## THE GALLUP ORGANIZATION

The Clifton StrengthsFinder Technical Report: Development and Validation

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## **Abstract**

The Gallup Organization's Clifton StrengthsFinder is an online measure of personal talent that identifies areas where an individual's greatest potential for building strengths exists. The 180-item pairs were based on the theory and research foundation associated with semi-structured personal interviews that had been used by Selection Research Incorporated and Gallup (Harter, Hayes, & Schmidt, 2004; Schmidt & Rader, 1999) for over 30 years. The measure, developed through rational and empirical processes, has been repeatedly subjected to psychometric examination; a summary of reliability and validity evidence gathered to date is presented. The primary application of the Clifton StrengthsFinder, as the evaluation that initiates a strengths-based development process in work and academic settings, is discussed.

## Development of the Clifton StrengthsFinder

The Gallup Organization, widely known for its polls (Gallup, 2004; Newport, 2004) and employee selection research (Harter, Hayes, & Schmidt, 2004; Schmidt & Rader, 1999) developed numerous semi-structured interviews to identify talent that could be enhanced and used to pursue positive outcomes in work and school. Under the leadership of educational psychologist Donald O. Clifton<sup>1</sup>, Gallup developed the Clifton StrengthsFinder, an objective measure of personal talent (consisting of 180 pairs of items) that could be administered online in less than one hour. More than one million workers and students worldwide had completed this measure as of April 2004. The Clifton StrengthsFinder has been subjected to repeated psychometric scrutiny by its developers. The purpose of this manuscript is to describe the development and application of the Clifton StrengthsFinder and to summarize its psychometric support to date.

Clifton, over his 50-year career at the University of Nebraska, Selection Research Incorporated, and Gallup, studied "frames of reference" (Clifton, Hollingsworth, & Hall, 1952), teacher-student rapport (Dodge & Clifton, 1956), management (Clifton, 1970; 1975; 1980), and success across a wide variety of domains in business and education (Buckingham & Clifton, 2000; Clifton & Anderson, 2002; Clifton & Nelson, 1992). He based his research and practice related to success on one simple question, "What would happen if we studied what is right with people?", and on straightforward notions that stood the test of time and empirical scrutiny. First, he believed that talents could be operationalized, studied, and capitalized upon in work and academic settings. Specifically, "talents" were considered "naturally recurring patterns of thought, feeling, or behavior that can be productively applied" (Hodges & Clifton, 2004, p. 257) and manifested in life experiences characterized by yearnings, rapid learning, satisfactions, and timelessness. These trait-like "raw materials" are believed to be the products of normal healthy development and successful experiences over childhood and adolescence. "Strengths" are viewed as extension of talent. More precisely, the strength construct combines talents with associated knowledge and skills and is defined as the ability to consistently provide near-perfect performance in a specific task. (Though labeled the Clifton StrengthsFinder, the instrument actually measures talent that serves as the foundation for strengths development.)

Second, Clifton considered success to be closely associated with personal talents and strengths in addition to the traditional constructs linked with analytical intelligence. In accordance with those beliefs, he worked to identify hundreds of personal talents that predicted work and academic success, and he constructed empirically-based, semi-structured interviews for identifying these talents. When developing these interviews, Clifton and analysts examined the prescribed roles of a person (e.g., student, salesperson, administrator), visited the job site or academic setting, identified outstanding performers in these roles and settings, and determined the long-standing thoughts, feelings, and behaviors associated with situational success. Many of the interviews developed provided useful predictions of positive outcomes (Schmidt & Rader, 1999). These interviews subsequently were administered by Gallup analysts to more than two million individuals for the purposes of personal development and

employee selection. In the mid-1990s, when considering the creation of an objective measure of talent, Clifton and colleagues systematically reviewed these interviews and the data they generated to capitalize on the accumulated knowledge and experience of Gallup's talent-based practice.

The prominence of dimensions and items relating to motivation and to values in much of the interview research informed the design of a Clifton StrengthsFinder instrument that can identify those enduring human qualities. An initial pool of more than 5,000 items was constructed on the basis of traditional validity evidence (construct, content, criterion). Given the breadth of talent assessed, the pool of items was considered large and diverse. A smaller pool was derived subsequent to quantitative review of item functioning and a content review of the representativeness of themes and items within themes (with an eye toward the construct validity of the entire assessment). Specifically, evidence used to evaluate the item pairs was taken from a database of criterion-related validity studies, including over 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. During development phases, a number of sets of items were pilot tested. The items with the strongest psychometric properties (including item correlation to theme) were retained. 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 (see the validity section of this manuscript for presentation of average item correlations for each theme).

In 1999, a 35-theme version of the Clifton StrengthsFinder was launched. After several months of data were collected, researchers revisited the instrument and, based on analyses of theme uniqueness and redundancy, decided on the 180 item pairs (360 items, 256 of which are scored) and the 34-theme version that currently is available. Since 1999, some theme names have changed, but the theme descriptions

and 180 item pairs have not changed. (See Appendix A for a listing and description of the 34 themes.)

Today, the Clifton StrengthsFinder is available in 17 languages and modifiable for individuals with disabilities. It is appropriate for administration to adolescents and adults with a reading level of 10<sup>th</sup> grade or higher. By identifying one's top themes of talent, it provides a starting point in the identification of specific personal talents. And, the related supporting materials (e.g., Buckingham & Clifton, 2000; Clifton & Anderson, 2002; Clifton & Nelson, 1992) help individuals discover how to build upon his or her talents to develop strengths within his or her role. (Strengths-based development will be described in more detail in a subsequent section.) It is not designed or validated for use in employee selection or mental health screening. Given that Clifton StrengthsFinder feedback is provided to foster intrapersonal development, comparisons across profiles of individuals is discouraged. Furthermore, the Clifton StrengthsFinder is not sensitive to change; it should not be used a pre-post measure of growth.

#### Administration, Scoring, and Feedback

Through a secure Internet connection, the Clifton StrengthsFinder presents a demographic questionnaire (tapping country of residence, age, and gender) and the 180 item pairs in the preferred language of 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 an 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.)

Scores are calculated based on the mean of the intensity of self-description. Less than 30 percent of the 180 item pairs are ipsatively scored; no one theme contains more

than one item scored in a way that would produce an ipsative data matrix (Plake, 1999).<sup>2</sup>

A proprietary formula assigns a value to each response category. Values for items in the theme are averaged to derive a theme score. Scores are presented as a mean, a standard score, and a percentile and added to the Gallup database.

Feedback varies in accordance with the reason the person completes the Clifton StrengthsFinder. Summary scores are not provided to respondents. In most cases the respondent receives only a report listing his or her top five talent themes<sup>3</sup> -- those in which the person received his or her highest scores, in order of intensity -- also known as Signature Themes. In other situations the respondent may review all 34 themes, along with "action items" for each theme, in a personal feedback session with a Gallup consultant or in a supervised team-building session with their colleagues. In programs designed to promote strengths-based development (described subsequently), feedback often is accompanied by instruction, experiential learning, and mentoring activities designed to help people make the most of their talents (i.e., develop strengths associated with occupational or educational roles).

#### Reliability

#### Internal Consistency

The number of items per talent theme ranges from four (Context, Ideation, Includer, Input, Strategic) to 15 (Positivity). Internal consistency, as reflected in coefficient alphas based on responses of 706 Gallup associates, meets expectations for measures used in psychology practice (*coefficient alpha=*.70; AERA/APA/NCME, 1999). The alpha for the vast majority of the themes (23 of them) is at or above .70, whereas only three themes have alphas below .65. The highest alpha (.81) is associated with the Woo theme and the lowest alpha (.55) is associated with the Restorative theme. (See Table 1 for the number of items per theme as well as the coefficient alpha for each theme.)

**Table 1.** Items per Clifton StrengthsFinder Theme and Coefficient Alphas for a 706-Person Sample

Theme	Items per Theme	Coefficient Alphas	Theme	Items per Theme	Coefficient Alphas
Achiever	6	0.73	Futuristic	9	0.71
Activator	6	0.73	Harmony	5	0.70
Adaptability	8	0.73	Ideation	4	0.73
Analytical	9	0.76	Includer**	4	0.66
Arranger	9	0.66	Individualization	6	0.69
Belief	10	0.75	Input	4	0.70
Command	8	0.76	Intellection	10	0.76
Communication	8	0.75	Learner	8	0.77
Competition	6	0.78	Maximizer	5	0.66
Connectedness	8	0.58	Positivity	15	0.79
Consistency*	7	0.71	Relator	5	0.65
Context	4	0.62	Responsibility	11	0.65
Deliberative	9	0.76	Restorative	6	0.55
Developer	10	0.68	Self-Assurance	8	0.73
Discipline	13	0.73	Significance	10	0.77
Empathy	8	0.74	Strategic	4	0.72
Focus	7	0.68	Woo	6	0.81

Note: The 256 scored items (of the 360 items administered) are accounted for in this table.

## Stability

Almost all Clifton StrengthsFinder themes have test-retest reliability over a six-month interval between .60 and .80. An initial study of stability (examining score to score associations) was conducted in the 1990s and the 3-week test-retest of 300 consumer interviewers from Gallup provided an average theme correlation coefficient of .76. A June 2000 study revealed that the average correlation of an individual's theme ranking across multiple time periods is .74 (score to score associations across 706 Gallup associates with an average of 17 months between administrations). A third stability

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

study, involving 106 college students and a three-month interval, will be completed in 2005.

## Reliability Summary

Internal consistency and test-retest stability estimates were computed across numerous samples to examine the basic reliability of the Clifton StrengthsFinder. The evidence suggests that the scales or themes are internally consistent (despite being comprised of as few as four items) and stable over periods ranging from three weeks to 17 months. Specifically, coefficient alphas range from .55 to .81 and most test-retest correlations were above .70.

## Validity

#### **Item-total Correlations**

The average item-total correlation can provide a basic metric of item-to-theme validity. These average item-total correlations were computed, and corrected for part-whole overlap, for each of the 34 themes for 601,049 respondents (including laypersons, businesspeople, and college students) in the Clifton StrengthsFinder database (see Table 2). For comparison purposes, the grand average of 33 "average item-cross total correlations" (i.e., the average correlation of the items comprising a given theme with the total sum of items for a completely different theme) is also presented for each theme in Table 2. A grand average of these 33 average item-cross total correlations for each theme provides a concise summary of the extent to which items within a given theme category relate to other theme categories. It was expected that items would relate to their assigned themes better than to unassigned themes. As mentioned previously, the average item-total correlations are, on average, 6.6 times greater than the respective grand averages of the average item-cross total correlations. In more conservative terms, the median ratio of average item-totals to

the grand averages of average item-cross totals across all themes is 2.82. This demonstrates that in general the item sets for all of the 34 Clifton StrengthsFinder themes are more related within a given theme category than between theme categories. It should be noted, however, that considering the grand averages of the average item-total cross correlations masked seven instances (of 1122 analyses) in which the individual average item-cross total correlations were larger than the respective average item-total correlations. Gallup researchers plan to address these individual cases of dependency in future iterations of the Clifton StrengthsFinder instrument.

**Table 2**. Average Item-Total Comparisons for 601,049 Respondents in the Clifton StrengthsFinder Database

Theme	Average Item-Total Correlation	Grand Average of Average Item-Cross Total Correlation s	Theme	Average Item-Total Correlation	Grand Average of Average Item-Cross Total Correlation s
Achiever	0.41	0.16	Futuristic	0.36	0.14
Activator	0.31	0.14	Harmony	0.37	0.01
Adaptability	0.39	0.01	Ideation	0.32	0.13
Analytical	0.36	0.11	Includer**	0.31	0.07
Arranger	0.25	0.14	Individualization	0.26	0.12
Belief	0.21	0.11	Input	0.26	0.12
Command	0.31	0.12	Intellection	0.33	0.10
Communication	0.35	0.13	Learner	0.43	0.17
Competition	0.41	0.12	Maximizer	0.38	0.12
Connectedness	0.29	0.09	Positivity	0.35	0.11
Consistency*	0.31	0.02	Relator	0.28	0.17
Context	0.31	0.07	Responsibility	0.31	0.13
Deliberative	0.38	0.05	Restorative	0.40	0.07
Developer	0.29	0.08	Self-Assurance	0.28	0.15
Discipline	0.33	0.09	Significance	0.29	0.11
Empathy	0.35	0.03	Strategic	0.45	0.17
Focus	0.33	0.15	Woo	0.43	0.15

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

## Correlations Among Theme Total Scores

Analysis of the relationships between the 34 theme scores provides additional information about the extent of overlap between Clifton StrengthsFinder themes. Examination of the intercorrelation matrix of theme scores suggests that, despite six high correlations in the range of .65 to .73, none of the themes are completely redundant. (A table presenting all interrelationships between themes is included in Appendix B.) In 2005, Gallup researchers will conduct further examinations of theme

integrity, including a confirmatory factor analysis (Tim Hodges, personal communication, December 8, 2004).

## Convergent and Discriminant Validity

Construct validity of the Clifton StrengthsFinder has been considered on the basis of convergent and discriminant validity evidence. A construct validity study (Harter & Hodges, 2003) explored the relationship between the Clifton StrengthsFinder and the five-factor model of personality in a sample of 297 undergraduate business students in a Midwestern university. The "big five" factors of personality are neuroticism (which reflects emotional stability -- reverse-scored), extroversion (seeking the company of others), openness/intellectence (interest in new experiences, ideas, and so forth), agreeableness (likeability, harmoniousness), and conscientiousness (rule abidance, discipline, integrity) (McCrae & Costa, 1987; McCrae, Costa, Lima, et al., 1999; McCrae, Costa, Ostendorf, et al., 2000). A priori hypotheses linking themes and personality variables included Conscientiousness correlating positively with Achiever, Deliberative, Discipline, Focus, and Responsibility; Extroversion correlating positively with Activator, Communication, and Woo; Agreeableness correlating positively with Harmony and Positivity; Intellectence correlating positively with Ideation, Input, Intellection, and Strategic. Several of these expected associations between Clifton StrengthsFinder themes and five-factor model constructs were found (see Table 3). For example, the Discipline theme correlates .81 with the 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.

**Table 3.** Correlations between Clifton StrengthsFinder Themes and the Big 5 for 297 Respondents

Theme	Extraversion	Agreeableness	Conscientiousness	Emotional Stability	Intellectence	Theme	Extraversion	Agreeableness	Conscientiousness	Emotional Stability	Intellectence
Achiever	0.16	0.26	0.53	0.18	0.36	Futuristic	0.30	0.29	0.20	0.02	0.41
Activator	0.55	0.11	-0.05	0.11	0.45	Harmony	-0.28	0.01	0.24	-0.13	-0.54
Adaptability	0.09	0.06	-0.56	0.19	0.18	Ideation	0.38	0.08	-0.27	0.26	0.70
Analytical	-0.16	-0.16	0.39	-0.04	0.19	Includer**	0.38	0.36	-0.13	0.21	0.03
Arranger	0.26	0.34	0.28	0.17	0.34	Individualization	0.19	0.15	-0.07	0.01	0.44
Belief	0.09	0.37	0.19	0.15	0.20	Input	0.04	0.22	0.14	-0.05	0.53
Command	0.30	-0.15	0.01	0.09	0.59	Intellection	-0.19	0.91	0.17	-0.07	0.42
Communication	0.77	0.29	-0.15	-0.02	0.36	Learner	0.00	0.14	0.38	0.18	0.42
Competition	0.17	-0.17	0.18	0.18	0.31	Maximizer	0.30	0.10	-0.01	0.18	0.33
Connectedness	0.13	0.38	-0.08	0.12	0.41	Positivity	0.53	0.58	-0.17	0.18	0.17
Consistency*	-0.26	-0.01	0.39	-0.24	-0.50	Relator	0.24	0.36	0.28	0.23	0.34
Context	-0.19	-0.16	0.03	0.06	0.14	Responsibility	-0.13	0.25	0.56	0.00	0.12
Deliberative	-0.49	-0.41	0.34	-0.18	-0.03	Restorative	-0.20	0.06	0.03	-0.22	0.04
Developer	0.17	0.65	0.07	0.03	0.02	Self-Assurance	0.30	0.22	0.12	0.31	0.53
Discipline	-0.19	-0.03	0.81	-0.33	-0.17	Significance	0.24	-0.12	0.19	-0.14	0.23
Empathy	0.12	0.51	-0.09	-0.31	-0.16	Strategic	0.37	0.08	-0.13	0.18	0.70
Focus	0.17	0.19	0.56	0.03	0.22	Woo	0.83	0.41	-0.29	-0.01	0.31

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

## Properties Specific to Culture and Demographic Variables

The measurement properties of the Clifton StrengthsFinder were examined in relation to cultural, age, and gender variables. First, the average item-total correlations for each theme were considered across the categories within each cultural and demographic variable to determine the nature of the relationship between items and themes across contexts. Second, the correlations among the theme scores were

calculated across the categories within each cultural and demographic variable to determine the nature of the relationship between themes across contexts.

#### **Cultural Variables**

Two survey responses are considered proxy indicators of culture: (1) the country of the respondent's current residence and (2) the language in which the survey was administered. For each Clifton StrengthsFinder theme, the overall means and standard deviations of these average item-total correlations across the cultural categories of a given indicator were calculated, weighted by the sample size of the cultural category of the indicator. The weighted means and standard deviations of the average item-total correlations for country of current residence are shown below in Table 4. Only countries with at least 500 respondents were considered in the analysis; a total of 25 countries met the sample size criterion. The total sample size for the country of residence analysis was 536,415 respondents. Examination of Table 4 shows that all of the weighted mean average item-total correlations are in the positive direction, with relatively small weighted standard deviations.

**Table 4.** Weighted Means (and Standard Deviations) of Average Item-Total Correlations for Each Clifton StrengthsFinder Theme across 25 Countries of Residence

Theme	Mean (std)	Theme	Mean (std)
Achiever	0.41 (0.04)	Futuristic	0.36 (0.03)
Activator	0.30 (0.03)	Harmony	0.38 (0.03)
Adaptability	0.39 (0.03)	Ideation	0.32 (0.03)
Analytical	0.35 (0.02)	Includer**	0.31 (0.01)
Arranger	0.25 (0.02)	Individualization	0.26 (0.02)
Belief	0.21 (0.03)	Input	0.26 (0.03)
Command	0.32 (0.03)	Intellection	0.33 (0.02)
Communication	0.35 (0.03)	Learner	0.43 (0.03)
Competition	0.41 (0.04)	Maximizer	0.38 (0.02)
Connectedness	0.29 (0.04)	Positivity	0.35 (0.02)
Consistency*	0.31 (0.03)	Relator	0.27 (0.02)
Context	0.32 (0.04)	Responsibility	0.30 (0.02)
Deliberative	0.38 (0.02)	Restorative	0.40 (0.02)
Developer	0.29 (0.02)	Self-Assurance	0.28 (0.02)
Discipline	0.33 (0.02)	Significance	0.29 (0.02)

Empathy	0.35 (0.04)	Strategic	0.44 (0.03)
Focus	0.33 (0.02)	Woo	0.43 (0.04)

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

Theme intercorrelation matrices were calculated for all 34 themes within the country of residence variable. Then the results across the corresponding cells of each matrix were summarized across all categories of the indicator, in the form of a weighted mean and weighted standard deviation (i.e., weighted by category sample size). The results of the theme-to-theme intercorrelations for country of current residence are presented in Appendix C. Examination of the standard deviations suggests that the theme-score correlations remained fairly stable across categories; the standard deviations ranged from .01 to .07, with a mean standard deviation of .03.

Table 5 shows the weighted means and standard deviations of the average item-total correlations for each Clifton StrengthsFinder theme across 13 of 17 survey languages. (Only language categories with at least 500 respondents were considered in the analysis.) The total sample size for the survey language analysis was 599,458 respondents. Examination of Table 5 shows that all of the weighted mean average item-total correlations are in the positive direction, with relatively small weighted standard deviations.

**Table 5.** Weighted Means (and Standard Deviations) of Average Item-Total Correlations for Each Clifton StrengthsFinder Theme across 13 Survey Languages

Theme	Mean (std)	Theme	Mean (std)
Achiever	0.41 (0.03)	Futuristic	0.36 (0.03)
Activator	0.31 (0.02)	Harmony	0.37 (0.03)
Adaptability	0.39 (0.03)	Ideation	0.32 (0.03)
Analytical	0.36 (0.02)	Includer**	0.32 (0.01)
Arranger	0.25 (0.02)	Individualization	0.26 (0.02)
Belief	0.21 (0.03)	Input	0.26 (0.03)
Command	0.32 (0.03)	Intellection	0.33 (0.01)
Communication	0.35 (0.02)	Learner	0.43 (0.03)
Competition	0.41 (0.03)	Maximizer	0.38 (0.02)
Connectedness	0.29 (0.03)	Positivity	0.35 (0.02)
Consistency*	0.31 (0.02)	Relator	0.27 (0.02)
Context	0.32 (0.03)	Responsibility	0.30 (0.02)
Deliberative	0.38 (0.02)	Restorative	0.40 (0.02)
Developer	0.29 (0.02)	Self-Assurance	0.28 (0.02)
Discipline	0.33 (0.02)	Significance	0.29 (0.02)
Empathy	0.35 (0.03)	Strategic	0.44 (0.03)
Focus	0.34 (0.02)	Woo	0.43 (0.03)

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The theme intercorrelation matrix for language is presented in Appendix D. Examination of the standard deviations suggests that the theme-score correlations were fairly stable across categories; the standard deviations ranged from .01 to .06, with a mean standard deviation of .02.

## Demographic Variables

Each respondent provides information regarding his or her age and gender prior to completing the Clifton StrengthsFinder. For analytical purposes, the ages of the survey respondents were classified into four categories: 15-29 year-olds, 30-44 year-olds, 45-59 year-olds, and those 60 years-of-age and greater. The total sample size for all four age groups was 540,798 respondents. More specifically, the 15-29 year-olds, 30-44 year-olds, 45-59 year-olds, and those 60 years-of-age and greater had 182,625

respondents, 231,218 respondents, 117,999 respondents, and 8,956 respondents, respectively.

The average item-total correlations were computed for each Clifton StrengthsFinder theme within each age category, then a weighted mean of the average item-total correlations were computed across the four age groups. Table 6 presents the weighted means and weighted standard deviations for each theme. All of the weighted means are positive, with relatively small standard deviations.

**Table 6.** Weighted Means (and Standard Deviations) of Average Item-Total Correlations for Each Clifton StrengthsFinder Theme across Four Age Groups

Theme	Mean (std)	Theme	Mean (std)
Achiever	0.41 (0.03)	Futuristic	0.36 (0.02)
Activator	0.31 (0.02)	Harmony	0.37 (0.03)
Adaptability	0.39 (0.01)	Ideation	0.32 (0.02)
Analytical	0.36 (0.00)	Includer**	0.31 (0.01)
Arranger	0.25 (0.01)	Individualization	0.25 (0.01)
Belief	0.21 (0.00)	Input	0.26 (0.01)
Command	0.32 (0.01)	Intellection	0.32 (0.01)
Communication	0.35 (0.00)	Learner	0.43 (0.01)
Competition	0.40 (0.01)	Maximizer	0.37 (0.03)
Connectedness	0.28 (0.02)	Positivity	0.35 (0.00)
Consistency*	0.30 (0.03)	Relator	0.28 (0.00)
Context	0.31 (0.01)	Responsibility	0.31 (0.01)
Deliberative	0.38 (0.01)	Restorative	0.39 (0.01)
Developer	0.29 (0.01)	Self-Assurance	0.29 (0.01)
Discipline	0.33 (0.00)	Significance	0.29 (0.00)
Empathy	0.35 (0.01)	Strategic	0.45 (0.01)
Focus	0.34 (0.00)	Woo	0.43 (0.01)

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Examination of the average item-total correlations for each theme across age categories shows that the basic item-to-theme relationships are positive and stable.

The 34 theme scores were intercorrelated for each of the four age groups separately. Next, the results across the four individual age correlation matrices were aggregated

by calculating the weighted means and standard deviations of the theme correlations in corresponding cells of each of the matrices. Examination of the standard deviations suggests that the theme-score correlations remained fairly stable across categories; the standard deviations ranged from .00 to .09, with a mean standard deviation of .02. (Appendix E presents relevant data.)

The gender of the respondents also was examined with respect to average item-total theme-score correlations. The average item-total correlations computed for 301,877 male respondents are presented in Table 7 subsequently. All of the average item-total correlations were in a positive direction. The average item-total correlations computed for 249,196 female respondents are presented in Table 8. Similar to the male respondents, all of the average item-total correlations were positive.

**Table 7.** Average Item-Total Correlations for Each Clifton StrengthsFinder Theme for Male Respondents

Theme	Mean	Theme	Mean
Achiever	0.42	Futuristic	0.36
Activator	0.30	Harmony	0.35
Adaptability	0.40	Ideation	0.31
Analytical	0.36	Includer**	0.31
Arranger	0.26	Individualization	0.26
Belief	0.22	Input	0.25
Command	0.31	Intellection	0.33
Communication	0.35	Learner	0.44
Competition	0.40	Maximizer	0.39
Connectedness	0.27	Positivity	0.34
Consistency*	0.30	Relator	0.28
Context	0.32	Responsibility	0.32
Deliberative	0.38	Restorative	0.41
Developer	0.27	Self-Assurance	0.28
Discipline	0.33	Significance	0.29
Empathy	0.29	Strategic	0.44
Focus	0.35	Woo	0.43

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

**Table 8.** Average Item-Total Correlations for Each Clifton StrengthsFinder Theme for Female Respondents

Theme	Mean	Theme	Mean
Achiever	0.41	Futuristic	0.36
Activator	0.30	Harmony	0.39
Adaptability	0.38	Ideation	0.33
Analytical	0.34	Includer**	0.32
Arranger	0.24	Individualization	0.26
Belief	0.20	Input	0.26
Command	0.31	Intellection	0.33
Communication	0.36	Learner	0.43
Competition	0.37	Maximizer	0.38
Connectedness	0.31	Positivity	0.35
Consistency*	0.32	Relator	0.28
Context	0.29	Responsibility	0.30
Deliberative	0.38	Restorative	0.39
Developer	0.30	Self-Assurance	0.29
Discipline	0.34	Significance	0.28
Empathy	0.35	Strategic	0.46
Focus	0.32	Woo	0.43

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

The correlations of the 34 theme scores were computed for the male and female respondents. Despite some high correlations in both gender tables, the evidence suggests that none of the themes are completely redundant. (Theme intercorrelation matrices for males and females are presented in Appendix F and Appendix G, respectively.)

#### Validity Summary

The average item-total correlations and theme-score intercorrelations were examined for the entire Clifton StrengthsFinder database, as well as for subsamples stratified by cultural indicators, age, and gender. Overall, the results suggest that items relate to their respective themes in a consistently positive manner. In addition, the analysis of the average item-cross total correlations suggests, as expected, that items have a

higher positive relationship with their assigned themes than with other themes. The examination of the theme-score intercorrelations suggests the absence of complete redundancy among themes. This lends support to the notion that each of the 34 themes provides unique information for evaluation purposes.

Evidence provided by Gallup researchers suggests that the structure of talent measured by the Clifton StrengthsFinder does not vary across cultures and demographic variables. The average item-to-theme correlation is quite similar across countries. The standard deviation of the correlations across countries is .03 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 .02 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. Regarding the age and gender of Clifton StrengthsFinder respondents, 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. Differences in item-total correlations between genders range from .00 to .06 across themes.

Finally, a study correlating Clifton StrengthsFinder themes with the Big 5 constructs provided initial evidence for the measure's convergent and discriminant validity. That is, the Clifton StrengthsFinder and personality variables were not redundant and were generally associated as hypothesized.

## Application: Strengths-Based Development

The Clifton StrengthsFinder identifies the areas where the greatest potential for strength development exists, and the measure often is used as a starting point for self-discovery in Gallup strengths-based development programs. After a respondent has completed the assessment and talent feedback is provided, a group of developmental

suggestions is customized to the individual's Signature Themes and to his or her role to help him or her integrate talents into personalized views of self. As the identification and integration stages of strengths development unfold, behavioral change is encouraged. Specifically, the strengths-based development process encourages individuals to build strengths by acquiring skills (i.e., basic abilities) and knowledge (i.e., what you know, including facts and meaning-making from experiences) that can complement their greatest talents in *strong* – consistently near-perfect – application to specific tasks.

Successful strengths-based development results in desired behavioral change (Clifton & Harter, 2003; Hodges & Clifton, 2004). Indeed, Gallup (Black, 2001; Connelly, 2002; Krueger, 2004) reports that client-sponsored studies have provided evidence that strengths-based development relates to various positive outcomes, including increases in employee engagement and productivity. Furthermore, 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 also show that strengths-based development increases self-confidence, direction, hope, and altruism (Hodges & Clifton, 2004) in college students. Ongoing research continues to explore the benefits of strengths-based development on desired outcomes in both work and academic settings.

## Closing Comments

Since 1998, the Clifton StrengthsFinder has been used as Gallup's talent identification tool in development programs with various academic institutions, faith-based organizations, major businesses, and other organizations. For these purposes, the measure has adequate internal consistency, stability, validity, and cross-cultural applicability. As mentioned previously, Gallup researchers plan to continue to examine the psychometric properties of the measure and modify it based on research findings.

The measure has been used to facilitate the development of individuals across dozens of roles including: student, teacher, manager, customer service representative, salesperson, administrative assistant, nurse, lawyer, pastor, leader, and school administrator. Strengths-based development programs, grounded in traditional Gallup practices, are now being refined based on the principles of positive psychology, the scientific study of and evidence-based promotion of optimal human functioning (as summarized in Cameron, Dutton, & Quinn, 2003; Keyes & Haidt, 2003; Linley & Joseph, 2004; Lopez & Snyder, 2003; Snyder & Lopez, 2002). The productive collaboration between Gallup and positive psychology hopefully will lead to refined and new measures and programs (both characterized by rigor and relevance) that will continue to generate more answers to the question "What would happen if we studied what is right with people?"

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#### **Footnotes**

- <sup>1</sup> 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."
- <sup>2</sup> 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 only in a very limited way. For example, if you rank-ordered your favorite colors and someone else rank-ordered his or her favorite colors, one could not compare the *intensity* of preference for any particular color due to ipsativity; only the *ranking* could be compared.
- <sup>3</sup> 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.
- <sup>4</sup> Reliability and validity evidence summarized in this manuscript was gathered on numerous samples. The samples were introduced in the paper in this order: 601,049 members of the total sample at time of some analyses, 300 consumer interviewers, 106 college students, 297 undergraduate business students, 536,415 members of the total sample (601,049) who met criteria for country of origin analysis, 599,458 members who met criteria for the language analysis, 540,798 members who met criteria for the age analysis, 301,877 for males, and 249,196 for females. The demographic items on the Clifton StrengthsFinder are optional items and some selection criteria were used in constructing samples. Therefore, the samples for some of the analyses associated with demographic variables are subsets of the total sample (601,049).

# Appendix A

Brief Descriptions of the 34 Themes of Talent Measured by the Clifton StrengthsFinder

#### **Achiever**

People especially talented in the Achiever theme have a great deal of stamina and work hard. They take great satisfaction from being busy and productive.

#### **Activator**

People especially talented in the Activator theme can make things happen by turning thoughts into action. They are often impatient.

#### **Adaptability**

People especially talented in the Adaptability theme prefer to "go with the flow." They tend to be "now" people who take things as they come and discover the future one day at a time.

#### **Analytical**

People especially talented in the Analytical theme search for reasons and causes. They have the ability to think about all the factors that might affect a situation.

#### **Arranger**

People especially talented in the Arranger theme can organize, but they also have a flexibility that complements this ability. They like to figure out how all of the pieces and resources can be arranged for maximum productivity.

### **Belief**

People especially talented in the Belief theme have certain core values that are unchanging. Out of these values emerges a defined purpose for their life.

#### **Command**

People especially talented in the Command theme have presence. They can take control of a situation and make decisions.

#### **Communication**

People especially talented in the Communication theme generally find it easy to put their thoughts into words. They are good conversationalists and presenters.

#### Competition

People especially talented in the Competition theme measure their progress against the performance of others. They strive to win first place and revel in contests.

#### **Connectedness**

People especially talented in the Connectedness theme have faith in the links between all things. They believe there are few coincidences and that almost every event has a reason.

#### Consistency

People especially talented in the Consistency theme are keenly aware of the need to treat people the same. They try to treat everyone in the world with consistency by setting up clear rules and adhering to them.

#### Context

People especially talented in the Context theme enjoy thinking about the past. They understand the present by researching its history.

#### **Deliberative**

People especially talented in the Deliberative theme are best described by the serious care they take in making decisions or choices. They anticipate the obstacles.

#### **Developer**

People especially talented in the Developer theme recognize and cultivate the potential in others. They spot the signs of each small improvement and derive satisfaction from these improvements.

#### **Discipline**

People especially talented in the Discipline theme enjoy routine and structure. Their world is best described by the order they create.

#### **Empathy**

People especially talented in the Empathy theme can sense the feelings of other people by imagining themselves in others' lives or others' situations.

#### **Focus**

People especially talented in the Focus theme can take a direction, follow through, and make the corrections necessary to stay on track. They prioritize, then act.

#### **Futuristic**

People especially talented in the Futuristic theme are inspired by the future and what could be. They inspire others with their visions of the future.

## **Harmony**

People especially talented in the Harmony theme look for consensus. They don't enjoy conflict; rather, they seek areas of agreement.

#### **Ideation**

People especially talented in the Ideation theme are fascinated by ideas. They are able to find connections between seemingly disparate phenomena.

#### Includer

People especially talented in the Includer theme are accepting of others. They show awareness of those who feel left out, and make an effort to include them.

#### **Individualization**

People especially talented in the Individualization theme are intrigued with the unique qualities of each person. They have a gift for figuring out how people who are different can work together productively.

#### Input

People especially talented in the Input theme have a craving to know more. Often they like to collect and archive all kinds of information.

#### Intellection

People especially talented in the Intellection theme are characterized by their intellectual activity. They are introspective and appreciate intellectual discussions.

#### Learner

People especially talented in the Learner theme have a great desire to learn and want to continuously improve. In particular, the process of learning, rather than the outcome, excites them.

#### **Maximizer**

People especially talented in the Maximizer theme focus on strengths as a way to stimulate personal and group excellence. They seek to transform something strong into something superb.

#### **Positivity**

People especially talented in the Positivity theme have an enthusiasm that is contagious. They are upbeat and can get others excited about what they are going to do.

#### Relator

People especially talented in the Relator theme enjoy close relationships with others. They find deep satisfaction in working hard with friends to achieve a goal.

#### Responsibility

People especially talented in the Responsibility theme take psychological ownership of what they say they will do. They are committed to stable values such as honesty and loyalty.

#### Restorative

People especially talented in the Restorative theme are adept at dealing with problems. They are good at figuring out what is wrong and resolving it.

#### **Self-Assurance**

People especially talented in the Self-Assurance theme feel confident in their ability to manage their own lives. They possess an inner compass that gives them confidence that their decisions are right.

#### **Significance**

People especially talented in the Signific ance theme want to be very important in the eyes of others. They are independent and want to be recognized.

#### Strategic

People especially talented in the Strategic theme create alternative ways to proceed. Faced with any given scenario, they can quickly spot the relevant patterns and issues.

#### Woo

People especially talented in the Woo theme love the challenge of meeting new people and winning them over. They derive satisfaction from breaking the ice and making a connection with another person.

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**Appendix B** *Theme-Score Intercorrelations for 601,049 Respondents in the Clifton StrengthsFinder Database* 

тнеме	Achiever	Activator	Adaptability	Analytical	Arranger	Belief	Command	Communication	Competition	Connectedness	Context	Deliberative	Developer	Discipline	Empathy	Consistency*	Focus
Achiever																	
Activator	0.35																
Adaptability	-0.24	-0.00															
Analytical	0.40	0.18	-0.33														
Arranger	0.47	0.39	-0.01	0.31													
Belief	0.31	0.26	0.07	0.19	0.40												
Command	0.32	0.67	0.03	0.25	0.28	0.21											
Communication	0.29	0.57	0.10	0.10	0.38	0.27	0.39										
Competition	0.49	0.44	-0.17	0.33	0.25	0.19	0.48	0.29									
Connectedness	0.08	0.16	0.19	0.06	0.26	0.44	0.13	0.20	-0.11								
Context	0.11	0.07	0.03	0.21	0.14	0.15	0.12	0.08	0.10	0.19							
Deliberative	0.13	-0.02	-0.01	0.45	0.07	0.09	0.22	-0.18	0.15	0.05	0.15						
Developer	0.05	0.08	0.32	-0.01	0.32	0.44	-0.06	0.21	-0.13	0.42	0.12	-0.04					
Discipline	0.37	0.09	-0.27	0.55	0.27	0.27	0.06	0.11	0.22	0.10	0.14	0.35	0.16				
Empathy	-0.19	-0.00	0.48	-0.29	0.06	0.17	-0.09	0.14	-0.22	0.33	0.03	-0.06	0.61	-0.00			
Consistency*	-0.03	-0.16	0.18	0.12	0.01	0.15	-0.19	-0.03	-0.09	0.04	0.08	0.17	0.26	0.43	0.25		
Focus	0.65	0.39	-0.37	0.52	0.41	0.31	0.38	0.29	0.48	0.08	0.13	0.26	0.03	0.52	-0.17	0.03	
Futuristic	0.42	0.47	-0.12	0.33	0.37	0.33	0.46	0.36	0.44	0.15	-0.01	0.12	0.06	0.24	-0.07	-0.14	0.57
Harmony	-0.10	-0.18	0.21	0.06	0.08	0.08	-0.28	-0.04	-0.16	0.06	0.08	0.12	0.31	0.28	0.31	0.68	-0.04
Ideation	0.25	0.45	0.08	0.16	0.27	0.17	0.56	0.36	0.30	0.25	0.12	0.05	0.08	-0.09	0.01	-0.40	0.26
Includer**	0.14	0.11	0.18	-0.00	0.21	0.24	-0.02	0.24	0.03	0.15	0.03	-0.34	0.33	0.10	0.20	0.21	0.06
Individualization	0.26	0.38	0.03	0.27	0.45	0.22	0.36	0.31	0.27	0.25	0.14	0.17	0.22	0.18	0.14	-0.19	0.33
Input	0.23	0.19	0.06	0.15	0.24	0.22	0.28	0.24	0.02	0.41	0.22	0.13	0.22	0.12	0.12	-0.05	0.21
Intellection	0.22	0.16	0.09	0.24	0.18	0.20	0.27	0.11	0.06	0.42	0.27	0.32	0.20	0.21	0.15	0.03	0.25
Learner	0.60	0.29	-0.20	0.49	0.45	0.33	0.30	0.23	0.25	0.31	0.25	0.22	0.17	0.35	-0.09	-0.06	0.57
Maximizer	0.22	0.35	0.10	0.14	0.40	0.19	0.32	0.30	0.23	0.19	0.03	0.10	0.14	0.11	0.10	-0.09	0.27
Positivity	0.25	0.41	0.25	-0.07	0.46	0.38	0.16	0.53	0.15	0.29	0.05	-0.36	0.53	0.06	0.37	0.07	0.18
Relator	0.47	0.40	-0.02	0.33	0.49	0.39	0.34	0.37	0.30	0.24	0.10	0.10	0.25	0.28	0.02	0.02	0.43
Responsibility	0.45	0.20	-0.02	0.43	0.58	0.57	0.16	0.22	0.13	0.28	0.15	0.27	0.34	0.49	0.07	0.25	0.43
Restorative	0.11	0.05	0.07	0.26	0.09	0.20	0.06	0.06	0.07	0.11	0.18	0.18	0.22	0.23	0.10	0.19	0.17
Self-Assurance	0.53	0.51	-0.06	0.33	0.47	0.34	0.56	0.38	0.44	0.16	0.10	0.14	0.06	0.20	-0.12	-0.14	0.51

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Significance	0.40	0.45	-0.13	0.44	0.35	0.26	0.44	0.33	0.53	-0.01	0.09	0.26	-0.07	0.35	-0.19	0.04	0.57
Strategic	0.42	0.46	-0.04	0.28	0.34	0.26	0.48	0.46	0.37	0.20	0.09	0.07	0.03	0.10	-0.09	-0.29	0.39
Woo	0.31	0.51	0.08	0.05	0.39	0.30	0.32	0.71	0.30	0.18	0.05	-0.30	0.20	0.04	0.10	-0.10	0.27

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

## **Appendix B Continued**

Theme-Score Intercorrelations for 601,049 Respondents in the Clifton StrengthsFinder Database

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тнеме	Futuristic	Harmony	Ideation	Includer**	Individualization	Input	Intellection	Learner	Maximizer	Positivity	Relator	Responsibility	Restorative	Self-Assurance	Significance	Strategic	Woo
Achiever																	
Activator																	
Adaptability																	
Analytical																	
Arranger																	
Belief																	
Command																	
Communication																	
Competition																	
Connectedness																	
Context																	
Deliberative																	
Developer																	
Discipline																	
Empathy																	
Consistency*																	
Focus																	
Futuristic																	
Harmony	-0.21																
Ideation	0.43	-0.36															
Includer**	0.13	0.16	0.07														
Individualization	0.35	-0.01	0.34	-0.05													
Input	0.20	-0.04	0.39	0.05	0.23												
Intellection	0.23	0.02	0.39	-0.00	0.23	0.73											
Learner	0.41	-0.07	0.36	0.10	0.33	0.56	0.54										
Maximizer	0.35	-0.03	0.31	0.06	0.47	0.16	0.18	0.22									
Positivity	0.32	0.11	0.26	0.52	0.25	0.18	0.08	0.21	0.29								
Relator	0.43	-0.04	0.29	0.20	0.34	0.23	0.22	0.43	0.31	0.43							
Responsibility	0.29	0.20	0.11	0.18	0.26	0.25	0.26	0.47	0.19	0.26	0.51						
Restorative	0.12	0.17	0.04	0.14	0.02	0.11	0.16	0.21	-0.43	0.09	0.14	0.25					
Self-Assurance	0.55	-0.24	0.43	0.14	0.36	0.24	0.23	0.51	0.48	0.33	0.50	0.38	-0.00				

Significance	0.48	-0.00	0.25	0.01	0.35	0.07	0.11	0.29	0.33	0.17	0.34	0.29	0.13	0.46			
Strategic	0.54	-0.49	0.51	0.08	0.34	0.28	0.27	0.41	0.33	0.27	0.43	0.24	0.04	0.52	0.34		
Woo	0.38	-0.09	0.34	0.34	0.26	0.16	0.01	0.23	0.26	0.70	0.38	0.20	0.07	0.42	0.30	0.40	

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

**Appendix C**Weighted Means (and Standard Deviations) of Theme-Score Intercorrelations across 25 Countries of Residence

тнеме	Achiever	Activator	Adaptability	Analytical	Arranger	Belief	Command	Communication	Competition	Connectedness	Context	Deliberative
Achiever												
Activator	0.34 (0.03)											
Adaptability	-0.23 (0.04)	0.01 (0.01)										
Analytical	0.40 (0.03)	0.18 (0.04)	-0.31 (0.03)									
Arranger	0.46 (0.02)	0.38 (0.02)	0.00 (0.03)	0.31 (0.02)								
Belief	0.30 (0.02)	0.26 (0.02)	0.08 (0.02)	0.20 (0.03)	0.40 (0.02)							
Command	0.32 (0.02)	0.67 (0.03)	0.03 (0.02)	0.26 (0.04)	0.28 (0.02)	0.21 (0.02)						
Communication	0.28 (0.03)	0.57 (0.02)	0.11 (0.02)	0.09 (0.03)	0.38 (0.02)	0.27 (0.02)	0.39 (0.03)					
Competition	0.49 (0.03)	0.44 (0.03)	-0.17 (0.02)	0.32 (0.03)	0.24 (0.02)	0.19 (0.03)	0.49 (0.03)	0.29 (0.02)				
Connectedness	0.07 (0.03)	0.16 (0.02)	0.20 (0.02)	0.06 (0.04)	0.25 (0.03)	0.43 (0.03)	0.12 (0.02)	0.20 (0.02)	-0.12 (0.04)			
Context	0.11 (0.02)	0.07 (0.02)	0.03 (0.02)	0.22 (0.03)	0.14 (0.02)	0.16 (0.01)	0.12 (0.02)	0.08 (0.02)	0.09 (0.03)	0.19 (0.02)		
Deliberative	0.13 (0.02)	-0.02 (0.02)	0.00 (0.03)	0.44 (0.03)	0.07 (0.03)	0.11 (0.03)	0.23 (0.02)	-0.19 (0.03)	0.14 (0.01)	0.06 (0.02)	0.15 (0.01)	
Developer	0.04 (0.06)	0.08 (0.05)	0.33 (0.04)	-0.02 (0.06)	0.32 (0.04)	0.44 (0.01)	-0.06 (0.05)	0.21 (0.03)	-0.14 (0.05)	0.42 (0.03)	0.12 (0.02)	-0.04 (0.03)
Discipline	0.37 (0.02)	0.08 (0.03)	-0.26 (0.04)	0.54 (0.02)	0.27 (0.02)	0.27 (0.03)	0.07 (0.03)	0.11 (0.03)	0.21 (0.03)	0.09 (0.04)	0.14 (0.02)	0.34 (0.02)
Empathy	-0.18 (0.05)	0.00 (0.03)	0.47 (0.02)	-0.28 (0.03)	0.08 (0.03)	0.17 (0.02)	-0.08 (0.05)	0.14 (0.01)	-0.22 (0.03)	0.34 (0.03)	0.03 (0.03)	-0.05 (0.03)
Consistency*	-0.03 (0.03)	-0.16 (0.03)	0.18 (0.02)	0.13 (0.03)	0.01 (0.02)	0.14 (0.03)	-0.19 (0.03)	-0.02 (0.03)	-0.10 (0.04)	0.03 (0.03)	0.08 (0.02)	0.17 (0.02)
Focus	0.65 (0.03)	0.39 (0.02)	-0.36 (0.04)	0.51 (0.04)	0.41 (0.02)	0.32 (0.03)	0.39 (0.02)	0.29 (0.02)	0.48 (0.02)	0.08 (0.03)	0.13 (0.02)	0.25 (0.02)
Futuristic	0.42 (0.03)	0.47 (0.03)	-0.11 (0.02)	0.32 (0.04)	0.36 (0.02)	0.34 (0.02)	0.46 (0.03)	0.36 (0.02)	0.44 (0.02)	0.15 (0.03)	-0.01 (0.03)	0.11 (0.02)
Harmony	-0.09 (0.03)	-0.18 (0.03)	0.21 (0.01)	0.06 (0.03)	0.09 (0.02)	0.09 (0.03)	-0.27 (0.04)	-0.03 (0.03)	-0.16 (0.04)	0.06 (0.03)	0.08 (0.02)	0.12 (0.02)
Ideation	0.25 (0.02)	0.44 (0.02)	0.09 (0.02)	0.15 (0.02)	0.27 (0.02)	0.19 (0.03)	0.57 (0.03)	0.36 (0.02)	0.30 (0.02)	0.26 (0.02)	0.12 (0.02)	0.04 (0.02)
Includer**	0.14 (0.02)	0.11 (0.02)	0.18 (0.02)	0.00 (0.02)	0.21 (0.02)	0.23 (0.03)	-0.02 (0.02)	0.24 (0.02)	0.03 (0.01)	0.15 (0.03)	0.03 (0.02)	-0.34 (0.02)
Individualization	0.26 (0.02)	0.38 (0.02)	0.04 (0.02)	0.27 (0.02)	0.46 (0.02)	0.23 (0.02)	0.37 (0.02)	0.31 (0.01)	0.27 (0.02)	0.26 (0.03)	0.15 (0.02)	0.17 (0.02)
Input	0.23 (0.02)	0.19 (0.01)	0.07 (0.02)	0.15 (0.02)	0.24 (0.02)	0.22 (0.01)	0.27 (0.02)	0.24 (0.02)	0.01 (0.03)	0.41 (0.03)	0.23 (0.02)	0.13 (0.02)
Intellection	0.23 (0.03)	0.15 (0.02)	0.09 (0.02)	0.24 (0.03)	0.19 (0.03)	0.21 (0.03)	0.27 (0.02)	0.11 (0.02)	0.06 (0.04)	0.43 (0.03)	0.27 (0.02)	0.32 (0.02)
Learner	0.59 (0.02)	0.28 (0.02)	-0.18 (0.03)	0.48 (0.02)	0.44 (0.03)	0.34 (0.02)	0.30 (0.02)	0.23 (0.03)	0.24 (0.02)	0.31 (0.02)	0.26 (0.02)	0.21 (0.02)
Maximizer	0.23 (0.02)	0.35 (0.02)	0.11 (0.02)	0.15 (0.02)	0.41 (0.02)	0.20 (0.02)	0.32 (0.02)	0.30 (0.02)	0.23 (0.02)	0.19 (0.03)	0.03 (0.02)	0.10 (0.02)
Positivity	0.24 (0.02)	0.41 (0.02)	0.25 (0.02)	-0.07 (0.04)	0.46 (0.01)	0.37 (0.03)	0.16 (0.02)	0.53 (0.02)	0.15 (0.02)	0.29 (0.03)	0.06 (0.02)	-0.36 (0.03)
Relator	0.46 (0.03)	0.40 (0.02)	0.00 (0.03)	0.32 (0.03)	0.48 (0.02)	0.38 (0.02)	0.34 (0.02)	0.36 (0.01)	0.29 (0.02)	0.24 (0.02)	0.10 (0.02)	0.10 (0.03)
Responsibility	0.43 (0.02)	0.19 (0.03)	-0.01 (0.04)	0.42 (0.02)	0.57 (0.01)	0.56 (0.02)	0.16 (0.02)	0.22 (0.02)	0.12 (0.02)	0.28 (0.03)	0.15 (0.01)	0.27 (0.02)
Restorative	0.11 (0.04)	0.04 (0.03)	0.08 (0.02)	0.24 (0.02)	0.09 (0.03)	0.21 (0.02)	0.07 (0.03)	0.06 (0.03)	0.07 (0.03)	0.11 (0.02)	0.18 (0.01)	0.17 (0.01)
Self-Assurance	0.53 (0.03)	0.51 (0.03)	-0.05 (0.03)	0.33 (0.03)	0.47 (0.03)	0.34 (0.02)	0.56 (0.03)	0.38 (0.02)	0.44 (0.02)	0.16 (0.03)	0.09 (0.03)	0.13 (0.02)

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Significance	0.41 (0.04)	0.45 (0.04)	-0.12 (0.04)	0.43 (0.04)	0.35 (0.02)	0.27 (0.03)	0.45 (0.04)	0.34 (0.02)	0.53 (0.03)	-0.01 (0.04)	0.09 (0.02)	0.25 (0.02)
Strategic	0.41 (0.02)	0.46 (0.03)	-0.03 (0.02)	0.27 (0.03)	0.32 (0.02)	0.26 (0.02)	0.48 (0.04)	0.45 (0.02)	0.37 (0.03)	0.20 (0.02)	0.09 (0.02)	0.07 (0.02)
Woo	0.31 (0.03)	0.50 (0.03)	0.09 (0.02)	0.04 (0.04)	0.38 (0.02)	0.30 (0.02)	0.32 (0.03)	0.70 (0.03)	0.30 (0.02)	0.18 (0.03)	0.05 (0.02)	-0.30 (0.04)

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

#### **Appendix C Continued**

Weighted Means (and Standard Deviations) of Theme-Score Intercorrelations across 25 Countries of Residence

ТНЕМЕ	Developer	Discipline	Empathy	Consistency*	Focus	Futuristic	Harmony	Ideation	Includer**	Individualization	Input	Intellection
Achiever												
Activator												
Adaptability												
Analytical												
Arranger												
Belief												
Command												
Communication												
Competition												
Connectedness												
Context												
Deliberative												
Developer												
Discipline	0.16 (0.02)											
Empathy	0.62 (0.04)	0.01 (0.01)										
Consistency*	0.26 (0.04)	0.43 (0.05)	0.25 (0.02)									
Focus	0.02 (0.06)	0.51 (0.03)	-0.17 (0.04)	0.03 (0.03)								
Futuristic	0.06 (0.05)	0.23 (0.04)	-0.07 (0.04)	-0.14 (0.04)	0.56 (0.02)							
Harmony	0.32 (0.04)	0.29 (0.03)	0.31 (0.03)	0.68 (0.03)	-0.04 (0.03)	-0.21 (0.04)						
Ideation	0.08 (0.05)	-0.10 (0.07)	0.01 (0.03)	-0.40 (0.05)	0.25 (0.03)	0.42 (0.02)	-0.36 (0.05)					
Includer**	0.32 (0.02)	0.10 (0.02)	0.20 (0.01)	0.22 (0.03)	0.07 (0.02)	0.13 (0.02)	0.16 (0.02)	0.07 (0.02)				
Individualization	0.22 (0.02)	0.18 (0.03)	0.14 (0.02)	-0.19 (0.02)	0.32 (0.02)	0.35 (0.02)	-0.01 (0.02)	0.33 (0.02)	-0.05 (0.02)			
Input	0.22 (0.02)	0.12 (0.03)	0.13 (0.02)	-0.04 (0.04)	0.20 (0.02)	0.20 (0.02)	-0.03 (0.04)	0.38 (0.03)	0.05 (0.02)	0.23 (0.02)		
Intellection	0.21 (0.02)	0.21 (0.04)	0.15 (0.02)	0.03 (0.03)	0.25 (0.02)	0.23 (0.02)	0.02 (0.03)	0.39 (0.01)	0.00 (0.03)	0.23 (0.02)	0.73 (0.02)	
Learner	0.17 (0.05)	0.34 (0.04)	-0.08 (0.04)	-0.05 (0.04)	0.57 (0.01)	0.41 (0.02)	-0.07 (0.04)	0.35 (0.01)	0.10 (0.02)	0.33 (0.02)	0.56 (0.02)	0.55 (0.01)
Maximizer	0.14 (0.02)	0.11 (0.03)	0.11 (0.02)	-0.08 (0.02)	0.27 (0.02)	0.35 (0.02)	-0.03 (0.02)	0.31 (0.02)	0.06 (0.01)	0.47 (0.02)	0.16 (0.01)	0.18 (0.02)
Positivity	0.53 (0.02)	0.07 (0.03)	0.37 (0.02)	0.08 (0.03)	0.19 (0.02)	0.33 (0.02)	0.12 (0.02)	0.27 (0.02)	0.52 (0.02)	0.25 (0.02)	0.18 (0.02)	0.08 (0.03)
Relator	0.25 (0.04)	0.27 (0.03)	0.03 (0.04)	0.02 (0.03)	0.43 (0.02)	0.43 (0.03)	-0.03 (0.03)	0.30 (0.02)	0.20 (0.02)	0.34 (0.02)	0.23 (0.02)	0.22 (0.02)
Responsibility	0.34 (0.02)	0.48 (0.01)	0.08 (0.02)	0.25 (0.02)	0.43 (0.02)	0.28 (0.03)	0.21 (0.02)	0.11 (0.03)	0.18 (0.02)	0.25 (0.02)	0.25 (0.02)	0.27 (0.02)
Restorative	0.21 (0.03)	0.22 (0.02)	0.10 (0.03)	0.19 (0.02)	0.16 (0.04)	0.12 (0.04)	0.17 (0.02)	0.03 (0.03)	0.13 (0.02)	0.02 (0.02)	0.11 (0.01)	0.16 (0.01)
Self-Assurance	0.06 (0.05)	0.20 (0.03)	-0.11 (0.04)	-0.13 (0.04)	0.51 (0.02)	0.55 (0.03)	-0.23 (0.04)	0.43 (0.02)	0.14 (0.02)	0.36 (0.02)	0.23 (0.02)	0.23 (0.03)

Significance	-0.07 (0.05)	0.34 (0.02)	-0.19 (0.04)	0.04 (0.03)	0.57 (0.03)	0.48 (0.02)	-0.01 (0.03)	0.24 (0.01)	0.01 (0.02)	0.35 (0.01)	0.07 (0.03)	0.11 (0.03)
Strategic	0.03 (0.05)	0.10 (0.04)	-0.09 (0.03)	-0.28 (0.04)	0.38 (0.02)	0.54 (0.03)	-0.49 (0.03)	0.51 (0.04)	0.08 (0.02)	0.33 (0.02)	0.27 (0.03)	0.27 (0.02)
Woo	0.20 (0.04)	0.04 (0.04)	0.10 (0.03)	-0.10 (0.04)	0.27 (0.02)	0.38 (0.02)	-0.09 (0.04)	0.34 (0.02)	0.34 (0.02)	0.26 (0.02)	0.15 (0.02)	0.01 (0.04)

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

## **Appendix C Continued**

Weighted Means (and Standard Deviations) of Theme-Score Intercorrelations across 25 Countries of Residence

тнеме	Learner	Maximizer	Positivity	Relator	Responsibility	Restorative	Self-Assurance	Significance	Strategic	Woo
Achiever										
Activator										
Adaptability										
Analytical										
Arranger										
Belief										
Command										
Communication										
Competition										
Connectedness										
Context										
Deliberative										
Developer										
Discipline										
Empathy										
Consistency*										
Focus										
Futuristic										
Harmony										
Ideation										
Includer**										
Individualization										
Input										
Intellection										
Learner										
Maximizer	0.22 (0.02)									
Positivity	0.21 (0.03)	0.30 (0.03)								
Relator	0.42 (0.02)	0.32 (0.02)	0.43 (0.02)							
Responsibility	0.46 (0.02)	0.20 (0.01)	0.26 (0.02)	0.50 (0.02)						
Restorative	0.20 (0.03)	-0.43 (0.02)	0.09 (0.04)	0.14 (0.03)	0.25 (0.02)					
Self-Assurance	0.50 (0.02)	0.48 (0.02)	0.33 (0.02)	0.49 (0.03)	0.37 (0.02)	0.00 (0.03)				

Significance	0.29 (0.02)	0.33 (0.01)	0.18 (0.02)	0.35 (0.03)	0.30 (0.03)	0.13 (0.02)	0.46 (0.03)			
Strategic	0.40 (0.02)	0.33 (0.02)	0.26 (0.02)	0.42 (0.02)	0.23 (0.02)	0.03 (0.04)	0.52 (0.03)	0.35 (0.03)		
Woo	0.23 (0.03)	0.26 (0.02)	0.69 (0.01)	0.37 (0.02)	0.19 (0.03)	0.06 (0.04)	0.42 (0.03)	0.30 (0.02)	0.40 (0.02)	

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

Appendix D
Weighted Means (and Standard Deviations) of Theme-Score Intercorrelations across 13 Survey Languages

ТНЕМЕ	Achiever	Activator	Adaptability	Analytical	Arranger	Belief	Command	Communication	Competition	Connectedness	Context	Deliberative
Achiever												
Activator	0.34 (0.02)											
Adaptability	-0.23 (0.03)	0.01 (0.01)										
Analytical	0.40 (0.03)	0.17 (0.03)	-0.32 (0.03)									
Arranger	0.46 (0.02)	0.38 (0.02)	0.00 (0.02)	0.31 (0.02)								
Belief	0.30 (0.01)	0.26 (0.02)	0.08 (0.02)	0.20 (0.03)	0.40 (0.02)							
Command	0.32 (0.02)	0.67 (0.02)	0.03 (0.02)	0.26 (0.03)	0.28 (0.02)	0.21 (0.02)						
Communication	0.28 (0.02)	0.57 (0.02)	0.11 (0.02)	0.09 (0.02)	0.38 (0.02)	0.26 (0.02)	0.39 (0.02)					
Competition	0.49 (0.02)	0.44 (0.02)	-0.17 (0.01)	0.33 (0.02)	0.25 (0.01)	0.18 (0.03)	0.49 (0.02)	0.29 (0.01)				
Connectedness	0.07 (0.03)	0.16 (0.02)	0.20 (0.02)	0.06 (0.04)	0.25 (0.02)	0.43 (0.03)	0.13 (0.03)	0.20 (0.02)	-0.11 (0.04)			
Context	0.11 (0.02)	0.07 (0.02)	0.03 (0.02)	0.21 (0.03)	0.14 (0.02)	0.16 (0.01)	0.12 (0.01)	0.08 (0.02)	0.09 (0.02)	0.19 (0.02)		
Deliberative	0.13 (0.02)	-0.02 (0.02)	0.00 (0.03)	0.45 (0.02)	0.07 (0.02)	0.10 (0.03)	0.23 (0.01)	-0.19 (0.02)	0.14 (0.01)	0.06 (0.02)	0.15 (0.01)	
Developer	0.04 (0.06)	0.08 (0.05)	0.33 (0.04)	-0.02 (0.05)	0.32 (0.04)	0.44 (0.01)	-0.06 (0.05)	0.21 (0.03)	-0.14 (0.04)	0.42 (0.02)	0.12 (0.02)	-0.04 (0.03)
Discipline	0.37 (0.02)	0.08 (0.01)	-0.27 (0.04)	0.54 (0.01)	0.27 (0.01)	0.27 (0.02)	0.07 (0.02)	0.10 (0.02)	0.21 (0.02)	0.10 (0.03)	0.14 (0.02)	0.34 (0.01)
Empathy	-0.18 (0.05)	0.00 (0.03)	0.48 (0.02)	-0.29 (0.03)	0.07 (0.03)	0.18 (0.01)	-0.08 (0.04)	0.14 (0.01)	-0.22 (0.03)	0.34 (0.03)	0.03 (0.02)	-0.06 (0.03)
Consistency*	-0.02 (0.02)	-0.16 (0.02)	0.18 (0.02)	0.12 (0.03)	0.01 (0.02)	0.15 (0.02)	-0.19 (0.02)	-0.03 (0.03)	-0.10 (0.03)	0.04 (0.02)	0.08 (0.01)	0.17 (0.02)
Focus	0.65 (0.03)	0.39 (0.01)	-0.37 (0.04)	0.52 (0.05)	0.41 (0.01)	0.32 (0.03)	0.38 (0.02)	0.28 (0.02)	0.47 (0.02)	0.09 (0.03)	0.13 (0.02)	0.26 (0.02)
Futuristic	0.42 (0.03)	0.47 (0.03)	-0.11 (0.02)	0.32 (0.03)	0.36 (0.02)	0.33 (0.02)	0.46 (0.03)	0.36 (0.02)	0.44 (0.02)	0.16 (0.02)	-0.01 (0.03)	0.11 (0.02)
Harmony	-0.09 (0.03)	-0.18 (0.02)	0.21 (0.01)	0.06 (0.03)	0.09 (0.02)	0.09 (0.02)	-0.27 (0.03)	-0.04 (0.03)	-0.16 (0.03)	0.07 (0.02)	0.08 (0.02)	0.11 (0.01)
Ideation	0.25 (0.02)	0.45 (0.02)	0.09 (0.01)	0.15 (0.02)	0.27 (0.01)	0.18 (0.02)	0.57 (0.02)	0.36 (0.01)	0.30 (0.02)	0.25 (0.03)	0.12 (0.02)	0.04 (0.02)
Includer**	0.14 (0.02)	0.11 (0.02)	0.18 (0.01)	0.00 (0.02)	0.21 (0.02)	0.23 (0.02)	-0.02 (0.02)	0.24 (0.02)	0.03 (0.01)	0.15 (0.02)	0.03 (0.01)	-0.34 (0.02)
Individualization	0.26 (0.02)	0.38 (0.02)	0.04 (0.02)	0.27 (0.02)	0.45 (0.02)	0.23 (0.01)	0.37 (0.01)	0.31 (0.01)	0.27 (0.01)	0.26 (0.02)	0.15 (0.01)	0.17 (0.01)
Input	0.23 (0.02)	0.19 (0.01)	0.07 (0.01)	0.15 (0.02)	0.24 (0.02)	0.22 (0.01)	0.28 (0.02)	0.24 (0.02)	0.02 (0.03)	0.41 (0.03)	0.23 (0.01)	0.13 (0.02)
Intellection	0.23 (0.02)	0.16 (0.02)	0.09 (0.02)	0.24 (0.02)	0.19 (0.03)	0.21 (0.02)	0.27 (0.02)	0.11 (0.02)	0.06 (0.03)	0.43 (0.03)	0.27 (0.01)	0.32 (0.02)
Learner	0.59 (0.02)	0.28 (0.01)	-0.19 (0.02)	0.48 (0.02)	0.44 (0.02)	0.33 (0.02)	0.30 (0.02)	0.23 (0.02)	0.24 (0.02)	0.31 (0.02)	0.26 (0.02)	0.21 (0.02)
Maximizer	0.23 (0.02)	0.35 (0.01)	0.10 (0.01)	0.15 (0.01)	0.41 (0.02)	0.20 (0.02)	0.33 (0.01)	0.30 (0.01)	0.23 (0.02)	0.19 (0.02)	0.03 (0.02)	0.10 (0.02)
Positivity	0.24 (0.02)	0.41 (0.02)	0.26 (0.02)	-0.08 (0.03)	0.46 (0.01)	0.37 (0.03)	0.15 (0.01)	0.53 (0.02)	0.14 (0.01)	0.29 (0.02)	0.06 (0.01)	-0.36 (0.02)
Relator	0.46 (0.02)	0.40 (0.02)	-0.01 (0.03)	0.32 (0.02)	0.48 (0.02)	0.38 (0.02)	0.34 (0.02)	0.36 (0.01)	0.29 (0.02)	0.24 (0.02)	0.10 (0.02)	0.10 (0.02)
Responsibility	0.43 (0.02)	0.19 (0.01)	-0.01 (0.03)	0.43 (0.01)	0.57 (0.02)	0.56 (0.02)	0.16 (0.01)	0.21 (0.02)	0.12 (0.01)	0.28 (0.02)	0.15 (0.01)	0.27 (0.02)
Restorative	0.11 (0.04)	0.04 (0.03)	0.07 (0.02)	0.25 (0.02)	0.09 (0.02)	0.21 (0.02)	0.07 (0.02)	0.05 (0.03)	0.07 (0.03)	0.11 (0.02)	0.18 (0.01)	0.17 (0.01)
Self-Assurance	0.53 (0.02)	0.51 (0.03)	-0.05 (0.02)	0.33 (0.02)	0.47 (0.02)	0.34 (0.02)	0.56 (0.02)	0.37 (0.02)	0.44 (0.02)	0.16 (0.02)	0.10 (0.02)	0.14 (0.02)

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Significance	0.41 (0.03)	0.45 (0.03)	-0.13 (0.04)	0.43 (0.04)	0.36 (0.02)	0.27 (0.03)	0.45 (0.03)	0.34 (0.01)	0.53 (0.02)	-0.01 (0.03)	0.09 (0.02)	0.25 (0.02)
Strategic	0.41 (0.02)	0.46 (0.02)	-0.03 (0.02)	0.27 (0.03)	0.33 (0.01)	0.25 (0.01)	0.48 (0.04)	0.45 (0.02)	0.37 (0.03)	0.20 (0.02)	0.09 (0.02)	0.07 (0.02)
Woo	0.30 (0.03)	0.50 (0.02)	0.09 (0.02)	0.04 (0.03)	0.38 (0.02)	0.30 (0.02)	0.32 (0.03)	0.70 (0.02)	0.29 (0.02)	0.18 (0.02)	0.05 (0.02)	-0.31 (0.03)

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

#### **Appendix D Continued**

Weighted Means (and Standard Deviations) of Theme-Score Intercorrelations across 13 Survey Languages

ТНЕМЕ	Developer	Discipline	Empathy	Consistency*	Focus	Futuristic	Harmony	Ideation	Includer**	Individualization	Input	Intellection
Achiever												
Activator												
Adaptability												
Analytical												
Arranger												
Belief												
Command												
Communication												
Competition												
Connectedness												
Context												
Deliberative												
Developer												
Discipline	0.16 (0.02)											
Empathy	0.62 (0.04)	0.00 (0.01)										
Consistency*	0.26 (0.03)	0.43 (0.03)	0.25 (0.03)									
Focus	0.03 (0.05)	0.51 (0.03)	-0.17 (0.05)	0.02 (0.02)								
Futuristic	0.06 (0.05)	0.24 (0.02)	-0.07 (0.04)	-0.14 (0.03)	0.56 (0.02)							
Harmony	0.31 (0.03)	0.28 (0.02)	0.31 (0.03)	0.68 (0.02)	-0.04 (0.02)	-0.21 (0.04)						
Ideation	0.08 (0.04)	-0.09 (0.05)	0.01 (0.03)	-0.40 (0.04)	0.25 (0.02)	0.42 (0.02)	-0.37 (0.04)					
Includer**	0.33 (0.02)	0.10 (0.02)	0.20 (0.01)	0.21 (0.03)	0.06 (0.02)	0.13 (0.01)	0.16 (0.01)	0.07 (0.02)				
Individualization	0.22 (0.02)	0.18 (0.02)	0.14 (0.02)	-0.19 (0.03)	0.33 (0.02)	0.35 (0.02)	-0.01 (0.02)	0.34 (0.01)	-0.05 (0.02)			
Input	0.22 (0.02)	0.12 (0.02)	0.13 (0.02)	-0.05 (0.03)	0.20 (0.02)	0.20 (0.01)	-0.03 (0.03)	0.39 (0.03)	0.05 (0.02)	0.23 (0.01)		
Intellection	0.21 (0.02)	0.20 (0.03)	0.15 (0.01)	0.03 (0.02)	0.25 (0.02)	0.23 (0.02)	0.02 (0.02)	0.39 (0.01)	0.00 (0.03)	0.23 (0.01)	0.73 (0.01)	
Learner	0.17 (0.04)	0.34 (0.02)	-0.08 (0.03)	-0.06 (0.03)	0.57 (0.01)	0.41 (0.01)	-0.07 (0.03)	0.36 (0.01)	0.10 (0.02)	0.33 (0.02)	0.56 (0.02)	0.55 (0.01)
Maximizer	0.14 (0.03)	0.11 (0.02)	0.10 (0.02)	-0.08 (0.01)	0.28 (0.02)	0.35 (0.02)	-0.04 (0.01)	0.31 (0.02)	0.06 (0.02)	0.47 (0.02)	0.16 (0.01)	0.18 (0.02)
Positivity	0.53 (0.01)	0.06 (0.02)	0.37 (0.01)	0.08 (0.03)	0.18 (0.02)	0.32 (0.01)	0.12 (0.02)	0.27 (0.02)	0.52 (0.02)	0.25 (0.01)	0.18 (0.02)	0.08 (0.02)
Relator	0.25 (0.03)	0.28 (0.02)	0.03 (0.04)	0.02 (0.02)	0.44 (0.02)	0.42 (0.02)	-0.03 (0.02)	0.30 (0.02)	0.20 (0.02)	0.34 (0.01)	0.23 (0.01)	0.22 (0.02)
Responsibility	0.34 (0.02)	0.49 (0.01)	0.08 (0.02)	0.25 (0.02)	0.43 (0.02)	0.28 (0.02)	0.21 (0.01)	0.11 (0.02)	0.18 (0.02)	0.25 (0.01)	0.25 (0.01)	0.27 (0.02)
Restorative	0.21 (0.03)	0.23 (0.02)	0.10 (0.03)	0.19 (0.02)	0.16 (0.04)	0.12 (0.04)	0.17 (0.03)	0.03 (0.02)	0.14 (0.02)	0.02 (0.02)	0.11 (0.01)	0.16 (0.01)
Self-Assurance	0.06 (0.05)	0.20 (0.02)	-0.12 (0.04)	-0.14 (0.03)	0.51 (0.02)	0.54 (0.03)	-0.23 (0.03)	0.43 (0.02)	0.14 (0.01)	0.36 (0.02)	0.24 (0.02)	0.23 (0.03)

Significance	-0.07 (0.05)	0.35 (0.01)	-0.19 (0.04)	0.04 (0.02)	0.57 (0.03)	0.48 (0.02)	-0.01 (0.03)	0.24 (0.01)	0.01 (0.02)	0.35 (0.01)	0.07 (0.03)	0.11 (0.03)
Strategic	0.03 (0.05)	0.10 (0.02)	-0.09 (0.04)	-0.29 (0.02)	0.39 (0.02)	0.54 (0.03)	-0.49 (0.02)	0.52 (0.03)	0.08 (0.02)	0.34 (0.01)	0.28 (0.02)	0.27 (0.01)
Woo	0.20 (0.04)	0.03 (0.03)	0.11 (0.02)	-0.10 (0.03)	0.26 (0.02)	0.38 (0.02)	-0.09 (0.03)	0.34 (0.01)	0.34 (0.02)	0.26 (0.01)	0.15 (0.02)	0.01 (0.03)

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

#### **Appendix D Continued**

Weighted Means (and Standard Deviations) of Theme-Score Intercorrelations across 13 Survey Languages

ТНЕМЕ	Leamer	Maximizer	Positivity	Relator	Responsibility	Restorative	Self-Assurance	Significance	Strategic	Woo
Achiever										
Activator										
Adaptability										
Analytical										
Arranger										
Belief										
Command										
Communication										
Competition										
Connectedness										
Context										
Deliberative										
Developer										
Discipline										
Empathy										
Consistency*										
Focus										
Futuristic										
Harmony										
Ideation										
Includer**										
Individualization										
Input										
Intellection										
Learner		ANIZATION DRINGE								

Maximizer	0.22 (0.02)									
Positivity	0.21 (0.02)	0.30 (0.02)								
Relator	0.43 (0.02)	0.32 (0.02)	0.43 (0.01)							
Responsibility	0.46 (0.02)	0.20 (0.01)	0.25 (0.01)	0.50 (0.02)						
Restorative	0.20 (0.03)	-0.43 (0.02)	0.09 (0.03)	0.13 (0.04)	0.25 (0.02)					
Self-Assurance	0.51 (0.01)	0.48 (0.01)	0.32 (0.01)	0.49 (0.02)	0.37 (0.01)	0.00 (0.03)				
Significance	0.29 (0.01)	0.33 (0.01)	0.17 (0.02)	0.35 (0.02)	0.30 (0.02)	0.13 (0.02)	0.46 (0.03)			
Strategic	0.40 (0.02)	0.33 (0.02)	0.26 (0.01)	0.42 (0.02)	0.23 (0.01)	0.03 (0.04)	0.52 (0.02)	0.35 (0.02)		
Woo	0.22 (0.02)	0.26 (0.02)	0.69 (0.01)	0.37 (0.01)	0.19 (0.02)	0.06 (0.03)	0.42 (0.02)	0.30 (0.01)	0.40 (0.01)	

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

**Appendix E**Weighted Means (and Standard Deviations) of Theme-Score Intercorrelations across Four Age Groups

ТНЕМЕ	Achiever	Activator	Adaptability	Analytical	Arranger	Belief	Command	Communication	Competition	Connectedness	Context	Deliberative
Achiever												
Activator	0.35 (0.02)											
Adaptability	-0.24 (0.01)	0.00 (0.04)										
Analytical	0.41 (0.02)	0.18 (0.01)	-0.33 (0.01)									
Arranger	0.47 (0.02)	0.38 (0.01)	-0.01 (0.00)	0.32 (0.02)								
Belief	0.31 (0.01)	0.26 (0.01)	0.07 (0.02)	0.19 (0.01)	0.40 (0.01)							
Command	0.33 (0.02)	0.67 (0.02)	0.03 (0.04)	0.25 (0.01)	0.28 (0.01)	0.21 (0.01)						
Communication	0.29 (0.01)	0.58 (0.00)	0.10 (0.01)	0.10 (0.03)	0.39 (0.01)	0.27 (0.01)	0.39 (0.00)					
Competition	0.50 (0.01)	0.45 (0.01)	-0.18 (0.04)	0.34 (0.01)	0.27 (0.02)	0.19 (0.01)	0.49 (0.01)	0.29 (0.00)				
Connectedness	0.08 (0.01)	0.16 (0.01)	0.20 (0.02)	0.06 (0.03)	0.25 (0.00)	0.44 (0.01)	0.13 (0.01)	0.21 (0.01)	-0.09 (0.01)			
Context	0.11 (0.02)	0.08 (0.02)	0.02 (0.00)	0.21 (0.00)	0.14 (0.02)	0.16 (0.02)	0.12 (0.03)	0.08 (0.01)	0.09 (0.02)	0.20 (0.03)		
Deliberative	0.13 (0.00)	-0.02 (0.02)	0.00 (0.01)	0.45 (0.01)	0.07 (0.01)	0.10 (0.01)	0.22 (0.02)	-0.18 (0.02)	0.15 (0.03)	0.05 (0.02)	0.15 (0.00)	
Developer	0.05 (0.01)	0.09 (0.03)	0.32 (0.02)	-0.01 (0.01)	0.32 (0.01)	0.44 (0.01)	-0.06 (0.02)	0.21 (0.00)	-0.13 (0.00)	0.42 (0.01)	0.12 (0.00)	-0.04 (0.02)
Discipline	0.37 (0.04)	0.09 (0.03)	-0.28 (0.04)	0.55 (0.01)	0.28 (0.03)	0.27 (0.01)	0.07 (0.03)	0.11 (0.03)	0.21 (0.02)	0.11 (0.01)	0.14 (0.01)	0.35 (0.02)
Empathy	-0.19 (0.02)	0.00 (0.02)	0.48 (0.03)	-0.29 (0.01)	0.06 (0.01)	0.17 (0.02)	-0.09 (0.01)	0.14 (0.01)	-0.22 (0.01)	0.33 (0.02)	0.03 (0.01)	-0.06 (0.00)
Consistency*	-0.03 (0.05)	-0.15 (0.06)	0.18 (0.04)	0.12 (0.01)	0.01 (0.03)	0.15 (0.02)	-0.18 (0.05)	-0.03 (0.04)	-0.10 (0.05)	0.04 (0.01)	0.08 (0.02)	0.17 (0.02)
Focus	0.65 (0.00)	0.39 (0.02)	-0.37 (0.01)	0.52 (0.01)	0.41 (0.01)	0.31 (0.01)	0.38 (0.02)	0.29 (0.01)	0.48 (0.02)	0.09 (0.01)	0.13 (0.01)	0.26 (0.01)
Futuristic	0.42 (0.01)	0.48 (0.03)	-0.13 (0.03)	0.34 (0.01)	0.38 (0.01)	0.33 (0.01)	0.46 (0.04)	0.36 (0.01)	0.44 (0.01)	0.17 (0.02)	-0.01 (0.02)	0.12 (0.02)
Harmony	-0.10 (0.03)	-0.18 (0.05)	0.21 (0.04)	0.06 (0.02)	0.08 (0.02)	0.08 (0.02)	-0.28 (0.04)	-0.04 (0.02)	-0.16 (0.04)	0.06 (0.01)	0.08 (0.02)	0.12 (0.01)
Ideation	0.25 (0.01)	0.44 (0.02)	0.08 (0.02)	0.16 (0.02)	0.27 (0.01)	0.17 (0.01)	0.56 (0.02)	0.37 (0.01)	0.31 (0.00)	0.25 (0.01)	0.12 (0.04)	0.05 (0.02)
Includer**	0.14 (0.01)	0.11 (0.02)	0.18 (0.01)	0.00 (0.01)	0.22 (0.00)	0.24 (0.01)	-0.02 (0.01)	0.24 (0.01)	0.02 (0.00)	0.16 (0.02)	0.03 (0.01)	-0.34 (0.02)
Individualization	0.26 (0.02)	0.38 (0.02)	0.04 (0.01)	0.27 (0.02)	0.45 (0.02)	0.22 (0.02)	0.36 (0.02)	0.32 (0.03)	0.28 (0.02)	0.25 (0.01)	0.15 (0.02)	0.17 (0.03)
Input	0.23 (0.02)	0.19 (0.01)	0.06 (0.03)	0.16 (0.03)	0.24 (0.03)	0.22 (0.03)	0.28 (0.02)	0.24 (0.01)	0.03 (0.01)	0.41 (0.01)	0.23 (0.02)	0.13 (0.01)
Intellection	0.22 (0.02)	0.15 (0.01)	0.09 (0.04)	0.25 (0.03)	0.18 (0.03)	0.20 (0.02)	0.27 (0.01)	0.11 (0.01)	0.08 (0.01)	0.42 (0.01)	0.28 (0.02)	0.32 (0.01)
Learner	0.60 (0.03)	0.29 (0.02)	-0.20 (0.03)	0.49 (0.03)	0.45 (0.04)	0.33 (0.01)	0.30 (0.03)	0.24 (0.01)	0.26 (0.01)	0.31 (0.02)	0.25 (0.01)	0.22 (0.01)
Maximizer	0.22 (0.03)	0.34 (0.02)	0.11 (0.01)	0.14 (0.01)	0.39 (0.03)	0.19 (0.02)	0.32 (0.03)	0.31 (0.02)	0.25 (0.01)	0.16 (0.03)	0.03 (0.02)	0.09 (0.01)
Positivity	0.25 (0.00)	0.41 (0.01)	0.25 (0.02)	-0.07 (0.02)	0.47 (0.01)	0.37 (0.00)	0.16 (0.01)	0.53 (0.01)	0.15 (0.01)	0.30 (0.03)	0.05 (0.00)	-0.36 (0.01)
Relator	0.47 (0.02)	0.40 (0.02)	-0.02 (0.02)	0.33 (0.02)	0.49 (0.00)	0.39 (0.01)	0.34 (0.02)	0.37 (0.00)	0.31 (0.01)	0.24 (0.02)	0.10 (0.02)	0.10 (0.01)
Responsibility	0.45 (0.04)	0.20 (0.01)	-0.02 (0.03)	0.43 (0.01)	0.58 (0.01)	0.57 (0.01)	0.16 (0.01)	0.23 (0.02)	0.14 (0.00)	0.28 (0.01)	0.16 (0.01)	0.27 (0.02)
Restorative	0.11 (0.04)	0.06 (0.03)	0.06 (0.01)	0.26 (0.02)	0.12 (0.03)	0.21 (0.02)	0.07 (0.04)	0.05 (0.02)	0.05 (0.03)	0.15 (0.02)	0.17 (0.01)	0.19 (0.00)
Self-Assurance	0.54 (0.00)	0.51 (0.02)	-0.05 (0.03)	0.34 (0.02)	0.47 (0.01)	0.34 (0.01)	0.56 (0.02)	0.38 (0.01)	0.45 (0.02)	0.16 (0.01)	0.10 (0.03)	0.14 (0.01)

Significance	0.40 (0.01)	0.45 (0.01)	-0.13 (0.01)	0.44 (0.01)	0.35 (0.02)	0.26 (0.01)	0.44 (0.01)	0.34 (0.01)	0.53 (0.00)	-0.01 (0.01)	0.09 (0.01)	0.26 (0.01)
Strategic	0.42 (0.01)	0.46 (0.02)	-0.04 (0.03)	0.28 (0.02)	0.34 (0.02)	0.26 (0.02)	0.48 (0.03)	0.46 (0.01)	0.38 (0.01)	0.21 (0.01)	0.09 (0.03)	0.07 (0.01)
Woo	0.31 (0.01)	0.51 (0.01)	0.08 (0.02)	0.05 (0.03)	0.40 (0.01)	0.30 (0.00)	0.32 (0.00)	0.71 (0.00)	0.30 (0.01)	0.19 (0.01)	0.05 (0.01)	-0.30 (0.02)

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

#### **Appendix E Continued**

Weighted Means (and Standard Deviations) of Theme-Score Intercorrelations across Four Age Groups

ТНЕМЕ	Developer	Discipline	Empathy	Consistency*	Focus	Futuristic	Harmony	Ideation	Includer**	Individualization	Input	Intellection
Achiever												
Activator												
Adaptability												
Analytical												
Arranger												
Belief												
Command												
Communication												
Competition												
Connectedness												
Context												
Deliberative												
Developer												
Discipline	0.16 (0.02)											
Empathy	0.61 (0.01)	0.00 (0.02)										
Consistency*	0.26 (0.03)	0.43 (0.01)	0.25 (0.03)									
Focus	0.03 (0.01)	0.52 (0.02)	-0.18 (0.01)	0.02 (0.04)								
Futuristic	0.06 (0.02)	0.24 (0.05)	-0.08 (0.03)	-0.14 (0.09)	0.57 (0.01)							
Harmony	0.31 (0.03)	0.28 (0.02)	0.31 (0.02)	0.68 (0.03)	-0.04 (0.03)	-0.21 (0.08)						
Ideation	0.08 (0.03)	-0.08 (0.04)	0.01 (0.01)	-0.40 (0.04)	0.26 (0.00)	0.43 (0.05)	-0.36 (0.04)					
Includer**	0.33 (0.02)	0.10 (0.01)	0.20 (0.03)	0.21 (0.01)	0.06 (0.01)	0.13 (0.01)	0.16 (0.02)	0.07 (0.01)				
Individualization	0.22 (0.00)	0.19 (0.01)	0.14 (0.01)	-0.19 (0.02)	0.33 (0.02)	0.36 (0.03)	-0.01 (0.03)	0.33 (0.01)	-0.04 (0.02)			
Input	0.22 (0.02)	0.13 (0.04)	0.12 (0.00)	-0.04 (0.03)	0.21 (0.02)	0.21 (0.01)	-0.03 (0.03)	0.38 (0.02)	0.05 (0.01)	0.23 (0.01)		
Intellection	0.20 (0.01)	0.21 (0.03)	0.14 (0.01)	0.04 (0.02)	0.25 (0.02)	0.24 (0.01)	0.03 (0.02)	0.39 (0.01)	0.01 (0.00)	0.22 (0.01)	0.73 (0.01)	
Learner	0.17 (0.01)	0.35 (0.05)	-0.10 (0.01)	-0.05 (0.05)	0.58 (0.02)	0.42 (0.02)	-0.07 (0.04)	0.35 (0.02)	0.11 (0.01)	0.33 (0.02)	0.56 (0.01)	0.54 (0.02)
Maximizer	0.14 (0.01)	0.12 (0.01)	0.11 (0.01)	-0.08 (0.03)	0.28 (0.01)	0.37 (0.03)	-0.03 (0.03)	0.30 (0.02)	0.07 (0.01)	0.46 (0.03)	0.16 (0.03)	0.18 (0.02)
Positivity	0.53 (0.01)	0.06 (0.01)	0.36 (0.02)	0.08 (0.03)	0.18 (0.00)	0.32 (0.01)	0.11 (0.01)	0.27 (0.01)	0.52 (0.02)	0.25 (0.04)	0.18 (0.01)	0.08 (0.01)
Relator	0.25 (0.01)	0.28 (0.03)	0.02 (0.03)	0.02 (0.04)	0.44 (0.01)	0.43 (0.01)	-0.04 (0.02)	0.29 (0.01)	0.21 (0.01)	0.34 (0.04)	0.23 (0.01)	0.22 (0.01)
Responsibility	0.34 (0.01)	0.50 (0.01)	0.07 (0.02)	0.25 (0.01)	0.44 (0.02)	0.30 (0.02)	0.20 (0.02)	0.11 (0.03)	0.19 (0.01)	0.25 (0.01)	0.25 (0.04)	0.26 (0.03)
Restorative	0.23 (0.00)	0.23 (0.00)	0.10 (0.02)	0.18 (0.01)	0.16 (0.03)	0.11 (0.03)	0.17 (0.02)	0.05 (0.04)	0.12 (0.00)	0.04 (0.03)	0.12 (0.03)	0.18 (0.02)
Self-Assurance	0.06 (0.01)	0.20 (0.03)	-0.12 (0.01)	-0.13 (0.05)	0.51 (0.01)	0.55 (0.03)	-0.23 (0.03)	0.43 (0.01)	0.15 (0.01)	0.36 (0.03)	0.24 (0.01)	0.23 (0.02)

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Significance	-0.06 (0.00)	0.35 (0.02)	-0.19 (0.01)	0.04 (0.04)	0.58 (0.00)	0.49 (0.00)	0.00 (0.04)	0.25 (0.01)	0.01 (0.01)	0.35 (0.01)	0.08 (0.00)	0.12 (0.01)
Strategic	0.04 (0.04)	0.11 (0.05)	-0.10 (0.02)	-0.28 (0.06)	0.39 (0.01)	0.55 (0.03)	-0.49 (0.04)	0.51 (0.03)	0.08 (0.03)	0.33 (0.02)	0.28 (0.01)	0.27 (0.01)
Woo	0.20 (0.01)	0.04 (0.02)	0.10 (0.02)	-0.10 (0.03)	0.27 (0.01)	0.38 (0.01)	-0.09 (0.01)	0.34 (0.01)	0.33 (0.01)	0.27 (0.03)	0.16 (0.01)	0.02 (0.01)

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

## **Appendix E Continued**

Weighted Means (and Standard Deviations) of Theme-Score Intercorrelations across Four Age Groups

ТНЕМЕ	Learner	Maximizer	Positivity	Relator	Responsibility	Restorative	Self-Assurance	Significance	Strategic	Woo
Achiever										
Activator										
Adaptability										
Analytical										
Arranger										
Belief										
Command										
Communication										
Competition										
Connectedness										
Context										
Deliberative										
Developer										
Discipline										
Empathy										
Consistency*										
Focus										
Futuristic										
Harmony										
Ideation										
Includer**										
Individualization										
Input										
Intellection										
Learner										
Maximizer	0.21 (0.03)									
Positivity	0.21 (0.01)	0.30 (0.03)								
Relator	0.43 (0.02)	0.31 (0.05)	0.43 (0.01)							
Responsibility	0.47 (0.05)	0.18 (0.02)	0.26 (0.01)	0.51 (0.02)						
Restorative	0.22 (0.04)	-0.42 (0.02)	0.09 (0.02)	0.14 (0.04)	0.27 (0.02)					
Self-Assurance	0.51 (0.01)	0.48 (0.03)	0.33 (0.00)	0.50 (0.01)	0.38 (0.01)	0.01 (0.04)				

Significance	0.29 (0.00)	0.33 (0.01)	0.17 (0.01)	0.34 (0.02)	0.30 (0.01)	0.14 (0.02)	0.46 (0.01)			
Strategic	0.41 (0.01)	0.32 (0.03)	0.27 (0.02)	0.43 (0.01)	0.24 (0.04)	0.04 (0.05)	0.52 (0.01)	0.34 (0.01)		
Woo	0.24 (0.01)	0.27 (0.01)	0.70 (0.01)	0.38 (0.00)	0.21 (0.02)	0.06 (0.02)	0.42 (0.01)	0.30 (0.01)	0.40 (0.02)	

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

**Appendix F** *Theme-Score Intercorrelations for Male Respondents* 

ТНЕМЕ	Achiever	Activator	Adaptability	Analytical	Arranger	Belief	Command	Communication	Competition	Connectedness	Context	Deliberative
Achiever												
Activator	0.38											
Adaptability	-0.26	-0.02										
Analytical	0.41	0.19	-0.31									
Arranger	0.49	0.41	-0.06	0.34								
Belief	0.34	0.29	0.03	0.22	0.43							
Command	0.33	0.66	0.05	0.24	0.28	0.23						
Communication	0.32	0.58	0.08	0.13	0.39	0.28	0.40					
Competition	0.51	0.45	-0.14	0.29	0.28	0.21	0.48	0.32				
Connectedness	0.08	0.17	0.16	0.09	0.26	0.45	0.13	0.21	-0.11			
Context	0.09	0.06	0.06	0.18	0.14	0.16	0.10	0.08	0.05	0.20		
Deliberative	0.12	-0.01	0.02	0.44	0.08	0.10	0.22	-0.16	0.12	0.06	0.14	
Developer	0.07	0.12	0.26	0.05	0.34	0.44	-0.03	0.22	-0.08	0.43	0.15	-0.02
Discipline	0.38	0.13	-0.29	0.58	0.30	0.29	0.09	0.14	0.24	0.12	0.14	0.35
Empathy	-0.18	0.03	0.45	-0.24	0.06	0.15	-0.03	0.14	-0.17	0.33	0.08	-0.03
Consistency*	-0.03	-0.14	0.18	0.14	0.00	0.13	-0.16	-0.04	-0.07	0.04	0.12	0.19
Focus	0.65	0.41	-0.38	0.53	0.43	0.34	0.38	0.31	0.48	0.10	0.10	0.25
Futuristic	0.42	0.49	-0.12	0.33	0.38	0.35	0.46	0.38	0.44	0.17	-0.05	0.12
Harmony	-0.10	-0.16	0.19	0.09	0.08	0.07	-0.26	-0.04	-0.13	0.06	0.12	0.13
Ideation	0.24	0.43	0.10	0.15	0.27	0.19	0.55	0.38	0.27	0.26	0.09	0.04
Includer**	0.14	0.13	0.17	0.02	0.21	0.23	0.00	0.25	0.05	0.17	0.04	-0.33
Individualization	0.28	0.39	0.01	0.29	0.46	0.24	0.37	0.33	0.29	0.23	0.14	0.18
Input	0.21	0.19	0.03	0.19	0.23	0.22	0.27	0.24	0.02	0.41	0.24	0.14
Intellection	0.19	0.15	0.08	0.26	0.16	0.21	0.26	0.12	0.05	0.42	0.27	0.32
Learner	0.59	0.30	-0.22	0.50	0.46	0.36	0.28	0.25	0.24	0.33	0.23	0.21
Maximizer	0.21	0.34	0.09	0.15	0.38	0.19	0.32	0.29	0.23	0.16	0.02	0.11
Positivity	0.28	0.44	0.20	-0.02	0.47	0.39	0.18	0.53	0.21	0.29	0.08	-0.35
Relator	0.48	0.43	-0.05	0.35	0.50	0.41	0.34	0.38	0.33	0.24	0.09	0.11
Responsibility	0.46	0.24	-0.07	0.46	0.60	0.58	0.18	0.24	0.15	0.30	0.16	0.27
Restorative	0.14	0.07	0.05	0.27	0.12	0.21	0.08	0.09	0.09	0.13	0.17	0.17
Self-Assurance	0.54	0.52	-0.06	0.33	0.48	0.37	0.56	0.40	0.44	0.17	0.07	0.14

Significance	0.41	0.46	-0.12	0.43	0.36	0.28	0.44	0.35	0.52	-0.01	0.07	0.26
Strategic	0.43	0.46	-0.04	0.28	0.34	0.28	0.47	0.47	0.36	0.21	0.06	0.07
Woo	0.35	0.51	0.04	0.08	0.40	0.33	0.32	0.70	0.33	0.18	0.05	-0.28

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

## **Appendix F Continued**

Theme-Score Intercorrelations for Male Respondents

ТНЕМЕ	Developer	Discipline	Empathy	Consistency*	Focus	Futuristic	Harmony	Ideation	Includer**	Individualization	Input	Intellection
Achiever												
Activator												
Adaptability												
Analytical												
Arranger												
Belief												
Command												
Communication												
Competition												
Connectedness												
Context												
Deliberative												
Developer												
Discipline	0.17											
Empathy	0.57	-0.03										
Consistency*	0.22	0.40	0.21									
Focus	0.06	0.54	-0.16	0.02								
Futuristic	0.10	0.28	-0.03	-0.13	0.57							
Harmony	0.27	0.26	0.26	0.66	-0.03	-0.20						
Ideation	0.13	-0.05	0.08	-0.37	0.25	0.42	-0.33					
Includer**	0.33	0.11	0.21	0.21	0.08	0.15	0.16	0.09				
Individualization	0.22	0.21	0.13	-0.20	0.35	0.37	-0.01	0.33	-0.03			
Input	0.22	0.13	0.11	-0.06	0.20	0.20	-0.05	0.40	0.06	0.21		
Intellection	0.22	0.22	0.16	0.04	0.23	0.23	0.02	0.40	0.02	0.20	0.73	
Learner	0.22	0.38	-0.07	-0.04	0.57	0.40	-0.05	0.34	0.12	0.33	0.56	0.53
Maximizer	0.13	0.11	0.12	-0.08	0.27	0.35	-0.03	0.30	0.06	0.46	0.14	0.17
Positivity	0.53	0.09	0.35	0.06	0.22	0.35	0.10	0.29	0.52	0.27	0.16	0.07
Relator	0.28	0.31	0.03	0.02	0.46	0.44	-0.03	0.30	0.20	0.36	0.22	0.21
Responsibility	0.34	0.50	0.04	0.22	0.45	0.31	0.18	0.13	0.18	0.27	0.24	0.26
Restorative	0.23	0.26	0.09	0.17	0.19	0.14	0.16	0.06	0.15	0.05	0.13	0.17
Self-Assurance	0.11	0.24	-0.06	-0.11	0.52	0.55	-0.21	0.40	0.15	0.38	0.23	0.21

Significance	-0.03	0.39	-0.17	0.06	0.58	0.49	0.02	0.23	0.03	0.36	0.06	0.10
Strategic	0.08	0.15	-0.04	-0.26	0.40	0.55	-0.48	0.49	0.09	0.35	0.29	0.27
Woo	0.22	0.09	0.10	-0.10	0.31	0.40	-0.08	0.34	0.34	0.29	0.15	0.01

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

## **Appendix F Continued**

Theme-Score Intercorrelations for Male Respondents

ТНЕМЕ	Learner	Maximizer	Positivity	Relator	Responsibility	Restorative	Self-Assurance	Significance	Strategic	Woo
Achiever										
Activator										
Adaptability										
Analytical										
Arranger										
Belief										
Command										
Communication										
Competition										
Connectedness										
Context										
Deliberative										
Developer										
Discipline										
Empathy										
Consistency*										
Focus										
Futuristic										
Harmony										
Ideation										
Includer**										
Individualization										
Input										
Intellection										
Learner										
Maximizer	0.19									
Positivity	0.23	0.28								
Relator	0.44	0.30	0.44							
Responsibility	0.50	0.19	0.27	0.52						
Restorative	0.24	-0.43	0.12	0.17	0.27					
Self-Assurance	0.49	0.47	0.35	0.51	0.40	0.02				

Significance	0.28	0.33	0.21	0.37	0.32	0.15	0.46			
Strategic	0.41	0.31	0.29	0.44	0.27	0.07	0.51	0.34		
Woo	0.25	0.24	0.70	0.40	0.23	0.10	0.44	0.32	0.41	

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

**Appendix G** *Theme-Score Intercorrelations for Female Respondents* 

тнеме	Achiever	Activator	Adaptability	Analytical	Arranger	Belief	Command	Communication	Competition	Connectedness	Context	Deliberative
Achiever												
Activator	0.31											
Adaptability	-0.21	0.05										
Analytical	0.41	0.15	-0.31									
Arranger	0.45	0.36	0.04	0.31								
Belief	0.28	0.22	0.13	0.17	0.37							
Command	0.31	0.67	0.04	0.24	0.27	0.19						
Communication	0.25	0.57	0.12	0.08	0.37	0.25	0.39					
Competition	0.48	0.43	-0.14	0.31	0.23	0.16	0.47	0.30				
Connectedness	0.09	0.17	0.20	0.07	0.27	0.43	0.15	0.19	-0.08			
Context	0.12	0.07	0.04	0.21	0.14	0.16	0.12	0.09	0.09	0.22		
Deliberative	0.14	-0.04	-0.01	0.44	0.07	0.09	0.20	-0.20	0.15	0.07	0.15	
Developer	0.03	0.07	0.35	-0.01	0.30	0.45	-0.07	0.19	-0.12	0.40	0.14	-0.02
Discipline	0.36	0.04	-0.26	0.54	0.24	0.25	0.04	0.07	0.22	0.06	0.15	0.34
Empathy	-0.19	0.01	0.47	-0.26	0.07	0.20	-0.09	0.12	-0.18	0.32	0.06	-0.04
Consistency*	-0.01	-0.16	0.16	0.15	0.02	0.18	-0.19	-0.03	-0.08	0.01	0.07	0.18
Focus	0.64	0.35	-0.34	0.51	0.39	0.28	0.37	0.27	0.46	0.09	0.15	0.26
Futuristic	0.42	0.45	-0.10	0.32	0.36	0.31	0.45	0.35	0.43	0.16	0.02	0.11
Harmony	-0.09	-0.19	0.21	0.08	0.08	0.10	-0.28	-0.04	-0.15	0.04	0.08	0.13
Ideation	0.25	0.45	0.10	0.14	0.27	0.16	0.57	0.36	0.30	0.27	0.12	0.04
Includer**	0.14	0.09	0.19	0.00	0.21	0.24	-0.03	0.23	0.03	0.11	0.04	-0.34
Individualization	0.24	0.36	0.07	0.26	0.44	0.20	0.35	0.29	0.25	0.29	0.16	0.18
Input	0.28	0.22	0.05	0.20	0.28	0.23	0.32	0.24	0.11	0.40	0.27	0.15
Intellection	0.27	0.17	0.07	0.27	0.21	0.21	0.29	0.10	0.13	0.43	0.30	0.34
Learner	0.61	0.28	-0.18	0.48	0.44	0.31	0.31	0.22	0.28	0.31	0.27	0.23
Maximizer	0.24	0.36	0.12	0.14	0.42	0.19	0.33	0.30	0.23	0.22	0.04	0.09
Positivity	0.23	0.41	0.28	-0.08	0.45	0.37	0.16	0.53	0.15	0.28	0.07	-0.36
Relator	0.46	0.38	0.01	0.32	0.48	0.36	0.34	0.35	0.29	0.24	0.11	0.10
Responsibility	0.44	0.17	0.02	0.43	0.56	0.54	0.16	0.20	0.13	0.27	0.17	0.28
Restorative	0.08	0.01	0.10	0.25	0.06	0.20	0.05	0.03	0.05	0.09	0.18	0.19
Self-Assurance	0.53	0.49	-0.03	0.32	0.47	0.31	0.55	0.37	0.43	0.19	0.11	0.12

Significance	0.39	0.44	-0.10	0.42	0.34	0.23	0.44	0.33	0.52	0.01	0.09	0.25
Strategic	0.41	0.46	-0.02	0.25	0.33	0.24	0.48	0.46	0.36	0.22	0.10	0.05
Woo	0.27	0.51	0.12	0.03	0.37	0.27	0.33	0.71	0.29	0.17	0.06	-0.32

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

# **Appendix G Continued**

Theme-Score Intercorrelations for Female Respondents

ТНЕМЕ	Developer	Discipline	Empathy	Consistency*	Focus	Futuristic	Harmony	Ideation	Includer**	Individualization	Input	Intellection
Achiever												
Activator												
Adaptability												
Analytical												
Arranger												
Belief												
Command												
Communication												
Competition												
Connectedness												
Context												
Deliberative												
Developer												
Discipline	0.15											
Empathy	0.63	0.01										
Consistency*	0.28	0.46	0.25									
Focus	0.02	0.50	-0.16	0.05								
Futuristic	0.04	0.21	-0.08	-0.13	0.55							
Harmony	0.33	0.31	0.33	0.70	-0.02	-0.21						
Ideation	0.05	-0.13	0.00	-0.42	0.25	0.41	-0.38					
Includer**	0.31	0.09	0.17	0.22	0.06	0.13	0.15	0.05				
Individualization	0.22	0.15	0.16	-0.18	0.31	0.32	-0.01	0.34	-0.08			
Input	0.18	0.11	0.07	-0.07	0.26	0.24	-0.06	0.41	0.03	0.27		
Intellection	0.18	0.20	0.12	0.01	0.29	0.24	0.01	0.40	-0.03	0.26	0.73	
Learner	0.13	0.31	-0.11	-0.06	0.58	0.42	-0.09	0.37	0.09	0.33	0.58	0.56
Maximizer	0.15	0.10	0.10	-0.09	0.28	0.35	-0.04	0.33	0.06	0.48	0.20	0.21
Positivity	0.52	0.03	0.35	0.07	0.16	0.32	0.10	0.27	0.52	0.23	0.17	0.07
Relator	0.22	0.24	-0.01	0.02	0.41	0.42	-0.05	0.30	0.20	0.32	0.25	0.23
Responsibility	0.33	0.48	0.07	0.27	0.42	0.28	0.22	0.10	0.18	0.24	0.26	0.28
Restorative	0.21	0.21	0.12	0.21	0.14	0.10	0.19	0.01	0.12	0.00	0.09	0.15
Self-Assurance	0.04	0.16	-0.14	-0.14	0.49	0.54	-0.25	0.44	0.14	0.34	0.29	0.26

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Significance	-0.07	0.33	-0.17	0.04	0.56	0.47	0.00	0.25	0.00	0.34	0.13	0.15
Strategic	0.02	0.07	-0.10	-0.30	0.37	0.54	-0.50	0.52	0.07	0.32	0.31	0.28
Woo	0.17	-0.01	0.09	-0.11	0.24	0.37	-0.11	0.36	0.33	0.23	0.16	0.01

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness

# **Appendix G Continued**

Theme-Score Intercorrelations for Female Respondents

ТНЕМЕ	Leamer	Maximizer	Positivity	Relator	Responsibility	Restorative	Self-Assurance	Significance	Strategic	Woo
Achiever										
Activator										
Adaptability										
Analytical										
Arranger										
Belief										
Command										
Communication										
Competition										
Connectedness										
Context										
Deliberative										
Developer										
Discipline										
Empathy										
Consistency*										
Focus										
Futuristic										
Harmony										
Ideation										
Includer**										
Individualization										
Input										
Intellection										
Learner										
Maximizer	0.24									
Positivity	0.20	0.31								
Relator	0.43	0.32	0.42							
Responsibility	0.45	0.20	0.25	0.49						
Restorative	0.17	-0.43	0.07	0.10	0.23					
Self-Assurance	0.53	0.49	0.33	0.50	0.36	-0.03				

Significance	0.30	0.34	0.16	0.32	0.28	0.12	0.44			
Strategic	0.41	0.34	0.28	0.43	0.22	0.00	0.53	0.33		
Woo	0.21	0.27	0.69	0.35	0.17	0.03	0.41	0.29	0.41	

<sup>\*</sup>Formerly Fairness; \*\*Formerly Inclusiveness