THE GALLUP ORGANIZATION

THE CLIFTON STRENGTHSFINDER™ RESEARCH FAQS

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Foreword

Many technical issues must be considered in the evaluation of an instrument such as the Clifton StrengthsFinder. One set of issues revolves around information technology and the expanding possibilities that Web-based applications offer for those who study human nature. Another set of issues involves what is known as psychometrics, which is the scientific study of human behavior through measurement. The Clifton StrengthsFinder is required to meet many American and international standards for psychometrics applied to test development (such as AERA/APA/NCME, 1999). The Clifton StrengthsFinder Research FAQs deal with some questions that emerge from those standards as well as technical questions that a leader may have about the use of the Clifton StrengthsFinder in his or her organization.

A few technical references have been cited for readers who wish to review primary source material. These technical materials may be found in local university libraries or on the Internet. The reader is encouraged to review the sources cited at the end of the FAQs. Readers with other research questions are encouraged to contact Gallup and request a copy of *The Clifton StrengthsFinder Technical Report: Development and Validation* (Lopez, Hodges, & Harter, 2005).

What is the Clifton StrengthsFinder?

The Clifton StrengthsFinder is a Web-based talent assessment instrument from the perspective of Positive Psychology. Through a secure connection, the Clifton StrengthsFinder presents 180 items to the user. Each item lists a pair of potential self-descriptors, such as "I read instructions carefully" and "I like to jump right into things." The descriptors are placed as if anchoring polar ends of a continuum. From each pair, the participant is then asked to choose the descriptor that best describes him or her, and also the extent to which it does so. The participant is given 20 seconds to respond to a given item before the system moves on to the next item. (Clifton StrengthsFinder developmental research showed that the 20-second limit resulted in a negligible item noncompletion rate.)

What is Positive Psychology?

For more than 50 years following World War II, psychology focused primarily on a pathology model, attempting to diagnose and treat mental illness. Research focused on repairing damage within a disease model of human functioning. Although this

period yielded many important breakthroughs in the treatment of mental illness, psychology's predominant focus on the pathology model allowed for very little attention on the study of fulfilled individuals and thriving organizations. A search of more than 100 years of the psychology literature found approximately 8,000 articles on anger, 58,000 on anxiety, and 71,000 on depression, but only about 850 articles on joy, 3,000 on happiness, and 5,700 on life satisfaction turned up. Articles on negative emotions surpassed those on positive emotions by a 14-1 ratio (Myers, 2000).

A new perspective in psychology, led by such pioneers as Donald O. Clifton, Ph.D., and Martin Seligman, Ph.D., is known as Positive Psychology. Positive Psychology is defined as "the scientific study of optimal human functioning. It aims to discover and promote the factors that allow individuals and communities to thrive" (Sheldon, Fredrickson, Rathunde, & Csikszentmihalyi, 2000). Positive Psychology is about identifying the talents and strengths in individuals and organizations, and helping them develop and excel by building upon those talents and strengths. This new paradigm explores ways to help people flourish rather than simply function. Topics receiving attention within the Positive Psychology movement include courage, strength, wisdom, spirituality, happiness, hope, resiliency, confidence, satisfaction, and other related areas of study. These topics are studied at the individual level or in a work group, family, or community. The strong reception to this positive approach to psychology is evidenced through special journal issues devoted to Positive Psychology in the American Psychologist (January 2000, March 2001) and the Journal of Humanistic Psychology (Winter 2001), as well as a host of edited books on topics in the field of Positive Psychology (Cameron, Dutton, & Quinn, 2003; Keyes & Haidt, 2003; Linley & Joseph, 2004; Lopez & Snyder, 2003; Snyder & Lopez, 2002).

The Gallup Organization has been a prominent and recognized leader in the Positive Psychology movement since its inception. In January 2003, Dr. Clifton was awarded an American Psychological Association presidential commendation in recognition of his pioneering role in strengths-based psychology. The commendation states, "Whereas, living out the vision that life and work could be about building what is best and highest, not just about correcting weaknesses, [Clifton] became the father of Strengths-Based Psychology and the grandfather of Positive Psychology."

Gallup has sponsored and hosted the first five major Positive Psychology Summits, now attended annually by more than 300 research leaders, graduate students, and practitioners. Gallup is also actively involved in the science of Positive Psychology through theory development and empirical research in the areas of talent-based hiring, strengths-based development, employee engagement, and customer engagement. Further, many of the leading academics in the Positive Psychology field are members of Gallup's Senior Scientist program designed for global research leaders who teach at conferences and client programs, conduct publishable research, and lend their expertise to Gallup research design and consulting. Current Gallup Senior Scientists engaged in Positive Psychology research and instruction include Chip Anderson (Azusa Pacific University), Bruce Avolio (University of Nebraska-Lincoln), Mihaly Csikszentmihalyi (Claremont Graduate University), Ed Diener (University of Illinois-Urbana Champaign), Barbara Fredrickson (University of Michigan), Daniel

Kahneman (Princeton University), Fred Luthans (University of Nebraska-Lincoln), and Phil Stone (Harvard University).

James K. Clifton, Gallup Chairman and CEO, articulated the following vision for the future of Positive Psychology in his letter to attendees of the First International Positive Psychology Summit.

> We believe many of the answers and solutions the world needs most lie within this new science [of Positive Psychology]. We [Gallup] will continue to do our part to contribute both financial and methodological resources to help harden with math and economics what many perceive to be a science that is too soft. They are of course, wrong, and have no idea of the power in many of the discoveries that you [Positive Psychological researchers] have made. The best partnership Gallup can have with this new institution is to help provide research and evidence that this science is as hard as physics or medicine. That will be our contribution (Clifton, 2002).

Is the Clifton StrengthsFinder supposed to be a work-related inventory, a clinical inventory, both, or neither?

The Clifton StrengthsFinder is an omnibus assessment based on Positive Psychology. Its primary application has been in the work domain, but it has been used for understanding individuals in a variety of roles and settings -- employees, executive teams, students, families, and personal development. It is *not* intended for clinical assessment or diagnosis of psychiatric disorders.

Why isn't the Clifton StrengthsFinder based on the "big five" factors of personality that have been well established in research journals since the 1980's?

The "big five" factors of personality are neuroticism (which reflects emotional stability -- reverse-scored), extroversion (seeking the company of others), openness (interest in new experiences, ideas, and so forth), agreeableness (likeability, harmoniousness), and conscientiousness (rule abidance, discipline, integrity). A substantial amount of scientific research has demonstrated that human personality functioning can be summarized in terms of these five dimensions. This research has been conducted across cultures and languages (for example, McCrae and Costa, 1987; McCrae, Costa, Lima, et al., 1999; McCrae, Costa, Ostendorf, et al., 2000).

The major reason that the Clifton StrengthsFinder is not based on the big five is that the big five is a measurement model rather than a conceptual one. It was derived from factor analysis. No theory underpinned it. It consists of the most generally agreed upon minimal number of personality factors, but conceptually it is no more correct than a model with four or six factors (Block, 1995; Hogan, Hogan, and Roberts, 1996). Some parts of the Clifton StrengthsFinder could be boiled down to aspects of the big five, but nothing would be gained from doing so. In fact, reducing the respondent's Clifton StrengthsFinder score to five dimensions would produce less information than is produced by any current measure of the big five, as those measures report subscores within those of the five major dimensions.

How was the Clifton StrengthsFinder developed?

The conceptual basis of the Clifton StrengthsFinder is grounded in more than three decades of the study of success across a wide variety of functions in business and education. Data from more than two million individuals were considered in the development of the Clifton StrengthsFinder. The item pairs were selected from a database of criterion-related validity studies, including more than 100 predictive validity studies (Schmidt & Rader, 1999). Factor and reliability analyses were conducted in multiple samples to assess the contribution of items to measurement of themes and the consistency and stability of theme scores -- thereby achieving the goal of a balance between maximized theme information and efficiency in instrument length.

Why does the Clifton StrengthsFinder use these 180 item pairs and not others?

These pairs reflect Gallup's research over three decades of studying successful people in a systematic, structured manner. They were derived from a quantitative review of item functioning, from a content review of the representativeness of themes and items within themes, with an eye toward the construct validity of the entire assessment. Given the breadth of talent we wish to assess, the pool of items is large and diverse. Well-known personality assessments range from 150 to upward of 400 items.

Are the Clifton StrengthsFinder items ipsatively scored, and if so, does this limit scoring of the items?

Ipsativity is a mathematical term that refers to an aspect of a data matrix, such as a set of scores. A data matrix is said to be ipsative when the sum of the scores for each respondent is a constant. More generally, ipsativity refers to a set of scores that define a person in particular but is comparable between persons in only a very limited way. For example, if you rank-ordered your favorite colors and someone else rank-ordered their favorite colors, one could not compare the *intensity* of preference for any particular color due to ipsativity; only the *ranking* could be compared. Of the 180 Clifton StrengthsFinder items, less than 30 percent are ipsatively scored. These items are distributed over the range of Clifton StrengthsFinder themes, and no one theme contains more than one item scored in a way that would produce an ipsative data matrix (Plake, 1999).

How are Clifton StrengthsFinder theme scores calculated?

Scores are calculated on the basis of the mean of the intensity of self-description. The respondent is given three response options for each self-description: strongly agree, agree, and neutral. A proprietary formula assigns a value to each response category. Values for items in the theme are averaged to derive a theme score. Scores can be reported as a mean, as a standard score, or as a percentile.

Was modern test score theory (for example, IRT) used to develop the Clifton StrengthsFinder?

The Clifton StrengthsFinder was developed to capitalize on the accumulated knowledge and experience of Gallup's talent-based strengths practice. Thus, items were initially chosen on the basis of traditional validity evidence (construct, content, criterion). This is a universally accepted method for developing assessments. Methods to apply IRT to assessments that are both heterogeneous and homogeneous are only now being explored (for example, Waller, Thompson, and Wenk, 2000). Further iterations of the Clifton StrengthsFinder may well use other statistical methods to refine the instrument.

What construct validity research has been conducted in relation to the Clifton StrengthsFinder?

The Clifton StrengthsFinder is an omnibus assessment of talents based on Positive Psychology. Therefore, it undoubtedly has correlational linkages to these measures to about the same extent that personality measures link to other measures in general.

Construct validity can be assessed through a number of analysis types. During development phases, a number of items were pilot tested. The items with the strongest psychometric properties (including item correlation to theme) were retained.

Items should correlate to their proposed themes (constructs) at a higher level than they do to other themes (constructs.) In a follow-up study of 601,049 respondents, the average item-to-proposed-theme correlation (corrected for part-whole overlap) was 6.6 times larger than the average item correlation to other themes.

Construct validity can also be assessed on the basis of convergent and discriminant validity evidence. A 2003 construct validity study explored the relationship between the Clifton StrengthsFinder and the five-factor model of personality. Several expected associations between Clifton StrengthsFinder themes and five-factor model constructs were found. For example, the Discipline theme correlates .81 with a measure of conscientiousness. Theoretically, these constructs have similar definition in relation to orderliness and planning. Other examples include the .83 correlation between Woo and extroversion, the .70 correlation between Ideation and intellectence, and the .58 correlation between Positivity and agreeableness.

Convergent and discriminant validity studies are a part of past and ongoing construct validity research.

Can Clifton StrengthsFinder scores change?

This is an important question for which there are both technical and conceptual answers.

Technical answers: The talents measured by Clifton StrengthsFinder are expected to demonstrate a property called reliability. Reliability has several definitions. The most important form of reliability estimate for the Clifton StrengthsFinder is technically known as test-retest reliability, which is the extent to which scores are stable over time. Test-retest reliabilities on the Clifton StrengthsFinder themes are high in relation to current psychometric standards.

Almost all Clifton StrengthsFinder themes have a test-retest reliability over a six-month interval between .60 and .80. A maximum test-retest reliability score of 1

would indicate that all Clifton StrengthsFinder respondents received *exactly* the same score over two assessments. The average correlation of an individual's theme ranking across multiple time periods is .74 (across 706 participants with an average of 17 months between administrations).

Conceptual answers: While an evaluation of the full extent of this stability is, of course, an empirical question, the conceptual origins of a person's talents are also relevant. Gallup has studied the life themes of top performers in an extensive series of research studies combining qualitative and quantitative investigations over many years. Participants have ranged from youths in their early teens to adults in their mid-seventies. In each of these studies, the focal point was the identification of long-standing patterns of thought, feeling, and behavior associated with success. The lines of interview questioning used were both prospective and retrospective, such as "What do you want to be doing ten years from now?" and "At what age did you make your first sale?" In other words, the timeframe of interest in our original studies of excellence in job performance was long term, not short term. Many of the items developed provided useful predictions of job stability, thereby suggesting that the measured attributes were of a persistent nature. Tracking studies of job performance over two- to three-year time spans added to the Gallup understanding of what it takes for a job incumbent to be consistently effective, rather than just achieve impressive short-term gains. The prominence of dimensions and items relating to motivation and to values in much of the original life themes research also informed the design of a Clifton StrengthsFinder instrument that can identify those enduring human qualities.

At this relatively early stage in the application of the Clifton StrengthsFinder, it is not yet clear how long an individual's salient features, so measured, will endure. In general, however, it is likely to be years rather than months. We may perhaps project a minimum of five years and upper ranges of 30 to 40 years and longer. There is growing evidence (for example, Judge, Higgins, Thoresen, and Barrick, 1999) that some aspects of personality are predictive throughout many decades of the life span. Some Clifton StrengthsFinder themes may turn out to be more enduring than others. Cross-sectional studies of different age groups will provide the earliest insights into possible age-related changes in normative patterns of behaviors. The first explanations for apparent changes in themes, as measured, should therefore be sought in the direction of measurement error rather than as indications of a true change in the underlying trait, emotion, or cognition. The respondents themselves should also be invited to offer an explanation for any apparent discrepancies.

How can one determine that the Clifton StrengthsFinder works?

The question of whether an assessment such as the Clifton StrengthsFinder "works" is addressed in an ongoing study of the construct validity of the instrument through psychometric and conceptual review. The Clifton StrengthsFinder is based on more than 30 years' of evidence as to the nature of talents and the application of strengths

analysis. This evidence was summarized in a recent scientific study that used meta-analysis (Schmidt & Rader, 1999).

The research literature in the behavioral and social sciences includes a multitude of individual studies with apparently conflicting conclusions. Meta-analysis allows the researcher to estimate the mean correlation between variables and make corrections for artifactual sources of variation in findings across studies. As such, it provides uniquely powerful information because it controls for measurement and sampling errors and other idiosyncrasies that distort the results of individual studies. (More than one thousand meta-analyses have been published in the psychological, educational, behavioral, medical, and personnel selection fields.) For a detailed review of meta-analysis across a variety of fields, see Lipsey and Wilson (1993).

What is strengths-based development?

Strengths-based development is a process that leads to an individual's ability to consistently perform a specific task at a nearly perfect level. A strength is made up of skills, knowledge, and talents. Skills are one's basic abilities to perform the steps of specific tasks, such as the ability to operate a computer. Skills do not naturally exist within us; they must be acquired through training and practice. Knowledge, defined simply as what you know, includes facts (factual knowledge) and understandings (gained through experience) that can be productively applied to specific tasks. Knowledge does not naturally exist within us; it must be acquired. Talents are recurring patterns of thought, feeling, or behavior that can be productively applied to specific tasks, such as the inner drive to compete, sensitivity to the needs of others, and the tendency to be outgoing at social gatherings. Although talents cannot be acquired, we each have talents that naturally exist within us -- and because those talents represent the best of our natural selves, they are the crucial component of strengths and our best opportunities to perform at levels of excellence.

Identification of talent is critical to strengths-based development. A popular means of identifying talent is to consider an individual's top five areas of talent as indicated by responses to the Clifton StrengthsFinder, Gallup's online talent assessment instrument. Considering these top five areas ("themes") of talent, known as one's Signature Themes, can help individuals understand and, as a result, internalize the themes that offer their most natural talents.

Signature Themes are a useful resource in the identification of talent. One's spontaneous reactions to any situation are an important indicator of talents, and the ranking of themes presented in a Clifton StrengthsFinder report is based upon spontaneous, top-of-mind reactions to the paired descriptors presented by the instrument.

Yearnings, rapid learning, satisfactions, and timelessness should also be considered when identifying talents (Clifton & Nelson, 1992). Yearnings reveal the presence of a talent, particularly when they are felt early in life. A yearning can be described as a pull, a magnetic influence, which draws one to a particular activity or environment time and again. Rapid learning offers another trace of talent. In the context of a new challenge or a new environment, something sparks in individual's talent. Immediately their brain seems to light up as if a whole bank of switches were suddenly flicked to "on" -- and the speed at which they learn a new skill or gain new knowledge provides a telltale clue to the talent's presence and power. Satisfactions are psychological fulfillment that results when one takes on and successfully meets challenges that engage their greatest talents. Timelessness can also serve as a clue to talent. When individuals become so engrossed in an activity that they lose track of time, it may be because the activity engaged one of their talents.

Strengths-based development begins with the identification of talent, and continues as one integrates his or her talents into his or her view of self. Successful strengths-based development results in desired behavioral change (Clifton & Harter, 2003). Client-sponsored studies have provided evidence that strengths-based development relates to various positive outcomes, including increases in employee engagement and productivity.

Managers who create environments in which employees are able to make the most of their talents have more productive work units with less employee turnover (Clifton & Harter, 2003). Studies show that strengths-based development increases self-confidence, direction, hope, and altruism (Hodges & Clifton, 2004). Ongoing research continues to explore the impact of strengths-based development on desired outcomes.

How can the Clifton StrengthsFinder be administered, scored, and reported for individuals who are unable to use the Internet because of either disability or economic status?

In regard to economic status (a.k.a. the digital divide), possible solutions include accessing the Internet from a library or school. It should be noted that some organizations with which Gallup works do not have universal Internet access. In these cases, as with those from disadvantaged backgrounds, the solution generally has involved special access from a few central locations.

In regard to disability, a range of accommodations is available. Generally, the most effective is for the participant to request that the timer that governs the pace of the Clifton StrengthsFinder administration be turned off. This and other accommodations would need to be arranged with Gallup on a case-by-case basis in advance of taking the Clifton StrengthsFinder.

What is the recommended reading level for Clifton StrengthsFinder users? What alternatives are available for those who do not meet that level?

The Clifton StrengthsFinder is designed for completion by those with at least an eighth- to tenth-grade reading level (in most cases, those 14 years of age or older). Trials of the Clifton StrengthsFinder in our youth leadership studies have demonstrated neither significant nor consistent problems in completion of the Clifton StrengthsFinder by teens. Possible alternatives or accommodations include turning off the pace timer to allow time to consult a dictionary or otherwise seek the meaning of a word.

Is the Clifton StrengthsFinder appropriate across demographic groups, countries, and languages?

There is overwhelming evidence from both Gallup and other research organizations that the structure of talent and personality dimensions such as those measured by the Clifton StrengthsFinder and other instruments does not vary across cultures and nationalities.

For instance, the average item-to-theme correlation is quite similar across countries. The standard deviation of the correlations across countries is .026 and ranges from .01 to .04 across themes. Across languages, similar results were obtained, with an average standard deviation of the correlations across languages of .024 and range from .01 to .03. With regard to theme intercorrelations, the standard deviation across countries averaged .03 with range of .01 to .07 across the 561 theme intercorrelations. Across languages, the standard deviation averaged .02, with range from .01 to .06. In summary, the theme intercorrelations are stable across cultural contexts.

The Clifton StrengthsFinder has international presence as a talent measurement instrument. It is currently available in 17 languages, with several other translations planned for the future. More than 110,000 of the first one million respondents completed the Clifton StrengthsFinder in a language other than English. Clifton StrengthsFinder respondents have come from nearly 50 different countries. Twenty-five of these countries have had at least 1,000 respondents. More than 225,000 respondents report a country of residence other than the United States.

Research exploring the age of Clifton StrengthsFinder respondents has revealed that the average item-to-theme correlation is quite similar across age groups. Average standard deviation of the correlations is .02 and ranges from .00 to .09 across themes.

Research into the gender of Clifton StrengthsFinder respondents has revealed that the item-total correlations are similar and consistently positive. Differences in item-total correlations between genders range from .00 to .06 across themes.

What feedback does a respondent get from the Clifton StrengthsFinder?

Feedback varies in accordance with the reason the person completes the Clifton StrengthsFinder. Sometimes the respondent receives only a report listing his or her top five themes -- those in which the person received his or her highest scores. In other situations the person may also review the remaining 29 themes, along with action suggestions for each theme, in a personal feedback session with a Gallup consultant or in a supervised team-building session with their colleagues.

Theme combinations are rare and powerful. There are 278,256 possible unique combinations of Signature Themes, and 33.39 million different permutations with unique order can exist.

Since 1998, the Clifton StrengthsFinder has been used as Gallup's initial diagnostic tool in development programs with various academic institutions, faith-based organizations, major businesses, and other organizations. The Clifton StrengthsFinder has been used to facilitate the development of individuals across hundreds of roles including: manager, customer service representative, salesperson, administrative assistant, nurse, lawyer, pastor, leader, student, teacher, and school administrator.

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The following references are provided for readers interested in particular details of these FAQs. This reference list is not meant to be exhaustive, and although many of the references use advanced statistical techniques, the reader should not be deterred from reviewing them.

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