity of the factor-analytically derived scales. Only one scale (Strategic/Tactical) has an alpha below .70 and this is likely due to this scale having fewer items than the other scales. Most of the scales have alphas above .80 and many are above .90. The next table shows the alpha reliability coefficients for the eTest empirical scales.

Reliability of the Empirical Scales

eTest Empirical Scales	Alpha
Job Type	
Manager / Individual Performer	$\alpha = .85$
Sales	$\alpha = .88$
Customer Service	$\alpha = .82$
Technical	$\alpha = .76$
Creative	$\alpha = .84$
Administrative	$\alpha = .80$
Job Performance	
Dependability	$\alpha = .47$
Motivation	$\alpha = .68$
Interpersonal Skill	$\alpha = .62$
Organizing Habits	$\alpha = .50$
Stress Tolerance	$\alpha = .74$
Leadership	$\alpha = .78$

Since these scales were developed by correlating items with external criteria (e.g., job performance) it is not surprising that some of the alpha coefficients are lower than found in the factor analytic scales above. This simply reflects the broad nature of some of the concepts being measured, as well as restriction of range in performance ratings, which can decrease the coefficient. The most crucial statistics for these scales are the validation and cross-validation coefficients, which are reported in the criterion validity section.

Test-Retest

Test-retest reliability is an indication of how consistent test results are over time. It is derived by having the same people take a test on two different occasions, then correlating the scores from the first administration with those from the second administration. The correlation (r_{1l}) is the test-retest reliability coefficient (Anastasi, 1976). The test-retest reliability coefficient is an indication of how stable test scores are over time, or how well test scores generalize over different occasions. The amount of time that should be allowed between the two test administrations has been debated, but a two-week interval is generally acceptable. Longer intervals can indicate the stability of test scores over longer periods of time. However, test-retest

reliability coefficients should be expected to decrease over longer periods of time, and the intervals rarely exceed six months (Anastasi, 1976). Two test-retest studies were conducted for the eTest Personality Inventory. The first was conducted on 69 college freshmen with a two-week test-retest interval. The reliability coefficients are reported in the table below.

eTest Big Five and Facet Scales	Reliability
Extraversion	**r = .90**
Persuasive / Matter-of-fact	r = .83
Talkative / Reserved	r = .88
Actively Friendly / Low-Key	r = .75
Bold / Socially Cautious	r = .79
Emotional Reactivity	**r = .57**
Insecure / Secure	r = .72
Expressive / Unexpressive	r = .50
Frustration-Prone / Patient	r = .65
Behavioral Control	**r = .86**
Disciplined / Undisciplined	r = .81
Conforming / Non-Conforming	r = .82
Detail-Oriented / Not Detail-Oriented	r = .77
Agreeableness	**r = .84**
Tolerant / Intolerant	r = .70
Easygoing / Intense	r = .86
Sympathetic / Dispassionate	r = .74
Complexity	**r = .54**
Strategic / Tactical	r = .54
Planful / Action-Oriented	r = .73
Divergent Thinking / Convergent Thinking	r = .79

Overall, the main personality scales of the eTest Personality Inventory have good test-retest reliability, demonstrating the reasonably high stability of the factor analytically derived scales. Most scales had reliability coefficients in the .70s and .80s. Additionally, the scales with somewhat lower reliability coefficients never had mean differences exceeding half a sten score. For example, the scale with the smallest test-retest reliability coefficient (Expressiveness) had average scores of 4.61 and 4.91, a .3-point difference on a ten-point scale. In real terms, this is a small difference between the scores over the two administrations of the test. The next table shows the test-retest reliabilities for the empirical scales.

eTest Empirical Scales	Reliability
Job Type	
Manager / Individual Performer	r = .72
Sales	r = .85
Customer Service	r = .84
Technical	r = .85
Creative	r = .64
Administrative	r = .84
Job Performance	
Dependability	r = .62
Motivation	r = .74
Interpersonal Skill	r = .73
Organizing Habits	r = .79
Stress Tolerance	r = .80
Leadership	r = .75

Once again, the overall test-retest reliabilities were good, and most were .70s and .80s. Also, the scale with the smallest coefficient (Dependability) showed a real difference in average scores over time of less than half a sten score (4.67 and 4.33).

A second study was conducted in the field with the general business population (n=72) over a longer time interval. Some of the retest intervals were as long as three years and most were between six months and three years. Given the length of time between test administrations one would expect somewhat lower reliability coefficients with this sample. The test-retest reliability coefficients are shown in the following table.

eTest Big Five and Facet Scales	Reliability
Extraversion	**r = .80**
Persuasive / Matter-of-fact	r = .70
Talkative / Reserved	r = .77
Actively Friendly / Low-Key	r = .73
Bold / Socially Cautious	r = .73
Emotional Reactivity	**r = .51**
Insecure / Secure	r = .46
Expressive / Unexpressive	r = .46
Frustration-Prone / Patient	r = .62
Behavioral Control	**r = .66**

Disciplined / Undisciplined	r = .52
Conforming / Non-Conforming	r = .64
Detail-Oriented / Not Detail-Oriented	r = .69
Agreeableness	**r = .60**
Tolerant / Intolerant	r = .63
Easygoing / Intense	r = .59
Sympathetic / Dispassionate	r = .46
Complexity	**r = .76**
Strategic / Tactical	r = .69
Planful / Action-Oriented	r = .42
Divergent Thinking / Convergent Thinking	r = .56

As expected, the test-retest coefficients were somewhat lower over such a long time period between test administrations. However, the actual mean differences over time were remarkably stable. For example, two scales with the smallest coefficients (Expressive and Planful) had average differences over the two test administrations of less than half a sten score (means of 5.76 and 5.38 for Expressive and means of 5.40 and 5.44 for Planful). These real-world differences are small, supporting the evidence that personality is stable even over long periods of time. However, to err on the side of caution the authors strongly recommend that any personality inventory results be interpreted with extreme caution if they are over three years old. Clearly, strong developmental efforts over time can lead to change and people should be retested after a three-year period. The test-retest coefficients for the empirical scales are reported in the following table.

eTest Empirical Scales	Reliability
Job Type	
Manager / Individual Performer	r = .75
Sales	r = .70
Customer Service	r = .47
Technical	r = .68
Creative	r = .42
Administrative	r = .54
Job Performance	
Dependability	r = .53
Motivation	r = .62
Interpersonal Skill	r = .65
Organizing Habits	r = .66
Stress Tolerance	r = .67
Leadership	r = .76

Once again, as expected, the test-retest coefficients were somewhat lower over such a long time period between test administrations. However, the actual mean differences over time were again remarkably stable. For example, two scales with the smallest coefficients (Creative and Dependable) had average differences over the two test administrations of less than a quarter of a sten score (means of 5.63 and 5.61 for Creative and means of 5.47 and 5.35 for Dependable). These real-world differences are small. However, it is still strongly recommended that individuals be retested after a three-year period.

The Validity Scales

The eTest Personality Inventory has six validity scales. The specific scales are described below, but are not laid out specifically in the report. The results of each scale are given in a narrative interpretation titled "Test Taking Approach" at the beginning of the printed report. The narrative will indicate whether there are any potential problems with the validity of a particular profile. The narrative also indicates how the person responded to the test items with such statements as, e.g., "the candidate responded consistently," "the candidate responded in an overly positive manner," etc.

Validity Scales:

Nonsense. There are several made-up nonsensical words embedded in the body of the test. If a person answers anything but Neutral/Unsure to one of the nonsense items, that adds to the score on this scale. A high score may indicate a low level of verbal ability, a person whose mother tongue is not English, inattention or carelessness.

Consistency of Responding. High scores indicate that the person tended to describe him/herself in contradictory terms, such as agreeing that both *organized* and *disorganized* are self-descriptors. A high score may indicate an inconsistent or conflicted self-image, variable behavior or carelessness.

Extreme Responses. The more likely the person is to describe him/herself with the Strongly Agree or Strongly Disagree responses, the higher the score on this dimension. High scores could indicate a tendency to respond strongly or to stake out extreme positions in other situations.

Nay-saying/Yea-saying. Nay-saying suggests a tendency to disagree with statements while Yea-saying may indicate the opposite.

Openness. Low scores here indicate that the person was straightforward, undefended and open in describing him/herself. High scores suggest a tendency to be circumspect of defended in describing oneself, and to spin things in a positive direction.

Infrequency. The more the person chooses statistically unusual responses, the higher the infrequency score.

Validation

The validity scales automatically correct for response style (whether an individual tends to respond moderately or extremely) so that it won't have an undue influence on the scores. Scores are also automatically corrected for yea saying. Finally, several scales are corrected for the level of openness the person shows in his or her responses. The purpose of the validity scales is to remove the influence of aspects of response style from the scores, as well as to give an indication whether the profile is valid for interpretation. These scales are an additional check to help get an accurate picture of the person.

In addition to the scales which help assess the validity and interpretability of an individual profile, the overall validity of a test is determined by several types of evidence. Validity deals with what a test measures and how well it measures what it is supposed to measure (Anastasi, 1976). This involves determining the relationships between performance on a test and other observable information about the behaviors of interest. There are essentially three procedures for gathering validity information about a test: content validity; criterion validity; and construct validity. The following sections describe the validity evidence and research for the instrument with each type of validity procedure.

Content Validity - The Factor Structure

Superordinate Factors. The eTest Personality Inventory consists of 317 items. The original principal components analysis with varimax rotation indicated the presence of more than five factors, with nine usable factors ultimately derived. Recent research has indicated that principal components analysis tends to overestimate the number of factors in a given dataset. Additionally, personality factors in “real world” situations tend to be correlated, and the use of principal components analysis tends to artificially force independence on the factors, which often clouds the underlying factor structure. Principal axis extraction with oblique rotation is likely to yield the most accurate and interpretable factor solution for “real world” intercorrelated data (Tenopyr, 1994).

The significantly larger sample was subjected to principal axis analysis with oblique rotation. (A principal components analysis with varimax rotation was conducted for comparative purposes; however, the principal axis solution yielded more interpretable factors, in keeping with previous research.) Examination of the initial eigenvalues suggested between 4 and 7 possible factors. Each of the factors was examined for interpretability and consistency. This resulted in the ultimate identification of five factors: Extraversion, Emotional Stability, Complexity, Conscientiousness, and Agreeableness. Items loading above .30 on a factor were used for the initial factor content. Items loading above .30 on multiple factors were analyzed for content and item-total correlation with the initial factors. A few items were retained on more than one factor when both item content and statistics indicated they represented each reasonably well. Some factor overlap was expected due to the broad nature of the Big Five; however, less overlap was observed than anticipated. Only 14 of 238 items loaded on more than one superordinate factor.

Subordinate Factors. Each of the five factors has three sub-factors (facets) except for Extraversion, which has four. This solution was derived by subjecting each of the five factors to a principal axis extraction and oblique rotation. Examination of the initial eigenvalues for each of the five factors suggested between two and five factors. Each of the factors was examined for interpretability and consistency. The ultimate result was a two-tier hierarchical personality structure much like that suggested by Digman (1990). The facets for Extraversion are *persuasive, talkative, actively friendly,* and *bold*. The facets for Emotional Reactivity are *insecure, expressive,* and *frustration-prone*. The facets for Behavioral Control are *disciplined, conforming,* and *detail-oriented*. The facets for Agreeableness are *tolerant, easygoing,* and *sympathetic*. The facets for Complexity are *strategic, planful,* and *divergent thinking.*

The Hierarchical Factor Structure. The outcome of the factor structure development was a two-tier hierarchical model of normal adult personality. Level 1 consists of traits, Level 2 consists of facets of the trait.

- Extraversion
  - Persuasive
  - Talkative
  - Actively Friendly
  - Bold
- Emotional Reactivity
  - Insecure
  - Expressive
  - Frustration-Prone
- Behavioral Control
  - Disciplined
  - Conforming
  - Detail-Oriented
- Agreeableness
  - Tolerant
  - Easygoing
  - Sympathetic
- Complexity
  - Strategic
  - Planful
  - Divergent Thinking

All factors, both Big Five and Facets, were examined for conceptual as well as statistical veracity. That is, we used a rational approach to fine-tune the item analysis process. Therefore, some items were eliminated because they did not fit conceptually, rather than because of any type of quantitative deficiency. This type of process helps to ensure each factor is sound in terms of its content, based on the concept it measures. Ensuring the scales are comprised of reasonable item content is also the first step towards fully defining the scale. In other words, content validity gives the first notions about what a scale means and what it measures. There are of course several more steps in this process, which will be addressed on the following pages.

Criterion Validity - Devising the Empirical Scales

The eTest Personality Inventory empirical scales were developed to add specific, valuable information about how a person's personality characteristics relate to the type of job he/she might be a "good fit" for, as well as how he/she is likely to be rated by a manager of several dimensions of job performance. These scales were developed by obtaining job category designations (e.g., sales, customer service), and by having hiring managers complete performance ratings six to nine months after the candidate was hired. Once these data were gathered, two samples were drawn. The first was used for scale development while the second was held out as a cross-validation sample.

Job Type Scales. The job type scales were developed by correlating all 317 items with self-reported job function classification data. In this way items that were strongly related to being in a certain position could be identified and used to form a job type scale. Item analyses (i.e., mean, variation, inter-item correlations, item-scale correlations) were then conducted to refine each scale into its final form.

Job Performance Scales. The job type scales were developed by correlating all 317 items with managerial ratings of job performance. In this way items that were strongly related to a particular aspect of job performance (e.g., motivation) could be identified and used to form a job performance scale. Item analyses (i.e., mean, variation, inter-item correlations, item-scale correlations) were then conducted to refine each scale into its final form. The validity coefficients and cross-validation coefficients for the job type scales are reported below. While some drop in correlation is to be expected with the hold-out sample, the job performance scales hold up remarkably well on cross-validation.

Scale	Initial Sample (n=369)	Hold-Out Sample (n=381)
Dependability	r = .43	r = .29
Motivation	r = .36	r = .31
Interpersonal Skill	r = .33	r = .24
Organizing Habits	r = .41	r = .30
Stress Tolerance	r = .39	r = .32
Leadership	r = .35	r = .24

Construct Validity - Correlations with Other Tests

Construct validity refers to how well a test measures a theoretical construct. A construct may also be called a characteristic or trait representing a certain class of behaviors (e.g., extraversion, conscientiousness). One of the most common means of determining the construct validity of a test is to examine the relationship between the test under consideration and other well-validated tests. The procedure involves giving the same people both tests and correlating the scores between the two tests. A test is said to have strong construct validity if its scores are related to similar scores on other tests, and *not* strongly related to dissimilar scores on other tests. For example, one would expect the eTest Extraversion scale to be related to or have a strong correlation with other valid tests measuring Extraversion, but you would not expect it to have a strong correlation with, e.g., a measure of creativity on another test. The following tables show the correlation of

Validation

eTest scores with scores on the 16PF (Cattell, Eber and Tatsuoka, 1970), one of the most widely used and well-researched measures of normal personality. This study was conducted on a general business population of 8,287 people. The tables are presented by eTest Big 5 factors and their facets, as well as the empirical scales.

eTest Extraversion Scales and the 16PF					
	Extraversion	Persuasive/ Matter-of-fact	Talkative/ Reserved	Actively Friendly/ Low-Key	Bold/ Socially Cautious
16PF Primary Scales:					
B Reasoning	-.01	.04	.03	-.03	-.04
G Persistent	-.13	-.10	-.08	-.12	-.09
M Imaginative	.09	.14	.08	.02	.07
Q1 Experimental	.22	.15	.19	.10	.21
Q3 Disciplined	-.10	-.04	-.08	-.10	-.08
C Calm	.15	.13	.11	.12	.14
I Sensitive	.07	.12	.04	.12	-.03
L Critical	.09	-.02	.09	.06	.07
O Apprehensive	-.23	-.27	-.17	-.11	-.20
Q4 Tense	-.19	-.23	-.12	-.12	-.18
A Outgoing	.42	.39	.34	.31	.24
E Assertive	.43	.24	.42	.27	.37
F Talkative	.53	.36	.47	.46	.36
H Socially Bold	.67	.55	.60	.53	.43
N Sophisticated	-.29	-.20	-.27	-.19	-.26
Q2 Self-Sufficient	-.32	-.28	-.26	-.24	-.21
16PF Second-Order Scales:					
EXTRAVERSION	.65	.53	.56	.52	.42
ANXIETY	-.28	-.31	-.20	-.18	-.23
TOUGH POISE	-.04	-.14	-.00	-.02	.03
INDEPENDENCE	.56	.39	.51	.37	.44
CONTROL	-.14	-.09	-.10	-.13	-.10
ADJUSTMENT	.42	.33	.35	.28	.36
LEADERSHIP	.41	.34	.37	.30	.30
CREATIVITY	-.04	-.02	-.00	-.07	-.01

eTest Emotional Reactivity Scales and the 16PF				
	Emotional Reactivity	Insecure/ Secure	Expressive/ Unexpressive	Frustration-Prone/Patient
16PF Primary Scales:				
B Reasoning	-.09	-.07	-.07	-.01
G Persistent	-.08	.05	-.09	-.05
M Imaginative	-.04	-.10	.03	.03
Q1 Experimental	.14	-.06	.15	.14
Q3 Disciplined	-.13	-.02	-.02	-.07
C Calm	-.03	-.19	.14	.05
I Sensitive	-.04	-.01	.06	-.08
L Critical	.16	.06	.05	.07
O Apprehensive	.07	.26	-.17	-.05
Q4 Tense	.08	.24	-.23	.03
A Outgoing	.14	-.07	.28	.09
E Assertive	.23	-.17	.21	.30
F Talkative	.16	-.16	.39	.10
H Socially Bold	.13	-.20	.41	.13
N Sophisticated	-.09	.12	-.15	-.11
Q2 Self-Sufficient	-.11	.02	-.27	-.03
16PF Second-Order Scales:				
EXTRAVERSION	.18	-.15	.45	.11
ANXIETY	.09	.29	-.25	-.02
TOUGH POISE	.05	.02	-.03	.04
INDEPENDENCE	.23	-.21	.31	.28
CONTROL	-.12	.02	-.07	-.07
ADJUSTMENT	.04	-.30	.33	.13
LEADERSHIP	.02	-.24	.30	.09
CREATIVITY	-.06	-.08	-.12	.05

eTest Behavioral Control Scales and the 16PF				
	Behavioral Control	Disciplined/ Undisciplined	Conforming/ Non-Conforming	Detail-Oriented/ Not Detail-Oriented
16PF Primary Scales:				
B Reasoning	-.11	-.07	-.11	-.04
G Persistent	.46	.36	.35	.40
M Imaginative	-.21	-.12	-.21	-.14
Q1 Experimental	-.28	-.09	-.33	-.16
Q3 Disciplined	.48	.35	.39	.42

C Calm	-.06	-.02	-.04	-.04
I Sensitive	-.16	-.10	-.11	-.16
L Critical	-.16	-.07	-.17	-.13
O Apprehensive	.05	-.01	.07	.01
Q4 Tense	.01	.00	.02	-.01
A Outgoing	-.13	-.00	-.10	-.18
E Assertive	-.34	-.09	-.39	-.24
F Talkative	-.18	-.05	-.19	-.17
H Socially Bold	-.20	-.02	-.21	-.18
N Sophisticated	.28	.10	.31	.21
Q2 Self-Sufficient	-.01	-.02	-.01	.04
16PF Second-Order Scales:				
EXTRAVERSION	-.17	-.02	-.16	-.19
ANXIETY	-.02	-.05	-.00	-.04
TOUGH POISE	.17	.11	.13	.16
INDEPENDENCE	-.44	-.15	-.49	-.32
CONTROL	.55	.42	.43	.48
ADJUSTMENT	-.12	-.00	-.16	-.06
LEADERSHIP	.16	.20	.08	.15
CREATIVITY	-.27	-.14	-.30	-.14

eTest Agreeableness Scales and the 16PF				
	Agreeableness	Tolerant/ Intolerant	Easygoing/ Intense	Sympathetic/ Dispassionate
16PF Primary Scales:				
B Reasoning	-.07	-.03	-.06	-.09
G Persistent	.04	.01	.05	.04
M Imaginative	-.11	-.04	-.14	-.09
Q1 Experimental	-.27	-.18	-.26	-.23
Q3 Disciplined	.13	.10	.14	.06
C Calm	.05	.09	.03	-.01
I Sensitive	.14	.16	.04	.18
L Critical	-.14	-.15	-.14	-.05
O Apprehensive	.01	-.07	.02	.07
Q4 Tense	-.11	-.15	-.09	-.02
A Outgoing	-.03	.04	-.15	.04
E Assertive	-.35	-.25	-.40	-.23
F Talkative	.02	.06	-.10	.05
H Socially Bold	-.05	.04	-.19	-.00
N Sophisticated	.16	.10	.22	.09
Q2 Self-Sufficient	-.07	-.10	.02	-.09
16PF Second-Order Scales:				
EXTRAVERSION	.00	.08	-.15	.06
ANXIETY	-.09	-.16	-.05	.01
TOUGH POISE	-.02	-.07	.03	-.04

INDEPENDENCE	-.34	-.22	-.41	-.24
CONTROL	.08	.05	.10	.05
ADJUSTMENT	-.06	.02	-.10	-.11
LEADERSHIP	.01	.07	-.04	-.03
CREATIVITY	-.21	-.14	-.18	-.17

eTest Complexity Scales and the 16PF

	Complexity	Strategic/ Tactical	Planful/ Action-Oriented	Divergent Thinking/ Convergent Thinking
16PF Primary Scales:				
B Reasoning	.30	.24	.18	.09
G Persistent	-.16	-.20	.10	-.18
M Imaginative	.32	.26	.10	.18
Q1 Experimental	.23	.19	.03	.19
Q3 Disciplined	-.17	-.25	.14	-.15
C Calm	.08	.02	.03	.09
I Sensitive	.07	.07	-.06	.08
L Critical	-.07	.03	-.16	-.00
O Apprehensive	-.18	-.06	-.11	-.14
Q4 Tense	-.07	.05	-.08	-.15
A Outgoing	.05	.02	-.15	.08
E Assertive	.30	.27	-.09	.21
F Talkative	-.01	-.03	-.19	.15
H Socially Bold	.12	.03	-.16	.21
N Sophisticated	-.24	-.20	.04	-.19
Q2 Self-Sufficient	.10	.15	.14	-.04
16PF Second-Order Scales:				
EXTRAVERSION	.02	-.05	-.21	.16
ANXIETY	-.12	.03	-.10	-.15
TOUGH POISE	-.21	-.18	-.05	-.11
INDEPENDENCE	.35	.30	-.09	.29
CONTROL	-.19	-.26	.14	-.20
ADJUSTMENT	.17	.05	.03	.20
LEADERSHIP	.00	-.12	.02	.07
CREATIVITY	.41	.37	.17	.18

eTest Empirical Job Type Scales and the 16PF

	Manager	Sales	Customer Service	Technical	Creative	Administrative
16PF Primary Scales:						
B Reasoning	.16	-.02	.05	.06	.08	.08
G Persistent	-.24	-.03	.13	.23	-.03	.16
M Imaginative	.26	.03	-.05	-.03	.11	-.05

Q1 Experimental	.21	.21	-.18	-.16	.14	-.24
Q3 Disciplined	-.28	-.06	.24	.32	-.02	.22
C Calm	.01	.12	.09	.05	.14	-.02
I Sensitive	.02	.05	.05	-.07	.07	-.06
L Critical	.03	.14	-.19	-.22	.01	-.22
O Apprehensive	-.09	-.17	-.09	-.08	-.18	.04
Q4 Tense	.04	-.14	-.17	-.13	-.16	.02
A Outgoing	.06	.40	-.08	-.24	.15	-.31
E Assertive	.28	.41	-.35	-.38	.20	-.45
F Talkative	-.09	.53	-.06	-.26	.27	-.41
H Socially Bold	.04	.60	-.08	-.28	.33	-.45
N Sophisticated	-.18	-.26	.17	.23	-.18	.29
Q2 Self-Sufficient	.09	-.30	-.01	.12	-.12	.22
16PF Second-Order Scales:						
EXTRAVERSION	-.03	.62	-.07	-.29	.29	-.47
ANXIETY	.02	-.21	-.18	-.13	-.22	.03
TOUGH POISE	-.16	-.00	-.08	.02	-.05	.02
INDEPENDENCE	.31	.51	-.32	-.40	.29	-.51
CONTROL	-.30	-.05	.20	.31	-.03	.22
ADJUSTMENT	.04	.39	.02	-.04	.28	-.23
LEADERSHIP	-.15	.41	.10	.04	.25	-.17
CREATIVITY	.32	-.08	-.11	-.03	.08	.01

eTest Empirical Job Performance Scales and the 16PF

	Dependability	Motivation	Interperson-al Skill	Organizing Habits	Stress Tolerance	Leader
16PF Primary Scales:						
B Reasoning	.22	.12	.06	.19	.16	.17
G Persistent	.09	-.17	-.14	.05	-.28	-.25
M Imaginative	.12	.20	.11	.08	.25	.25
Q1 Experimental	.00	.29	.09	.07	.35	.32
Q3 Disciplined	.09	-.23	-.07	-.00	-.30	-.27
C Calm	.01	.07	.19	-.10	.13	.11
I Sensitive	-.05	.01	.17	-.08	.02	.07
L Critical	-.11	.12	-.02	.00	.11	.10
O Apprehensive	-.02	-.11	-.23	.12	-.20	-.18
Q4 Tense	.05	-.03	-.24	.22	-.11	-.06
A Outgoing	-.14	.24	.33	-.14	.18	.26
E Assertive	.00	.49	.24	.07	.47	.52
F Talkative	-.22	.25	.41	-.25	.20	.27
H Socially Bold	-.18	.37	.49	-.25	.30	.40
N Sophisticated	-.00	-.32	-.20	-.02	-.32	-.34
Q2 Self-Sufficient	.19	-.10	-.23	.23	-.01	-.06
16PF Second-Order Scales:						
EXTRAVERSION	-.25	.32	.49	-.29	.23	.33

ANXIETY	.01	-.08	-.31	.20	-.14	-.13
TOUGH POISE	-.04	-.07	-.12	-.01	-.12	-.13
INDEPENDENCE	-.06	.55	.35	-.01	.57	.60
CONTROL	.11	-.23	-.14	.04	-.34	-.30
ADJUSTMENT	-.05	.25	.35	-.17	.30	.29
LEADERSHIP	-.05	.13	.31	-.18	.08	.13
CREATIVITY	.23	.21	-.01	.24	.30	.28

The interrelationships of the eTest scales with the 16PF scales demonstrate strong construct validity. While not all eTest scales have a similar scale on the 16PF, the scales that should show strong correlations to one another do so, while the scales that should not show a strong relationship do not. Additionally, negative or inverse relationships between scales are present in the expected places. Of course, the gathering of construct validity evidence is a potentially never-ending task, limited only by the number of valid instruments measuring similar characteristics. However, the evidence to date is solid. The next table shows the correlations between the eTest Big 5 and the Myers-Briggs (Myers, McCauley, Quenk and Hammer, 2003). This study was conducted in the general business population with 3,432 people. As with the 16PF, relationships between the eTest and Myers-Briggs scales are sound, with the expected magnitude and direction found in the correlations.

eTest Big 5 Scales and the Myers-Briggs

	MBTI Introversion/ Extraversion	MBTI Sensing/ Intuitive	MBTI Thinking/ Feeling	MBTI Judging/ Perceiving
eTest Scale				
Extraversion	.57	.23	-.04	.09
Emotional Reactivity	.12	.03	-.05	.09
Behavioral Control	-.11	-.44	-.09	-.49
Agreeableness	.04	-.09	.29	-.01
Complexity	.03	.34	-.16	.06

Relationship of eTest to Individual Difference Variables

Individual difference variables are variables such as race, gender and age. It is important to investigate the relationship of such variables to test scores in order to determine if people in different groups score differently on a measure. One way to do this is to code individual difference variables numerically and examine the correlations between these variables and test scores. The following table provides correlations of race, gender and age with eTest scores. Correlations of individual differences with 16 PF scores are also provided as a reference. As seen below, the eTest has negligible relationships to demographic variables and would be considered fair for minority groups.

eTest Personality Scales	Race[a] 1 = Minority 2 = Non-minority n = 11,845*	Gender[b] 1 = Female 2 = Male n = 12,152*	Age[c] n = 12, 056*
Extraversion	.02	.00	-.07
Matter-of-fact/Persuasive	.01	.03	.09
Reserved/Talkative	.06	-.01	-.07
Low Key/Actively Friendly	.03	-.02	-.07
Socially Cautious/Bold	-.02	.00	-.05
Emotional Reactivity	-.01	.01	-.15
Secure/Insecure	-.02	.01	.01
Unexpressive/Expressive	-.03	.00	-.17
Patient/Frustration	.03	.01	-.06
Behavioral Control	-.03	.02	-.11
Undisciplined/Disciplined	.01	-.02	-.03
Nonconforming/Conforming	-.02	.02	-.09
Not Detail Oriented/Detail Oriented	-.01	.01	-.06
Agreeableness	.00	-.01	-.04
Intolerant/Tolerant	-.01	-.01	.03
Urgent-Intense/Easygoing	-.04	.02	-.13
Dispassionate/Sympathetic	.01	.03	.02
Complexity	.11	.01	.33
Tactical/Strategic	.10	.03	.25
Action Oriented/Planful	.00	.00	.12
Convergent Thinking/Divergent Thinking	.01	-.01	.09

eTest Empirical Scales	Race[a] 1 = Minority 2 = Non-minority n = 11,845*	Gender[b] 1 = Female 2 = Male n = 12,152*	Age[c] n = 12,056*
Job Type			
Manager/Individual Performer	.09	-.01	.34
Sales	.00	.03	-.17
Customer Service	.00	-.01	.03
Technical	-.05	.02	.06
Creative	.01	-.02	.01
Administrative	.01	-.01	.15
Job Performance			
Dependability	.11	-.03	.18
Motivation	.05	-.02	.09
Interpersonal Skill	.06	.02	-.01
Organizing Habits	.09	-.01	.10
Stress Tolerance	.06	.00	.11
Leadership	.10	-.04	.20

eTest Cognitive Scales	Race[a] 1 = Minority 2 = Non-minority n = 5, 478*	Gender[b] 1 = Female 2 = Male n = 5,519*	Age[c] n = 5,504*
eTest Vocabulary	.15	.07	.06
eTest Deductive	.19	.06	.05

16 PF Scales	Race[a] 1 = Minority 2 = Non-minority n = 11,990*	Gender[b] 1 = Female 2 = Male n = 12,465*	Age[c] n = 12, 320*
Primary Scales			
B Reasoning	.09	.05	.07
G Persistent	-.05	-.02	-.06
M Imaginative	.06	.12	.20
Q1 Experimental	-.02	-.17	-.04
Q3 Disciplined	-.06	-.16	-.06
C Calm	.04	-.13	-.05
I Sensitive	-.06	.15	.11
L Critical	-.07	-.10	-.11
O Apprehensive	-.01	.08	-.05
Q4 Tense	.06	.18	.02
A Outgoing	-.02	-.01	.00
E Assertive	.06	-.05	-.05
F Talkative	.03	-.10	-.21
H Socially Bold	.02	-.14	-.04
N Sophisticated	-.09	.13	-.02
Q2 Self-sufficient	.03	.01	.10
Second-Order Scales			
Extraversion	.00	-.09	-.12
Anxiety	.00	.17	.00
Tough poise	.02	-.34	-.21
Independence	.05	-.07	-.02
Control	-.07	-.09	-.07
Adjustment	.03	-.21	-.12
Leadership	-.01	-.21	-.16
Creativity	.06	.02	.19

* Due to the large sample sizes, correlations above .02 are significant at the p<.05 level. However, such correlations cannot be considered of any practical importance. Correlations of .30 and above (i.e., corresponding to a medium effect size) may be considered of practical importance.

[a] A positive correlation indicates that non-minority members scored higher. A negative correlation indicates that minority members scored higher.

[b] A positive correlation indicates that males scored higher. A negative correlation indicates that females scored higher.

[c] A positive correlation indicates that older candidates scored higher. A negative correlation indicates that younger candidates scored higher.

eTest Cognitive Measures

The eTest Vocabulary Assessment

Vocabulary is one of the best correlates with overall intelligence and can be used as a rough estimate of a person's fund of general knowledge. For example, the vocabulary subtest of the Wechsler Adult Intelligence Scale (WAIS-IV, 2008) has the highest correlation of any of the subtests with the overall WAIS score. The eTest Vocabulary Assessment is a 60-item test in a typical format of one stem followed by five possible answers. The items are arranged roughly in order of difficulty.

The test is administered untimed and most people finish it in around ten minutes. (Fifty percent of them will complete the test in under 10 minutes and 90% will have completed it in under 16 minutes. By 30 minutes 99% will be finished.) The test is normed on a business population (characterized by relatively high scores on all measures of cognitive ability). There is an appropriate range of difficulty for the individual items, but this particular test has a high top end and is considered to be reasonably difficult. As with any language-based instrument, special care must be taken when interpreting its results for people whose native language is different and/or whose cultural experiences may be different from those of the norm group.

Validity Studies

The eTest Vocabulary Assessment correlates well with other tests of verbal aptitude and vocabulary. For instance, the correlations with the SRA Verbal Form (Vangent, 1955), a timed test of mental agility with verbal and quantitative components (n = 4,876), and the Shipley Institute of Living Scale (Western Psychological Services, 2009), a test of general mental ability consisting of vocabulary and abstract reasoning components (n = 2,494), are presented below. All correlations are significant beyond the .01 level.

	SRA Quantitative	SRA Verbal	SRA Total
eTest Vocabulary	.398	.624	.580
	Shipley Language	Shipley Abstract	Shipley Total
eTest Vocabulary	.657	.310	.540

Not only did the eTest Vocabulary Assessment score correlate well with the total scores of both the Shipley and the SRA, it had higher correlations with the verbal components of those tests than it did with the quantitative and abstract reasoning components. This offers strong support to the position that the test is in fact a valid measure of verbal intelligence.

In other studies, the eTest Vocabulary Assessment correlated significantly with Scale B, a problem-solving dimension embedded in the 16 PF (r = .380, n = 5,056). It also had a strong correlation with performance on the Universal Analytical Reasoning Scale (Management Psychology Group, 2001) (r = .465, n = 156), a nonverbal, culture-fair test of reasoning which is currently under development by Management Psychology Group. These correlations are significant beyond the .01 level.

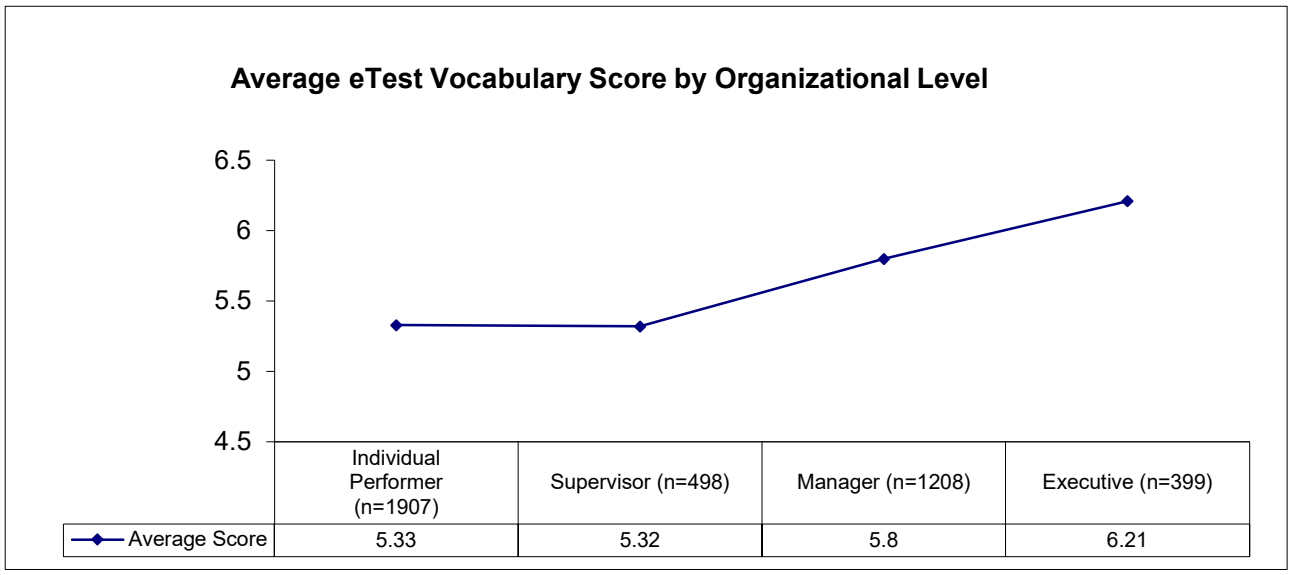
An analysis of 655 cases for which performance data were available indicated a slight relationship between the eTest Vocabulary score and performance (as measured by supervisory ratings on the statement "I would hire this person again."). On a 6-point scale, those people who rated high on this dimension had an average test score of 5.8 while those with low ratings had an average of 5.4. This was significant at the .01 level.

Reliability

A common and well-accepted statistic of reliability is Cronbach's alpha (Cronbach, 1951). Alpha is a measure of internal consistency. That is, it provides information about the extent to which items in a scale are related to one another. It is based on the average correlation between items and consequently ranges from 0 to 1. Alpha for the Vocabulary Scale is .88. This indicates that this is a scale of high reliability.

Vocabulary and Organizational Level

It is reasonable to assume that a high vocabulary score is positively associated with success in positions requiring greater verbal fluency and communication skill. Such demands increase as one moves into higher organizational levels. As would be expected, average eTest Vocabulary scores tend to increase from entry level to executive positions. This is illustrated by the following graph. The samples were drawn from the Management Psychology Group database. This archive of information represents cases from a wide range of organizations.



The eTest Deductive Reasoning Scale

Deductive reasoning, or the ability to determine whether a given conclusion can be derived from certain information, is an important component of general reasoning and critical thinking. It is central to making good business decisions.

The eTest Deductive Reasoning Scale measures this important cognitive ability. It is an untimed test consisting of 30 items. About half of the people who take the test can finish it in under 12 minutes and 90% can finish in 18 minutes. It is useful for selecting people who have the ability to analyze factual information and make logical conclusions based on that data.

Validity of the eTest Deductive Reasoning Scale

People with high scores on this measure also tend to get high scores on other tests of mental aptitude. For instance, correlations between the eTest Deductive Reasoning Scale and the SRA Verbal Form[1] (n = 4,876) and Shipley Institute of Living Scale[2] (n = 2,494) are presented in the tables below. Also, a smaller study (n = 17) showed that the eTest Deductive scale had a correlation of .508 with the Watson Glaser Critical Thinking Appraisal[3]. All correlations were significant beyond the .01 level.

	SRA Quantitative	SRA Verbal	SRA Total
eTest Deductive	.402	.414	.449
	Shipley Language	Shipley Abstract	Shipley Total
eTest Deductive	.364	.319	.407

In other studies, the eTest Deductive Reasoning Scale correlated significantly with Scale B, a problem-solving dimension embedded in the 16 Personality Factor Inventory[4] (r = .398, n = 5,056). It also had a strong correlation with performance on the Universal Analytical Reasoning Test, a nonverbal, culture-fair test of reasoning which is currently under development by Management Psychology Group[5] (r = .483, n = 156). These correlations are significant beyond the .01 level.

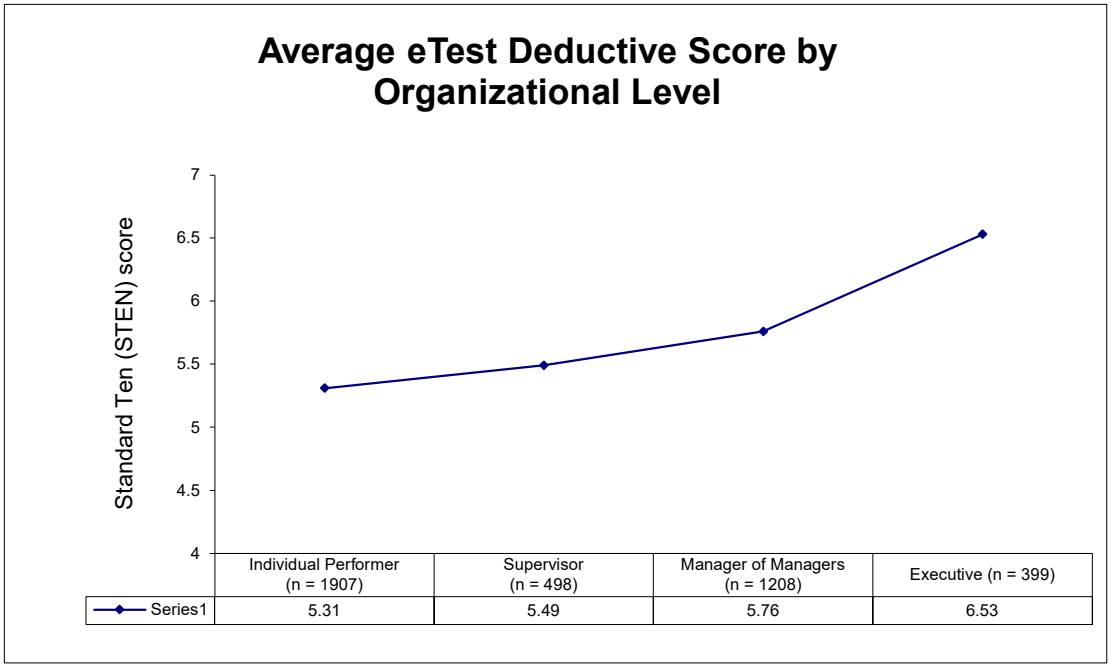
An analysis of 655 cases for which performance data were available indicated a significant relationship between the eTest Deductive score and performance (as measured by supervisory ratings on the statement "I would hire this person again."). On a 6-point scale, those people who rated high on this dimension had an average test score of 6.0 (that is, all of the people in this category received the maximum score) while those with low ratings had an average of 5.0. This was significant beyond the .01 level.

Reliability

Alpha (described in the previous section on the vocabulary measure) for the eTest Deductive Reasoning Scale is .63. This indicates that this is a scale of appropriately high reliability.

Deductive Reasoning and Organizational Level

It is reasonable to assume that the type of analytical reasoning tapped by this scale would be of increasing benefit as one climbs the corporate ladder and ascends into positions characterized by more complex problems. As would be expected, average eTest Deductive Reasoning scores tend to increase from entry level to executive positions. This is illustrated by the following graph. The samples were drawn from the Management Psychology Group database. This archive of information represents cases from a wide range of organizations.



Optional eTest Reports

Developmental Report

The eTest Developmental Report was written for the individual in case the organization wants to offer feedback. It provides a narrative description of the person's general traits, a set of developmental suggestions and a score profile. It is useful as a standalone tool for further self-reflection and personal/career development, or as part of a more comprehensive coaching process. It may be helpful to use with the Coaching Report in cases where the person is working with a mentor or coach. It includes the eTest Personality Profile information from the Hiring Manager's Interview Guide report, a more developmentally oriented version of the narrative description and several targeted developmental suggestions. This report is available at no charge upon request.

The Leadership Report

The eTest Leadership Report is a narrative description, based on the eTest profile, that focuses on leadership and influence. It is based on professional judgment grounded in academic training and many years of experience selecting and coaching leaders in a broad range of organizations. It is intended for assistance in making selection decisions as well as for developmental feedback and coaching. Although based on the well validated eTest profile, neither this report nor any other similar measure should be the sole basis for making hiring, promotional or career decisions. Rather, it should be considered as another data point and as a source of information and focus for further interviews, reference checks and other information gathering procedures.

The Leadership Report consists of general observations, probable assets and potential derailers. The narrative keys off of the broad range of dimensions (32 separate scales) that make up the eTest profile. The individual paragraphs presented in the narrative reflect the most prominent scores and themes. They also include observations based on subtle combinations of scores that are likely to have an impact on leadership style, but that may not be immediately obvious in the graphic score profile.

The paragraphs describing probable assets and potential derailers do not represent the full complement of factors likely to help or hinder a person in a leadership role. However, they do tap into some of the most likely strengths and developmental opportunities. They can provide some insights into a person's most likely positive attributes in a leadership role, and into his or her potential gaps and needs for improvement. The potential derailers are not necessarily fatal flaws or clear indications that there would be major problems in these areas. However, although there may be no behavioral indications of trouble, this report can be used as a roadmap to highlight potential opportunities for further growth and development, both in the leveraging of strengths and the avoidance of pitfalls.

Optional Additional eTest Reports

Of all of the eTest reports, the Leadership Report is the most qualitative. It presents no graphs or numbers. Therefore, it does not lend itself to the same types of validation and scale development as do the other reports from the eTest profile. Rather, it offers seasoned observations, opinions and suggestions based on professional judgment and extensive experience developing and using this instrument, as well as experience helping to select, coach and develop leaders in the real world.

The Sales Report

Development of the Profile

The Sales Report was designed to help select successful salespeople and to help individuals assess their own unique combinations of characteristics and preferences as they relate to various sales roles. The factors presented in the report were developed empirically from an analysis of real companies, real jobs and real performance data on real people. We analyzed over 100 sales jobs to determine their underlying dimensions, then examined the responses of over 3,000 salespeople from 47 companies to identify recurring themes. In addition to scales developed from the analysis of actual performance data, the report includes insights gained from the extensive professional experience of MPG psychologists in assessment and test construction/validation in a wide range of business organizations.

Norm Base

The people in the database upon which the Sales Report was developed were mostly college-educated. They were above average in terms of general intelligence and were more socially outgoing and dominant than a randomly selected group from the general population. This means that candidates or employees completing this instrument are being compared to a relatively strong sample of people, so the bar is high.

Use for Selection and Placement

For assistance in placement decisions, this report should be only one data point to help inform the decision-making process. It should be a source of information to be considered in combination with structured interviews, observations, reference checks, background screens and other sources of data. When used appropriately, it can be a powerful addition to the selection process, but it should not be the sole basis for hiring decisions. As noted earlier in, this manual, the eTest personality inventory upon which the Sales Report is based, has been validated in a wide range of jobs, but it should also be validated in your own environment and culture if it is to be part of the selection process. Obviously, there is no one best profile for all sales jobs. However, there are certain traits and behaviors that will increase the chances for success in most sales jobs. The Sales Report presents these factors, and provides general personality information along with more focused data about the person's similarity with people in different types of sales jobs.

Use for Self-development or Coaching

When individuals use the results of the Sales Report to assess their own readiness for a sales position, or if they are focused on the further development of their skills and their current roles, it may help to get a variety of outside opinions in addition to considering the eTest data. The Sales Report reflects the way people describe themselves, but others may see them differently. It may be helpful to use the results of the Sales Report as a basis for discussion with managers, coaches and mentors to help construct an appropriate developmental game plan.

Optional Additional eTest Reports

Structure of the Sales Report

Our research and experience indicate that salespeople, and sales jobs themselves, can be described along four major dimensions:

- **General Sales Similarity** (a very broad overall scale indicating how similar the person is to people in a very wide variety of sales jobs).
- **Account Acquisition** (the traditional hunter-farmer factor).
- **Strategic Selling** (important for developing complex solutions and dealing with intellectually challenging or ambiguous sales situations).
- **Team Coordination** (necessary for marshaling support and a broad array of resources for the client).

Personality characteristics can also offer insights into how a person may fare in various sales jobs. As noted earlier in this manual, there is a broad consensus that people can be described effectively using five major dimensions of personality (the Big Five):

- **Extraversion** (the orientation towards people and the external world).
- **Emotional Reactivity** (the tendency to be anxious, high strung or impatient).
- **Behavioral Control** (which includes discipline, conscientiousness and detail orientation).
- **Agreeableness** (the inclination to be affable, harmonious and cooperative).
- **Complexity** (the orientation towards the world of strategic, conceptual and complex ideas).

The Sales Report presents the person's scores on the above dimensions as well as predictions about his or her interpersonal style, motivational factors, problem-solving approach, general fit for the various sales environments and potential for management/leadership development. It also includes a section about probable strengths and potential gaps or liabilities. It reflects a combination of empirical research and professional judgment based on academic training and extensive real-world experience.

The Coaching Report

Development

This report is based on the person's responses to the standard eTest assessment. It reflects the experience and professional judgment of licensed psychologists who have used eTest results to help coach people to achieve and reach their potential in a wide variety of organizations, jobs and situations. The observations are generated from the person's basic personality factor scores, a variety of empirically derived predictions of performance and several scores indicating his/her similarity to people in different types of jobs. It is intended for managers, mentors and coaches to help people reach their potential. While it is focused primarily on job success, it can also apply to the client's overall development as a person. As with the other eTest reports, it is not a full psychological assessment, a measure of aptitude or ability, a clinical instrument or a medical diagnostic tool. It was developed specifically to assist coaches to work more effectively with their clients, primarily within a work/organizational context.

Structure of the Report

- **Strategies for Coaching** (focuses on a few key observations that can help the coach develop appropriate strategies for working with the client).
- **Probable Assets and Strengths** (describes the probable strengths suggested by the person's results). These are generated from his/her scores on various sub-scales and dimensions that influence how the major personality factors are expressed. In addition to the five major personality factors described above, there are 32 individual sub-scales and empirically derived performance predictors that are considered in developing the narrative list of strengths and developmental opportunities.
- **Areas for Development** (suggests areas for investigation). While they may not be career-ending, they should be considered as the client sets goals for development and strategies for achieving them. There may be other things that need attention, but these observations should provide a good starting point for discussion. These points will be similar to those in the Developmental Report. If he/she hasn't received that document, contact us and we can provide it.
- **Personality Profile** (presents the person's general personality score patterns). This may be useful in understanding the underlying characteristics and motivations that may influence the way he/she responds to coaching and learning opportunities. Personality traits are long term, enduring patterns of behavior that affect us consistently over time, and consistently in a wide range of settings. Our individual combinations of traits can influence our learning style and our approaches to training, coaching and developmental goal-setting. Not everyone learns the same way. The profile provides information about the client's scores on the five major domains of personality. They are the most basic personality traits and should be considered when helping him/her to craft effective strategies for learning, self-development and goal-setting.

Optional Additional eTest Reports

- **Coaching Guidelines** (offers key ideas to keep in mind when coaching this person to reach his/her full potential). It also provides a general framework to help coaches, managers and mentors facilitate growth, a worksheet for goals and strategies, and some references that may be useful.
- **Scale Definitions** (presents more detailed definitions the “Big Five” primary dimensions and their sub-factors presented in the report and used in the narrative descriptions and suggestions).

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