



MBTI® MANUAL GLOBAL SUPPLEMENT SERIES

# United States (North American English) Supplement to the MBTI® Manual for the Global Step I™ and Step II™ Assessments

Nancy A. Schaubhut  
Richard C. Thompson  
Michael L. Morris  
Justin J. Arneson



+1 800 624 1765 | [www.themyersbriggs.com](http://www.themyersbriggs.com)

United States (North American English) Supplement to the MBTI® Manual for the Global Step I™ and Step II™ Assessments Copyright 2018 by Peter B. Myers and Katharine D. Myers. Myers-Briggs Type Indicator, MBTI, Step I, Step II, the MBTI logo, and The Myers-Briggs Company logo are trademarks or registered trademarks of The Myers & Briggs Foundation in the United States and other countries. CPI and CPI 260 are trademarks or registered trademarks of The Myers-Briggs Company in the United States and other countries.

# United States (North American English) Supplement to the MBTI® Manual for the Global Step I™ and Step II™ Assessments

## CONTENTS

---

Introduction	1
Data Collection	2
<b>MBTI® Global Step I™ Assessment Results for the US (English) Sample</b>	<b>4</b>
MBTI® Type and Preference Distributions	4
Relationships Between MBTI® Global Step I™ and Form M Preference Pair Results	5
Global Step I™ Preference Pair Intercorrelations	6
Reliability and Validity of Global Step I™ Results	6
<b>MBTI® Global Step II™ Assessment Results for the US (English) Sample</b>	<b>17</b>
Relationships Between MBTI® Global Step II™, Form Q, and European Step II™ Facet Results	17
Global Step II™ Facet Intercorrelations	17
Reliability and Validity of Global Step II™ Results	17
Global Step II™ Facet Distributions	20
<b>Conclusion</b>	<b>22</b>
<b>Notes</b>	<b>23</b>
<b>References</b>	<b>24</b>

## INTRODUCTION

---

As steward of the *Myers-Briggs Type Indicator*® (MBTI®) assessment, The Myers-Briggs Company had two overarching goals in undertaking its revision to create global Step I™ and Step II™ forms: (1) preserve the integrity of the Step I and Step II assessments and (2) improve the reliability and validity of the MBTI assessment overall. More specifically, the company sought to update existing representative samples and compile new representative samples in additional countries based on translations (or adaptations) of the assessment into additional languages, use a statistical model consistent with type theory, and, if supported by data analysis, use the same scoring method globally, so that scores could be compared across all those countries and languages.

Broadening existing and compiling new representative samples was a high priority. The prior revision of the MBTI assessment culminated in the 1998 publication of MBTI Form M (Step I), which replaced the earlier Form G. Form Q (Step II) was subsequently published in 2001 and replaced Form K. In the United Kingdom, the European Step I assessment was published in 1997. The European Step II assessment was published in 2003 based on pan-European samples compiled by OPP Ltd. Although all these forms of the MBTI assessment served their audiences well, no additional representative samples in the United States or the UK had been compiled subsequent to their publication. It was therefore important to update the US and UK representative samples as well as expand the number of representative samples to include additional countries and languages, reflecting the increasingly global reach of the MBTI assessment.

To address this need, data were collected in targeted countries (see table 1), with specific demographic targets set by experts for all samples except those from Brazil and South Africa.<sup>1</sup> A consistent data collection effort yielded samples that responded to a common 230-item

MBTI research form containing all items on then-current forms of the assessment (i.e., MBTI Form M and Form Q, and European Step I and Step II); common demographic items; and other validation assessments. Respondents who completed North American English or European English versions of the assessment also completed an online interpretation session through The Myers-Briggs Company's MBTI®Complete website, making their verified, or "best-fit," type available for analysis.

In brief, the revision of the MBTI assessment provided the opportunity to collect a wealth of data, resulting in national representative samples that had not existed previously. These samples served the global research effort for the revised assessments themselves and also provided 4 new large and 19 new moderate-size samples. (*Please note:* In this manual supplement series, a particular sample may be referred to by either country or language for convenience in a particular context. Refer as needed to the sample names listed in table 1 when considering the results presented.)

Two different categories of samples were collected for this global project. Table 1 lists the 4 "large" samples—United States, Canada, and Australia (all North American English), and the United Kingdom (European English)—and the 19 "moderate-size" samples from around the world, which were all combined to form the *global sample*. Large samples were targeted to have 1,000 or more respondents, to exceed the sample size of an existing representative sample (specifically, in the US and the UK), and to reflect the size of the market for the MBTI assessment. The moderate-size samples for the most part included targets to ensure that they were nationally representative; only 3 of these samples—Brazil (Brazilian Portuguese), South Africa (Afrikaans), and South Africa (North American English)—due in part to their smaller markets for the MBTI assessment, were distributor led and nonrepresentative.

The MBTI global sample consists of 16,773 individuals, as detailed and summarized in the *MBTI® Manual for the Global Step I™ and Step II™ Assessments* (Myers, McCaulley, Quenk, & Hammer, 2018). The global sample was used to develop the Global Step I and Step II assessments. It is critical to keep in mind that while analyses were conducted for each country/language sample used in this supplement series and are summarized here, the focus of the analyses was on the global sample reported in the 2018 MBTI manual.

This supplement to the 2018 manual summarizes results obtained from responses of the United States (North American English) sample—hereafter, *US (English)* sample—to the Global Step I and Step II assessments in North American English. Included in this supplement is a general description of the sample, along with statistical summaries, analyses, and type distributions based on those results.

Table 1 | List of large and moderate-size country/language samples in the MBTI® global sample

Country/language sample	N
<b>Large samples</b>	
Australia (North American English)	776
Canada (North American English)	939
United Kingdom (European English)	2,831
United States (North American English)	3,578
<b>Moderate-size samples</b>	
Brazil (Brazilian Portuguese)*	839
Canada (Canadian French)	176
China (Simplified Chinese)	521
China (Traditional Chinese)	477
Denmark (Danish)	468
Finland (Finnish)	524
France (European French)	472
Germany (German)†	440
Greece (Greek)	277
Ireland (European English)	383
Italy (Italian)	458
Mexico (Latin American Spanish)	359
Netherlands (Dutch)	506
Norway (Norwegian)	493
Portugal (European Portuguese)	503
South Africa (Afrikaans)*	505
South Africa (North American English)*	189
Spain (European Spanish)	564
Sweden (Swedish)	495

Note: Global sample, N = 16,773.

\*Data collection for this sample was distributor led; it is not a representative sample.

†Germany sample includes one individual residing in Switzerland.

## DATA COLLECTION

Data for this revision of the assessment were collected almost exclusively online through two Myers-Briggs Company websites. The first site, built by the company's Research Division, accommodated the administration of the MBTI research form and other validity assessments, which were used for non-English-speaking research participants. The second site, for English-speaking participants, was a special modification of MBTI®Complete created for this research project using the 230-item MBTI research form, followed by MBTI®Complete's online interpretation session yielding respondents' best-fit type results. (For details on best-fit type, see chapter 7 in the 2018 MBTI manual.) MBTI research from data for the US (English) sample were collected using the MBTI®Complete website; best-fit type data were collected at that time but are not reported here.

For the MBTI research form, specific sampling targets were set for each sample (table 2). Local MBTI distributors

helped determine the final targets for samples in their respective countries or regions by selecting appropriate official sources. In general, sampling targets were designed to mirror the working-age population.

Once the websites were prepared and the sampling targets were set, data collection began. For most samples, the majority of participants were provided with incentives by an external market research firm. Such firms maintain panels of participants who have expressed willingness to participate in research. These participants were compensated for completing some combination of demographic items, the MBTI research form, and/or other validity assessments. For some samples—for example, Brazil (Brazilian Portuguese)—the locally based MBTI distributor led the data collection effort. Once data

were collected, all cases were thoroughly examined, and invalid cases (e.g., those with too many response omissions or where a participant had selected only the “A” response option across 230 items) were removed. This cleanup step, while reducing final sample sizes, was required to ensure that only the highest-quality data remained for analysis.

A representative sample of individuals in the US who read North American English was obtained from a market research firm. Targets were set based on the English-speaking population of the United States using US Census data. Table 2 shows the demographic target and actual obtained percentages. The resulting US (English) sample consists of 3,578 individuals, 52.9% women and 47.1% men. The age range is 18–86, with an average of 44

Table 2 | Demographic summary: US (English) sample

Demographic	Target %	Actual %	Demographic	Target %	Actual %
<b>Age group</b>			<b>Employment status</b>		
18–24 years	13	13	Working full-time or part-time (men)	33	31
25–34 years	18	17	Working full-time or part-time (women)	33	35
35–44 years	18	20	Not working for income	5	6
45–54 years	19	20	Retired	10	15
55–64 years	15	16	Enrolled as full-time student (men)	5	3
65+ years	17	13	Enrolled as full-time student (women)	5	5
Mean age: 44 years	—	—	None of the above	5	5
<b>Gender</b>			<b>General line of work</b>		
Female	50	53	Sales and related occupations	11	9
Male	50	47	Office and administrative support	18	8
<b>Ethnicity</b>			Education, training, and library occupations	7	6
White	80	67	Food preparation and food service	9	5
Hispanic/latino	15	13	Business and financial operations	5	5
Black	13	12	Healthcare practitioner and technical occupations	6	4
Asian	5	2	Production occupations	8	4
American Indian / Alaskan native	1	<1	Transportation and materials moving	7	3
Native Hawaiian	<1	<1	Computer and mathematical occupations	3	3
Multiethnic	2	4	Construction and extraction occupations	5	3
Other	—	1	Personal care and personal service	3	2
No response	—	3	Healthcare support occupations	3	2
<b>Education level</b>			Installation, maintenance, and repair occupations	4	2
Some high school	14	3	Architecture and engineering	2	2
High school diploma	31	26	Protective services	2	2
Some college (no degree)	20	24	Community and social services	1	1
Associate degree, occupational (trade, technical training)	4	4	Building and grounds cleaning and maintenance	3	1
Associate degree, academic	4	8	Arts, design, entertainment, sports, and media	1	1
Bachelor’s degree	18	24	Life, physical, and social sciences	1	1
Master’s degree	7	9	Legal	<1	<1
Professional degree (e.g., DDS, JD, MD)	1	2	Military-specific occupations	2	<1
Doctorate (e.g., PhD, EdD)	1	1	Farming, fishing, and forestry	<1	<1
No response	—	<1	No response	—	34

Note: N = 3,578. Percentages in a given category may not total 100% due to rounding of decimals.

years (standard deviation = 15.8). All individuals reported residing in the US.

## MBTI® GLOBAL STEP I™ ASSESSMENT RESULTS FOR THE US (ENGLISH) SAMPLE

The Global Step I assessment contains 92 items used to help determine individuals' personality type by identifying their preferences on four pairs of opposites (Extraversion–Introversion, Sensing–Intuition, Thinking–Feeling, and Judging–Perceiving). Combining an individual's four preferences yields 1 of 16 possible MBTI

types. The Global Step I assessment replaces the Form M assessment and the European Step I assessment.

### MBTI® Type and Preference Distributions

MBTI type was computed for all participants in the US (English) sample. Type, preference, and preference combination distributions for this sample are presented in tables 3 and 4.

Table 3 shows that the most common types for this group are ISTJ and ISFJ. The least common types are ENTJ and ENFJ. Table 4 shows the distributions of preferences as well as four two-preference

Table 3 | Reported MBTI® type distribution: US (English) sample

Sensing		Intuition		Thinking	Feeling	Thinking	Judging	Introversion
Thinking	Feeling	Feeling	Thinking					
<b>ISTJ</b> <i>n</i> = 628 17.6%	<b>ISFJ</b> <i>n</i> = 381 10.6%	<b>INFJ</b> <i>n</i> = 105 2.9%	<b>INTJ</b> <i>n</i> = 110 3.1%					
<b>ISTP</b> <i>n</i> = 336 9.4%	<b>ISFP</b> <i>n</i> = 238 6.7%	<b>INFP</b> <i>n</i> = 230 6.4%	<b>INTP</b> <i>n</i> = 160 4.5%					
<b>ESTP</b> <i>n</i> = 175 4.9%	<b>ESFP</b> <i>n</i> = 184 5.1%	<b>ENFP</b> <i>n</i> = 269 7.5%	<b>ENTP</b> <i>n</i> = 108 3.0%					
<b>ESTJ</b> <i>n</i> = 285 8.0%	<b>ESFJ</b> <i>n</i> = 224 6.3%	<b>ENFJ</b> <i>n</i> = 82 2.3%	<b>ENTJ</b> <i>n</i> = 63 1.8%					

Note: *N* = 3,578.

Table 4 | Reported MBTI® type preference and preference combination distributions: US (English) sample

Preferences	Orientation pairs		Process pairs		Orientation of energy and perceiving pairs		Judging and external orientation pairs			
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%		
<b>E</b>	1,390	38.8	<b>EJ</b>	654 18.3	<b>ST</b>	1,424 39.8	<b>ES</b>	868 24.3	<b>TJ</b>	1,086 30.4
<b>I</b>	2,188	61.2	<b>EP</b>	736 20.6	<b>SF</b>	1,027 28.7	<b>EN</b>	522 14.6	<b>TP</b>	779 21.8
<b>S</b>	2,452	68.5	<b>IJ</b>	1,224 34.2	<b>NF</b>	686 19.2	<b>IS</b>	1,583 44.2	<b>FJ</b>	792 22.1
<b>N</b>	1,127	31.5	<b>IP</b>	964 26.9	<b>NT</b>	441 12.3	<b>IN</b>	605 16.9	<b>FP</b>	921 25.7
<b>T</b>	1,865	52.1								
<b>F</b>	1,713	47.9								
<b>J</b>	1,878	52.5								
<b>P</b>	1,700	47.5								

Note: *N* = 3,578.

combinations: (1) *orientation* pairs, (2) *process* pairs, (3) *orientation of energy* and *perceiving process* pairs, and (4) *judging process* and *external orientation* pairs. The table shows that of the preferences, Is and Ss are more prevalent than Es or Ns, while Ts, Fs, Js, and Ps are more evenly distributed.

Tables 5–8 show type and preference distributions by gender.

## Relationships Between MBTI® Global Step I™ and Form M Preference Pair Results

Correlations between MBTI Global Step I and Form M preference pair results for the US (English) sample are shown in table 9.<sup>2</sup> The overall agreement rate of whole types between the Global Step I and Form M assessments is 81%, higher than the 60% agreement rate between Form G and Form M reported in the 1998 *MBTI® Manual* (Myers, McCaulley, Quenk, & Hammer).

Table 5 | Reported MBTI® type distribution for men: US (English) sample

Sensing		Intuition			
Thinking	Feeling	Thinking			
<b>ISTJ</b> <i>n</i> = 353 20.9%	<b>ISFJ</b> <i>n</i> = 99 5.9%	<b>INFJ</b> <i>n</i> = 26 1.5%	<b>INTJ</b> <i>n</i> = 68 4.0%	Judging	Introversion
<b>ISTP</b> <i>n</i> = 220 13.0%	<b>ISFP</b> <i>n</i> = 88 5.2%	<b>INFP</b> <i>n</i> = 78 4.6%	<b>INTP</b> <i>n</i> = 91 5.4%	Perceiving	
<b>ESTP</b> <i>n</i> = 119 7.1%	<b>ESFP</b> <i>n</i> = 77 4.6%	<b>ENFP</b> <i>n</i> = 94 5.6%	<b>ENTP</b> <i>n</i> = 73 4.3%		Extraversion
<b>ESTJ</b> <i>n</i> = 179 10.6%	<b>ESFJ</b> <i>n</i> = 61 3.6%	<b>ENFJ</b> <i>n</i> = 23 1.4%	<b>ENTJ</b> <i>n</i> = 37 2.2%	Judging	

Note: *n* = 1,686.

Table 6 | Reported MBTI® type preference and preference combination distributions for men: US (English) sample

Preferences		Orientation pairs		Process pairs		Orientation of energy and perceiving pairs		Judging and external orientation pairs	
<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<b>E</b>	663 39.3	<b>EJ</b>	300 17.8	<b>ST</b>	871 51.7	<b>ES</b>	436 25.9	<b>TJ</b>	637 37.8
<b>I</b>	1,023 60.7	<b>EP</b>	363 21.5	<b>SF</b>	325 19.3	<b>EN</b>	227 13.5	<b>TP</b>	503 29.8
<b>S</b>	1,196 70.9	<b>IJ</b>	546 32.4	<b>NF</b>	221 13.1	<b>IS</b>	760 45.1	<b>FJ</b>	209 12.4
<b>N</b>	490 29.1	<b>IP</b>	477 28.3	<b>NT</b>	269 16.0	<b>IN</b>	263 15.6	<b>FP</b>	337 20.0
<b>T</b>	1,140 67.6								
<b>F</b>	546 32.4								
<b>J</b>	846 50.2								
<b>P</b>	840 49.8								

Note: *n* = 1,686.

## Global Step I™ Preference Pair Intercorrelations

Intercorrelations of Global Step I continuous scores in the US (English) sample are shown in table 10 below the diagonal. The highest correlation is between the S–N and J–P preference pairs. The next highest is between S–N and T–F. These correlations are very similar to those found for the global sample, shown in table 10 above the diagonal. The US (English) sample findings are likewise consistent with those reported for Form M in the 1998 *MBTI® Manual* (Myers et al.).

## Reliability and Validity of Global Step I™ Results

This section covers measurement properties for the North American English version of the MBTI Global Step I assessment used in the US, including reliability and validity. For full reliability and validity information for the global sample, refer to the *MBTI® Manual for the Global Step I™ and Step II™ Assessments* (Myers et al., 2018).

Table 7 | Reported MBTI® type distribution for women: US (English) sample

Sensing		Intuition			
Thinking	Feeling	Thinking			
<b>ISTJ</b> <i>n</i> = 275 14.5%	<b>ISFJ</b> <i>n</i> = 282 14.9%	<b>INFJ</b> <i>n</i> = 79 4.2%	<b>INTJ</b> <i>n</i> = 42 2.2%	Judging	Introversion
<b>ISTP</b> <i>n</i> = 116 6.1%	<b>ISFP</b> <i>n</i> = 150 7.9%	<b>INFP</b> <i>n</i> = 152 8.0%	<b>INTP</b> <i>n</i> = 69 3.6%	Perceiving	
<b>ESTP</b> <i>n</i> = 56 3.0%	<b>ESFP</b> <i>n</i> = 107 5.7%	<b>ENFP</b> <i>n</i> = 175 9.2%	<b>ENTP</b> <i>n</i> = 35 1.8%		Extraversion
<b>ESTJ</b> <i>n</i> = 106 5.6%	<b>ESFJ</b> <i>n</i> = 163 8.6%	<b>ENFJ</b> <i>n</i> = 59 3.1%	<b>ENTJ</b> <i>n</i> = 26 1.4%	Judging	

Note: *n* = 1,892.

Table 8 | Reported MBTI® type preference and preference combination distributions for women: US (English) sample

Preferences		Orientation pairs		Process pairs		Orientation of energy and perceiving pairs		Judging and external orientation pairs	
<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<b>E</b>	727 38.4	<b>EJ</b>	354 18.7	<b>ST</b>	553 29.2	<b>ES</b>	432 22.8	<b>TJ</b>	449 23.7
<b>I</b>	1,165 61.6	<b>EP</b>	373 19.7	<b>SF</b>	702 37.1	<b>EN</b>	295 15.6	<b>TP</b>	276 14.6
<b>S</b>	1,255 66.3	<b>IJ</b>	678 35.8	<b>NF</b>	465 24.6	<b>IS</b>	823 43.5	<b>FJ</b>	583 30.8
<b>N</b>	637 33.7	<b>IP</b>	487 25.7	<b>NT</b>	172 9.1	<b>IN</b>	342 18.1	<b>FP</b>	584 30.9
<b>T</b>	725 38.3								
<b>F</b>	1,167 61.7								
<b>J</b>	1,032 54.5								
<b>P</b>	860 45.5								

Note: *n* = 1,892.

Table 9 | Relationships between MBTI® Global Step I™ and Form M preference pair results: US (English) sample

Preference pair	Global Step I™ and Form M preference pair results	
	Correlation between continuous scores	Agreement rate (%)
E-I	.97	94
S-N	.96	94
T-F	.98	96
J-P	.96	94
Overall agreement rate		81

Note:  $N = 3,578$ .

### RELIABILITY

Reliability refers to consistency of measurement. A measure is said to be reliable when it produces a consistent, though not necessarily identical, result. Scores, not assessments, are either reliable or unreliable for a particular population of respondents, as reliability is affected by both the sample and the items contained in the instrument (Capraro & Capraro, 2002). Because reliability hinges at least partially on total score variability, samples that are homogeneous on the characteristic being measured will likely yield a low total score variance, and the reliability of the scores regarding the characteristic may be poor. Conversely, participants in a sample that is heterogeneous with respect to the characteristic will likely score differently from each other, thereby increasing variability and providing stronger reliability (Dawis, 1987).

Internal consistency reliability measures the consistency of responses across items in a particular measure for a particular sample. The most commonly used estimator of internal consistency reliability is Cronbach's alpha (Cronbach, 1951). Table 11 shows the Cronbach's alphas for Global Step I preference pairs in the US (English) sample and in the global sample for comparison purposes. The US (English) sample alphas range from .88 to .91.

Another form of reliability is test-retest, which estimates how stable a measure is over time. Test-retest reliability correlations of Global Step I continuous scores in the US (English) sample are also presented in table 11. The test-retest interval was  $\leq 15$  weeks. This table also shows the rate of test-retest agreement for each preference pair. Test-retest correlations and test-retest agreement rates are also shown for the global sample in this table for comparison purposes.

Table 12 shows the percentage of individuals who reported zero, one, two, three, or four preferences the same upon retest in the US (English) sample. Ninety

Table 10 | Intercorrelations of Global Step I™ continuous scores: US (English) sample

Preference pair	E-I	S-N	T-F	J-P
E-I	—	-.20	-.15	-.15
S-N	-.21	—	.27	.48
T-F	-.18	.28	—	.23
J-P	-.14	.48	.22	—

Note: Correlations for the US (English) sample ( $N = 3,578$ ) are below the diagonal; those for the global sample ( $N = 16,773$ ) are above the diagonal.

Table 11 | Internal consistency and test-retest reliabilities of Global Step I™ preference pair continuous scores: US (English) and global samples

Sample	$N$	Cronbach's alpha			
		E-I	S-N	T-F	J-P
US (English)	3,578	.90	.88	.91	.88
Global	16,773	.89	.87	.89	.88

  

Sample (interval)	$n$	Test-retest correlation			
		E-I	S-N	T-F	J-P
US (English) ( $\leq 15$ weeks)	236	.88	.87	.87	.85
Global ( $\leq 15$ weeks)	1,762	.86	.83	.82	.81

  

Sample (interval)	$n$	Test-retest agreement rate (%)			
		E-I	S-N	T-F	J-P
US (English) ( $\leq 15$ weeks)	236	87	86	82	84
Global ( $\leq 15$ weeks)	1,762	84	86	79	79

Table 12 | Percentage of individuals with preferences the same at retest: US (English) sample

Sample (interval)	$n$	Number of preferences the same at retest (%)				
		4	3	2	1	0
US (English) ( $\leq 15$ weeks)	236	51	39	9	2	0

percent of individuals reported having either three or four preferences the same at time of retest.

## VALIDITY

An instrument is said to be valid when it measures what it has been designed to measure (Ghiselli, Campbell, & Zedeck, 1981; Murphy & Davidshofer, 2005). Validity can be demonstrated using a number of different approaches. *Convergent* validity and *discriminant* validity are often examined by looking at the patterns of relationships on different instruments. An initial examination of convergent and discriminant validity was conducted by analyzing relationships found between the North American English version of the MBTI Global Step I assessment and the *Adjective Check List* (ACL; Gough & Heilbrun, 1983) as well as the CPI 260® assessment (Gough & Bradley, 2005).

**ACL assessment.** A portion of the US (English) sample participants ( $n = 306$ ) also completed the ACL when completing the research version of the MBTI assessment. The ACL consists of 300 different adjectives—such as *intelligent*, *alert*, *clear-thinking*, and *noisy*—encompassing a wide variety of behaviors. Respondents were asked to select the adjectives they believed were

self-descriptive (Gough & Heilbrun, 1983). According to Gough and Heilbrun, results for any respondent with fewer than 20 adjectives or more than 250 adjectives checked should be cautiously interpreted; those with fewer than 10 or more than 270 checked are almost always invalid. As a result, respondents with too many or too few adjectives were omitted prior to analysis. The more conservative approach was taken here, and respondents with fewer than 20 adjectives or more than 250 adjectives checked were removed from the analysis of the ACL. Scales on the ACL assessment result from combinations of adjectives. Selected ACL scale means, standard deviations, and Cohen's  $d$  (Cohen, 1992; mean differences expressed in units of standard deviation<sup>3</sup>) for MBTI preferences for the US (English) sample are presented in tables 13–16.

**CPI 260® assessment.** The CPI 260 assessment measures personality characteristics intended to provide a clear and accurate description of the respondent to increase self-awareness and understanding (Gough & Bradley, 2005). A portion of the US (English) sample ( $n = 167$ ) also completed the CPI 260 assessment. CPI 260 scale means, standard deviations, and Cohen's  $d$  for each of the four preference pairs are shown in tables 17–20.

Table 13 | ACL scale means, standard deviations, and Cohen's *d* for Global Step I™ E–I preferences: US (English) sample

ACL scale	ACL scale description	Extraversion		Introversion		Cohen's <i>d</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<b>Sum of number checked</b>	Total number of adjectives checked	71.71	33.96	68.05	39.32	-0.10
<b>Sum of favorable checked</b>	Total number of favorable adjectives checked	36.26	17.13	32.69	16.23	-0.22
<b>Sum of unfavorable checked</b>	Total number of unfavorable adjectives checked	4.96	6.06	5.70	8.36	0.10
<b>Communality</b>	An indicator of providing common or similar responses compared to the responses of people in general	8.28	4.45	8.87	4.11	0.14
<b>Achievement</b>	To strive to be outstanding in pursuits of socially recognized significance	8.45	5.34	6.69	4.95	-0.35
<b>Dominance</b>	To seek and maintain a role as leader in groups, or to be influential and controlling in individual relationships	5.98	4.53	3.10	4.35	-0.65
<b>Endurance</b>	To persist in any task undertaken	6.28	4.75	5.83	4.91	-0.09
<b>Order</b>	To place special emphasis on neatness, organization, and planning in one's activities	4.50	4.37	5.33	4.40	0.19
<b>Intracception</b>	To engage in attempts to understand one's behavior or the behavior of others	9.97	5.57	9.45	5.11	-0.10
<b>Nurturance</b>	To engage in behaviors that provide material or emotional benefits to others	10.19	6.98	8.57	6.89	-0.23
<b>Affiliation</b>	To seek and maintain numerous personal friendships	15.53	7.62	12.90	7.58	-0.35
<b>Exhibition</b>	To behave in such a way as to elicit the immediate attention of others	3.48	3.92	-0.13	4.14	-0.89
<b>Autonomy</b>	To act independently of others or of social values and expectations	3.26	3.34	2.24	3.57	-0.29
<b>Aggression</b>	To engage in behaviors that attack or hurt others	0.91	3.66	-1.69	4.20	-0.65
<b>Change</b>	To seek novelty of experience and to avoid routine	3.77	3.23	2.25	3.14	-0.48
<b>Succorance</b>	To solicit sympathy, affection, or emotional support from others	-0.76	2.79	-0.37	2.71	0.14
<b>Deference</b>	To seek and maintain subordinate roles in relationships with others	-0.59	3.98	0.86	3.80	0.37
<b>Self-Control</b>	To control one's behaviors and emotions	-2.03	3.25	0.27	3.38	0.69
<b>Self-Confidence</b>	Poise, self-assurance, and belief in one's ability to achieve one's goals	8.43	5.05	4.78	4.64	-0.76
<b>Personal Adjustment</b>	The ability to cope with situational and interpersonal demands, and a feeling of efficacy	6.26	4.04	5.38	3.79	-0.23
<b>Ideal Self</b>	Strong sense of personal worth; or harmony between what one is and what one wants to be	5.79	5.64	3.74	5.14	-0.39
<b>Creative Personality</b>	The desire to do and think differently from the norm, and a talent for originality	3.99	3.43	2.68	3.34	-0.39
<b>Military Leadership</b>	Steadiness, self-discipline, and good judgment of the kind required in positions of military (or related) leadership	6.76	5.08	6.39	4.49	-0.08
<b>Adult</b>	Attitudes of independence, objectivity, and industriousness associated with the concept of "mature adult"	5.78	5.45	5.98	4.95	0.04

Note: Extraversion, *n* = 112; Introversion, *n* = 194. For information on Cohen's *d*, see note 3 at the back of this supplement.

Table 14 | ACL scale means, standard deviations, and Cohen's *d* for Global Step I™ S–N preferences: US (English) sample

ACL scale	ACL scale description	Sensing		Intuition		Cohen's <i>d</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<b>Sum of number checked</b>	Total number of adjectives checked	63.72	34.20	78.43	40.61	0.40
<b>Sum of favorable checked</b>	Total number of favorable adjectives checked	30.83	15.82	39.04	16.70	0.51
<b>Sum of unfavorable checked</b>	Total number of unfavorable adjectives checked	5.43	7.19	5.43	8.24	0.00
<b>Communality</b>	An indicator of providing common or similar responses compared to the responses of people in general	8.11	4.21	9.52	4.17	0.34
<b>Achievement</b>	To strive to be outstanding in pursuits of socially recognized significance	6.75	5.10	8.25	5.12	0.29
<b>Dominance</b>	To seek and maintain a role as leader in groups, or to be influential and controlling in individual relationships	4.12	4.61	4.20	4.68	0.02
<b>Endurance</b>	To persist in any task undertaken	5.70	4.87	6.46	4.80	0.16
<b>Order</b>	To place special emphasis on neatness, organization, and planning in one's activities	4.87	4.27	5.28	4.61	0.09
<b>Intracception</b>	To engage in attempts to understand one's behavior or the behavior of others	8.68	5.05	11.18	5.28	0.49
<b>Nurturance</b>	To engage in behaviors that provide material or emotional benefits to others	8.04	6.98	10.96	6.55	0.43
<b>Affiliation</b>	To seek and maintain numerous personal friendships	12.52	7.19	16.01	8.00	0.47
<b>Exhibition</b>	To behave in such a way as to elicit the immediate attention of others	0.90	4.19	1.66	4.74	0.17
<b>Autonomy</b>	To act independently of others or of social values and expectations	2.40	3.33	2.95	3.78	0.16
<b>Aggression</b>	To engage in behaviors that attack or hurt others	-0.63	4.15	-0.91	4.29	-0.07
<b>Change</b>	To seek novelty of experience and to avoid routine	2.00	2.84	4.09	3.47	0.68
<b>Succorance</b>	To solicit sympathy, affection, or emotional support from others	-0.55	2.73	-0.45	2.76	0.04
<b>Deference</b>	To seek and maintain subordinate roles in relationships with others	0.28	3.91	0.40	3.96	0.03
<b>Self-Control</b>	To control one's behaviors and emotions	-0.37	3.46	-0.88	3.57	-0.15
<b>Self-Confidence</b>	Poise, self-assurance, and belief in one's ability to achieve one's goals	5.47	4.76	7.14	5.47	0.33
<b>Personal Adjustment</b>	The ability to cope with situational and interpersonal demands, and a feeling of efficacy	5.22	3.85	6.47	3.87	0.32
<b>Ideal Self</b>	Strong sense of personal worth; or harmony between what one is and what one wants to be	3.51	5.00	6.06	5.69	0.48
<b>Creative Personality</b>	The desire to do and think differently from the norm, and a talent for originality	2.31	2.95	4.51	3.71	0.67
<b>Military Leadership</b>	Steadiness, self-discipline, and good judgment of the kind required in positions of military (or related) leadership	6.16	4.75	7.10	4.60	0.20
<b>Adult</b>	Attitudes of independence, objectivity, and industriousness associated with the concept of "mature adult"	5.56	4.76	6.46	5.66	0.17

Note: Sensing, *n* = 188; Intuition, *n* = 118.

Table 15 | ACL scale means, standard deviations, and Cohen's *d* for Global Step I™ T–F preferences: US (English) sample

ACL scale	ACL scale description	Thinking		Feeling		Cohen's <i>d</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<b>Sum of number checked</b>	Total number of adjectives checked	67.14	39.06	72.24	35.21	0.14
<b>Sum of favorable checked</b>	Total number of favorable adjectives checked	31.80	16.00	36.78	17.05	0.30
<b>Sum of unfavorable checked</b>	Total number of unfavorable adjectives checked	6.24	8.65	4.40	5.88	-0.24
<b>Communality</b>	An indicator of providing common or similar responses compared to the responses of people in general	8.36	4.43	9.02	3.98	0.16
<b>Achievement</b>	To strive to be outstanding in pursuits of socially recognized significance	7.43	4.99	7.21	5.37	-0.04
<b>Dominance</b>	To seek and maintain a role as leader in groups, or to be influential and controlling in individual relationships	4.27	4.60	4.00	4.68	-0.06
<b>Endurance</b>	To persist in any task undertaken	6.17	4.65	5.77	5.10	-0.08
<b>Order</b>	To place special emphasis on neatness, organization, and planning in one's activities	5.58	4.22	4.33	4.54	-0.29
<b>Intracception</b>	To engage in attempts to understand one's behavior or the behavior of others	9.13	5.26	10.29	5.25	0.22
<b>Nurturance</b>	To engage in behaviors that provide material or emotional benefits to others	7.06	6.98	11.82	5.95	0.73
<b>Affiliation</b>	To seek and maintain numerous personal friendships	12.36	7.33	15.76	7.74	0.45
<b>Exhibition</b>	To behave in such a way as to elicit the immediate attention of others	1.14	4.46	1.26	4.37	0.03
<b>Autonomy</b>	To act independently of others or of social values and expectations	2.90	3.58	2.24	3.42	-0.19
<b>Aggression</b>	To engage in behaviors that attack or hurt others	-0.57	4.40	-0.95	3.93	-0.09
<b>Change</b>	To seek novelty of experience and to avoid routine	2.22	3.11	3.55	3.30	0.42
<b>Succorance</b>	To solicit sympathy, affection, or emotional support from others	-0.62	2.81	-0.37	2.64	0.09
<b>Deference</b>	To seek and maintain subordinate roles in relationships with others	-0.27	3.87	1.09	3.87	0.35
<b>Self-Control</b>	To control one's behaviors and emotions	-0.51	3.35	-0.64	3.71	-0.03
<b>Self-Confidence</b>	Poise, self-assurance, and belief in one's ability to achieve one's goals	5.84	4.78	6.46	5.49	0.12
<b>Personal Adjustment</b>	The ability to cope with situational and interpersonal demands, and a feeling of efficacy	5.23	3.85	6.30	3.89	0.28
<b>Ideal Self</b>	Strong sense of personal worth; or harmony between what one is and what one wants to be	4.19	5.06	4.87	5.82	0.13
<b>Creative Personality</b>	The desire to do and think differently from the norm, and a talent for originality	3.05	3.54	3.30	3.28	0.07
<b>Military Leadership</b>	Steadiness, self-discipline, and good judgment of the kind required in positions of military (or related) leadership	6.50	4.67	6.56	4.77	0.01
<b>Adult</b>	Attitudes of independence, objectivity, and industriousness associated with the concept of "mature adult"	6.37	4.74	5.32	5.56	-0.21

Note: Thinking, *n* = 171; Feeling, *n* = 135.

Table 16 | ACL scale means, standard deviations, and Cohen's *d* for Global Step I™ J–P preferences: US (English) sample

ACL scale	ACL scale description	Judging		Perceiving		Cohen's <i>d</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<b>Sum of number checked</b>	Total number of adjectives checked	69.19	39.90	69.61	34.63	0.01
<b>Sum of favorable checked</b>	Total number of favorable adjectives checked	34.29	17.11	33.67	16.13	-0.04
<b>Sum of unfavorable checked</b>	Total number of unfavorable adjectives checked	5.22	8.46	5.66	6.53	0.06
<b>Communality</b>	An indicator of providing common or similar responses compared to the responses of people in general	8.35	4.29	8.99	4.18	0.15
<b>Achievement</b>	To strive to be outstanding in pursuits of socially recognized significance	7.76	5.06	6.85	5.24	-0.18
<b>Dominance</b>	To seek and maintain a role as leader in groups, or to be influential and controlling in individual relationships	4.30	4.40	3.99	4.88	-0.07
<b>Endurance</b>	To persist in any task undertaken	6.86	4.77	5.03	4.78	-0.38
<b>Order</b>	To place special emphasis on neatness, organization, and planning in one's activities	5.89	4.47	4.07	4.14	-0.42
<b>Intracception</b>	To engage in attempts to understand one's behavior or the behavior of others	9.57	5.37	9.72	5.19	0.03
<b>Nurturance</b>	To engage in behaviors that provide material or emotional benefits to others	8.76	7.17	9.61	6.70	0.12
<b>Affiliation</b>	To seek and maintain numerous personal friendships	13.87	7.73	13.86	7.67	0.00
<b>Exhibition</b>	To behave in such a way as to elicit the immediate attention of others	0.79	4.05	1.64	4.76	0.19
<b>Autonomy</b>	To act independently of others or of social values and expectations	2.47	3.54	2.77	3.50	0.09
<b>Aggression</b>	To engage in behaviors that attack or hurt others	-0.89	4.22	-0.57	4.18	0.08
<b>Change</b>	To seek novelty of experience and to avoid routine	2.11	3.02	3.58	3.34	0.46
<b>Succorance</b>	To solicit sympathy, affection, or emotional support from others	-0.69	2.64	-0.31	2.84	0.14
<b>Deference</b>	To seek and maintain subordinate roles in relationships with others	0.45	3.94	0.19	3.91	-0.06
<b>Self-Control</b>	To control one's behaviors and emotions	-0.12	3.26	-1.06	3.71	-0.27
<b>Self-Confidence</b>	Poise, self-assurance, and belief in one's ability to achieve one's goals	6.29	4.80	5.92	5.43	-0.07
<b>Personal Adjustment</b>	The ability to cope with situational and interpersonal demands, and a feeling of efficacy	5.95	4.08	5.43	3.68	-0.13
<b>Ideal Self</b>	Strong sense of personal worth; or harmony between what one is and what one wants to be	4.84	5.51	4.10	5.29	-0.14
<b>Creative Personality</b>	The desire to do and think differently from the norm, and a talent for originality	2.88	3.18	3.47	3.67	0.17
<b>Military Leadership</b>	Steadiness, self-discipline, and good judgment of the kind required in positions of military (or related) leadership	6.66	4.93	6.38	4.46	-0.06
<b>Adult</b>	Attitudes of independence, objectivity, and industriousness associated with the concept of "mature adult"	6.42	5.01	5.34	5.23	-0.21

Note: Judging, *n* = 161; Perceiving, *n* = 145.

Table 17 | CPI 260® scale means, standard deviations, and Cohen's *d* for Global Step I™ E–I preferences: US (English) sample

CPI 260® scale	CPI 260® scale description	Extraversion		Introversion		Cohen's <i>d</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<b>Dominance (Do)</b>	Prosocial interpersonal power and influence	22.83	6.21	14.90	6.29	-1.27
<b>Capacity for Status (Cs)</b>	Ambition for challenge and social status	15.07	4.34	10.05	3.32	-1.35
<b>Sociability (Sy)</b>	Social participation	16.39	3.36	10.48	3.91	-1.59
<b>Social Presence (Sp)</b>	Poise and comfort with attention and recognition	18.47	3.55	14.18	3.51	-1.22
<b>Self-acceptance (Sa)</b>	Sense of personal worth and self-confidence	15.15	3.05	11.00	3.81	-1.17
<b>Independence (In)</b>	Self-sufficiency and self-directedness	15.39	3.33	11.87	4.03	-0.93
<b>Empathy (Em)</b>	Capacity to understand and respond to others' needs	14.58	3.28	10.47	3.12	-1.29
<b>Responsibility (Re)</b>	Conscientiousness and follow-through	16.88	4.02	14.99	4.22	-0.46
<b>Social Conformity (So)</b>	Conformance with social norms and customs	20.97	4.51	18.48	4.30	-0.57
<b>Self-control (Sc)</b>	Cautiousness and self-regulation	17.05	5.48	17.09	4.85	0.01
<b>Good Impression (Gi)</b>	Tact and positive self-presentation	15.76	4.44	13.47	4.91	-0.48
<b>Communality (Cm)</b>	Conventional behavior and attitudes	19.14	2.62	18.94	2.24	-0.08
<b>Well-being (Wb)</b>	Overall sense of health and optimism	16.12	3.47	13.10	4.61	-0.71
<b>Tolerance (To)</b>	Open-mindedness and respect for others	13.36	3.86	10.64	4.30	-0.65
<b>Achievement via Conformance (Ac)</b>	Motivation within organized settings	21.69	4.25	18.84	4.86	-0.61
<b>Achievement via Independence (Ai)</b>	Motivation within unstructured settings	15.37	3.88	13.28	3.80	-0.55
<b>Conceptual Fluency (Cf)</b>	Comfort with intellectual and conceptual matters	21.12	4.54	17.46	4.54	-0.81
<b>Insightfulness (Is)</b>	Analytical insight into the motivations of others	13.17	2.96	12.26	2.89	-0.31
<b>Flexibility (Fx)</b>	Adaptability and comfort with change	9.08	3.87	8.10	3.91	-0.25
<b>Sensitivity (Sn)</b>	Tough- versus tender-mindedness	12.32	2.92	14.55	3.30	0.70
<b>Managerial Potential (Mp)</b>	Inclination for supervisory responsibilities	16.32	4.37	11.89	4.74	-0.96
<b>Work Orientation (Wo)</b>	Sense of dedication to work	17.44	3.34	15.17	4.32	-0.57
<b>Creative Temperament (Ct)</b>	Individualization and capacity for innovativeness	15.69	3.98	11.85	4.24	-0.93
<b>Leadership (Lp)</b>	Initiative and effectiveness in leading others	27.19	5.99	20.08	6.84	-1.08
<b>Amicability (Ami)</b>	Cooperation and friendliness	18.80	4.76	15.99	5.42	-0.54
<b>Law Enforcement Orientation (Leo)</b>	Conventional and practical values	18.02	2.86	16.96	3.30	-0.33
<b>Vector 1 (v.1)</b>	Extraversion versus introversion	9.10	4.64	13.24	4.11	0.96
<b>Vector 2 (v.2)</b>	Rule-following versus rule-questioning	14.08	3.21	12.65	3.35	-0.43
<b>Vector 3 (v.3)</b>	Fulfillment of personal potential	18.49	5.78	14.19	5.97	-0.73

Note: Extraversion, *n* = 59; Introversion, *n* = 108. For information on Cohen's *d*, see note 3 at the back of this supplement.

Table 18 | CPI 260® scale means, standard deviations, and Cohen's *d* for Global Step I™ S–N preferences: US (English) sample

CPI 260® scale	CPI 260® scale description	Sensing		Intuition		Cohen's <i>d</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<b>Dominance (Do)</b>	Prosocial interpersonal power and influence	17.46	7.29	18.54	7.41	0.15
<b>Capacity for Status (Cs)</b>	Ambition for challenge and social status	11.41	4.22	13.27	4.81	0.43
<b>Sociability (Sy)</b>	Social participation	12.18	4.60	13.95	4.73	0.38
<b>Social Presence (Sp)</b>	Poise and comfort with attention and recognition	15.18	3.83	17.49	4.44	0.58
<b>Self-acceptance (Sa)</b>	Sense of personal worth and self-confidence	12.19	4.03	13.43	4.12	0.31
<b>Independence (In)</b>	Self-sufficiency and self-directedness	12.72	4.16	14.51	3.83	0.44
<b>Empathy (Em)</b>	Capacity to understand and respond to others' needs	11.49	3.61	13.43	3.80	0.53
<b>Responsibility (Re)</b>	Conscientiousness and follow-through	15.58	4.10	15.92	4.71	0.08
<b>Social Conformity (So)</b>	Conformance with social norms and customs	19.50	4.48	18.86	4.70	-0.14
<b>Self-control (Sc)</b>	Cautiousness and self-regulation	17.45	4.89	15.76	5.50	-0.34
<b>Good Impression (Gi)</b>	Tact and positive self-presentation	14.65	4.73	12.97	5.13	-0.35
<b>Communality (Cm)</b>	Conventional behavior and attitudes	18.97	2.47	19.16	2.03	0.08
<b>Well-being (Wb)</b>	Overall sense of health and optimism	14.07	4.58	14.51	4.11	0.10
<b>Tolerance (To)</b>	Open-mindedness and respect for others	11.26	4.33	12.78	4.24	0.35
<b>Achievement via Conformance (Ac)</b>	Motivation within organized settings	20.05	4.73	19.16	5.21	-0.18
<b>Achievement via Independence (Ai)</b>	Motivation within unstructured settings	13.72	3.90	15.08	3.97	0.35
<b>Conceptual Fluency (Cf)</b>	Comfort with intellectual and conceptual matters	18.56	4.88	19.43	4.78	0.18
<b>Insightfulness (Is)</b>	Analytical insight into the motivations of others	12.38	2.95	13.27	2.84	0.30
<b>Flexibility (Fx)</b>	Adaptability and comfort with change	7.85	3.79	10.57	3.63	0.72
<b>Sensitivity (Sn)</b>	Tough- versus tender-mindedness	13.70	3.25	13.97	3.68	0.08
<b>Managerial Potential (Mp)</b>	Inclination for supervisory responsibilities	13.25	4.94	14.16	5.52	0.18
<b>Work Orientation (Wo)</b>	Sense of dedication to work	15.91	4.10	16.19	4.32	0.07
<b>Creative Temperament (Ct)</b>	Individualization and capacity for innovativeness	12.23	4.12	16.65	4.23	1.07
<b>Leadership (Lp)</b>	Initiative and effectiveness in leading others	22.36	7.39	23.41	7.32	0.14
<b>Amicability (Ami)</b>	Cooperation and friendliness	16.98	5.44	16.97	5.10	0.00
<b>Law Enforcement Orientation (Leo)</b>	Conventional and practical values	17.72	3.08	16.00	3.23	-0.55
<b>Vector 1 (v.1)</b>	Extraversion versus introversion	12.11	4.67	10.62	4.82	-0.32
<b>Vector 2 (v.2)</b>	Rule-following versus rule-questioning	13.48	3.25	12.00	3.55	-0.45
<b>Vector 3 (v.3)</b>	Fulfillment of personal potential	15.42	6.39	16.70	5.65	0.21

Note: Sensing, *n* = 130; Intuition, *n* = 37.

Table 19 | CPI 260® scale means, standard deviations, and Cohen's *d* for Global Step I™ T–F preferences: US (English) sample

CPI 260® scale	CPI 260® scale description	Thinking		Feeling		Cohen's <i>d</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<b>Dominance (Do)</b>	Prosocial interpersonal power and influence	17.96	7.51	17.40	7.10	–0.08
<b>Capacity for Status (Cs)</b>	Ambition for challenge and social status	12.14	4.33	11.44	4.51	–0.16
<b>Sociability (Sy)</b>	Social participation	12.23	4.70	12.96	4.64	0.16
<b>Social Presence (Sp)</b>	Poise and comfort with attention and recognition	15.76	4.08	15.62	4.09	–0.03
<b>Self-acceptance (Sa)</b>	Sense of personal worth and self-confidence	12.57	4.12	12.35	4.04	–0.05
<b>Independence (In)</b>	Self-sufficiency and self-directedness	13.31	4.33	12.88	3.94	–0.10
<b>Empathy (Em)</b>	Capacity to understand and respond to others' needs	11.83	3.93	12.03	3.51	0.05
<b>Responsibility (Re)</b>	Conscientiousness and follow-through	15.11	4.38	16.30	3.98	0.28
<b>Social Conformity (So)</b>	Conformance with social norms and customs	19.39	4.31	19.32	4.79	–0.01
<b>Self-control (Sc)</b>	Cautiousness and self-regulation	16.86	4.62	17.34	5.56	0.09
<b>Good Impression (Gi)</b>	Tact and positive self-presentation	14.08	4.53	14.52	5.24	0.09
<b>Communality (Cm)</b>	Conventional behavior and attitudes	18.80	2.64	19.26	2.01	0.19
<b>Well-being (Wb)</b>	Overall sense of health and optimism	14.18	4.48	14.16	4.48	0.00
<b>Tolerance (To)</b>	Open-mindedness and respect for others	11.46	4.24	11.77	4.48	0.07
<b>Achievement via Conformance (Ac)</b>	Motivation within organized settings	19.70	4.84	20.03	4.86	0.07
<b>Achievement via Independence (Ai)</b>	Motivation within unstructured settings	14.02	3.85	14.01	4.09	0.00
<b>Conceptual Fluency (Cf)</b>	Comfort with intellectual and conceptual matters	18.76	4.85	18.75	4.89	0.00
<b>Insightfulness (Is)</b>	Analytical insight into the motivations of others	12.88	2.97	12.23	2.89	–0.22
<b>Flexibility (Fx)</b>	Adaptability and comfort with change	8.44	3.90	8.45	3.96	0.00
<b>Sensitivity (Sn)</b>	Tough- versus tender-mindedness	12.92	3.18	14.74	3.27	0.56
<b>Managerial Potential (Mp)</b>	Inclination for supervisory responsibilities	13.54	5.09	13.35	5.08	–0.04
<b>Work Orientation (Wo)</b>	Sense of dedication to work	15.72	4.18	16.26	4.10	0.13
<b>Creative Temperament (Ct)</b>	Individualization and capacity for innovativeness	13.06	4.60	13.39	4.45	0.07
<b>Leadership (Lp)</b>	Initiative and effectiveness in leading others	22.49	7.40	22.71	7.38	0.03
<b>Amicability (Ami)</b>	Cooperation and friendliness	16.80	5.32	17.19	5.41	0.07
<b>Law Enforcement Orientation (Leo)</b>	Conventional and practical values	17.59	2.94	17.04	3.45	–0.17
<b>Vector 1 (v.1)</b>	Extraversion versus introversion	11.43	4.88	12.18	4.54	0.16
<b>Vector 2 (v.2)</b>	Rule-following versus rule-questioning	12.88	3.40	13.48	3.32	0.18
<b>Vector 3 (v.3)</b>	Fulfillment of personal potential	15.56	6.17	15.88	6.35	0.05

Note: Thinking, *n* = 90; Feeling, *n* = 77.

Table 20 | CPI 260® scale means, standard deviations, and Cohen's *d* for Global Step I™ J–P preferences: US (English) sample

CPI 260® scale	CPI 260® scale description	Judging		Perceiving		Cohen's <i>d</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<b>Dominance (Do)</b>	Prosocial interpersonal power and influence	17.58	7.75	17.86	6.73	0.04
<b>Capacity for Status (Cs)</b>	Ambition for challenge and social status	11.58	4.39	12.14	4.46	0.13
<b>Sociability (Sy)</b>	Social participation	12.20	4.92	13.06	4.31	0.18
<b>Social Presence (Sp)</b>	Poise and comfort with attention and recognition	14.89	4.09	16.75	3.84	0.47
<b>Self-acceptance (Sa)</b>	Sense of personal worth and self-confidence	12.11	4.12	12.94	3.99	0.21
<b>Independence (In)</b>	Self-sufficiency and self-directedness	12.83	4.25	13.49	4.00	0.16
<b>Empathy (Em)</b>	Capacity to understand and respond to others' needs	11.44	3.97	12.56	3.32	0.30
<b>Responsibility (Re)</b>	Conscientiousness and follow-through	16.25	3.76	14.88	4.70	–0.33
<b>Social Conformity (So)</b>	Conformance with social norms and customs	19.92	4.42	18.63	4.58	–0.29
<b>Self-control (Sc)</b>	Cautiousness and self-regulation	17.97	4.99	15.90	4.96	–0.42
<b>Good Impression (Gi)</b>	Tact and positive self-presentation	14.94	4.88	13.42	4.72	–0.32
<b>Communality (Cm)</b>	Conventional behavior and attitudes	19.11	2.45	18.89	2.29	–0.09
<b>Well-being (Wb)</b>	Overall sense of health and optimism	14.20	4.76	14.13	4.08	–0.02
<b>Tolerance (To)</b>	Open-mindedness and respect for others	11.34	4.42	11.94	4.24	0.14
<b>Achievement via Conformance (Ac)</b>	Motivation within organized settings	21.02	4.21	18.31	5.19	–0.58
<b>Achievement via Independence (Ai)</b>	Motivation within unstructured settings	13.94	3.98	14.13	3.94	0.05
<b>Conceptual Fluency (Cf)</b>	Comfort with intellectual and conceptual matters	18.92	4.90	18.54	4.82	–0.08
<b>Insightfulness (Is)</b>	Analytical insight into the motivations of others	12.53	3.00	12.65	2.87	0.04
<b>Flexibility (Fx)</b>	Adaptability and comfort with change	7.40	3.54	9.83	3.98	0.65
<b>Sensitivity (Sn)</b>	Tough- versus tender-mindedness	13.88	3.49	13.60	3.13	–0.09
<b>Managerial Potential (Mp)</b>	Inclination for supervisory responsibilities	13.47	5.10	13.43	5.07	–0.01
<b>Work Orientation (Wo)</b>	Sense of dedication to work	16.05	4.31	15.86	3.92	–0.05
<b>Creative Temperament (Ct)</b>	Individualization and capacity for innovativeness	11.89	4.13	14.94	4.47	0.71
<b>Leadership (Lp)</b>	Initiative and effectiveness in leading others	22.67	7.87	22.49	6.71	–0.03
<b>Amicability (Ami)</b>	Cooperation and friendliness	17.07	5.58	16.86	5.07	–0.04
<b>Law Enforcement Orientation (Leo)</b>	Conventional and practical values	17.62	3.19	16.96	3.16	–0.21
<b>Vector 1 (v.1)</b>	Extraversion versus introversion	12.08	4.76	11.38	4.69	–0.15
<b>Vector 2 (v.2)</b>	Rule-following versus rule-questioning	14.03	2.95	12.00	3.55	–0.63
<b>Vector 3 (v.3)</b>	Fulfillment of personal potential	15.35	6.24	16.18	6.25	0.13

Note: Judging, *n* = 95; Perceiving, *n* = 72.

## MBTI® GLOBAL STEP II™ ASSESSMENT RESULTS FOR THE US (ENGLISH) SAMPLE

The Global Step II assessment contains all 92 Global Step I items plus an additional 51 items needed to score the Step II facets, for a total of 143. Step II results expand on descriptions of the four preference pairs by providing information about five facets of each pair (see table 21). The Global Step II assessment replaces the Form Q assessment and the European Step II assessment.

Table 21 | Relationships between Global Step II™, Form Q, and European Step II™ facet results: US (English) sample

Global Step II™ facet	Correlation between continuous scores	
	Global Step II™ and Form Q facet results	Global Step II™ and European Step II™ facet results
<b>E–I facets</b>		
Initiating–Receiving	.98	.96
Expressive–Contained	.99	.93
Gregarious–Intimate	.97	.99
Active–Reflective	.86	.88
Enthusiastic–Quiet	.99	.97
<b>S–N facets</b>		
Concrete–Abstract	.96	.95
Realistic–Imaginative	.99	.99
Practical–Conceptual	.84	.85
Experiential–Theoretical	.96	.98
Traditional–Original	.95	.95
<b>T–F facets</b>		
Logical–Empathetic	.94	.95
Reasonable–Compassionate	.95	.97
Questioning–Accommodating	.58	.69
Critical–Accepting	.83	.82
Tough–Tender	.98	.97
<b>J–P facets</b>		
Systematic–Casual	.95	.97
Planful–Open-Ended	.98	.98
Early Starting–Pressure-Prompted	.92	.92
Scheduled–Spontaneous	.95	.93
Methodical–Emergent	.96	.89

Note: N = 3,578.

## Relationships Between MBTI® Global Step II™, Form Q, and European Step II™ Facet Results

Table 21 presents the relationships between MBTI Global Step II, Form Q, and European Step II facet results for the US (English) sample.

### Global Step II™ Facet Intercorrelations

Intercorrelations of Global Step II facets are presented in table 22. Facets within each preference pair correlate higher with other facets of the same preference pair than with facets of different preference pairs.

### Reliability and Validity of Global Step II™ Results

This section covers measurement properties for the North American English version of the MBTI Global Step II assessment, including reliability and validity. For full reliability and validity information for the global sample, refer to the *MBTI® Manual for the Global Step I™ and Step II™ Assessments* (Myers et al., 2018).

#### RELIABILITY

Internal consistency and test-retest reliabilities for Global Step II facets in the US (English) sample are presented in table 23.

#### VALIDITY

Reported here as evidence of the validity of the North American English version of the MBTI Global Step II assessment are the percentage of out-of-preference facet scores for each preference pair, correlations between preference pairs and facets, and correlations between the MBTI assessment and two other assessments.

The five facets within each preference pair do not represent the entire conceptual domain of the preference pair. Further, it is not uncommon for individuals to have a facet score on the side opposite that of their preference in a given preference pair. For example, an Extravert may score toward the Intimate pole. This apparent inconsistency is referred to as an out-of-preference score and defined as a facet score from –2 to –5 when a respondent has preferences for I, N, F, or P; or from 2 to 5 when a respondent has preferences for E, S, T, or J. While it is not unusual to have a number of out-of-preference scores, it is relatively rare to have out-of-preference scores in three or more facets within any one preference pair. The percentage of out-of-preference facet scores for each preference pair in the US (English) sample is shown in table 24.

Table 22 | Intercorrelations of Global Step II™ facets: US (English) sample

Global Step II™ facet	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
<b><i>E–I facets</i></b>																				
1. Initiating–Receiving	—																			
2. Expressive–Contained	.60	—																		
3. Gregarious–Intimate	.61	.55	—																	
4. Active–Reflective	.72	.61	.59	—																
5. Enthusiastic–Quiet	.65	.60	.63	.67	—															
<b><i>S–N facets</i></b>																				
6. Concrete–Abstract	-.12	-.12	-.13	-.13	-.26	—														
7. Realistic–Imaginative	-.13	-.12	-.12	-.14	-.25	.72	—													
8. Practical–Conceptual	-.12	-.07	-.11	-.11	-.24	.61	.67	—												
9. Experiential–Theoretical	-.10	-.07	-.09	-.10	-.17	.66	.57	.48	—											
10. Traditional–Original	-.16	-.07	-.10	-.13	-.24	.65	.61	.62	.52	—										
<b><i>T–F facets</i></b>																				
11. Logical–Empathetic	-.12	-.24	-.13	-.16	-.22	.33	.29	.16	.16	.14	—									
12. Reasonable–Compassionate	-.11	-.22	-.11	-.12	-.18	.30	.25	.11	.14	.11	.82	—								
13. Questioning–Accommodating	.01	-.12	-.04	-.01	-.02	.09	.07	-.10	-.04	-.17	.54	.59	—							
14. Critical–Accepting	-.15	-.21	-.11	-.12	-.15	.24	.19	.07	.08	.08	.59	.64	.73	—						
15. Tough–Tender	-.06	-.19	-.05	-.06	-.09	.29	.23	.09	.12	.09	.66	.71	.71	.72	—					
<b><i>J–P facets</i></b>																				
16. Systematic–Casual	-.15	-.16	-.19	-.17	-.29	.53	.47	.36	.34	.51	.42	.39	.20	.29	.33	—				
17. Planful–Open-Ended	-.09	-.07	-.12	-.09	-.15	.32	.27	.22	.21	.36	.17	.14	.04	.09	.12	.66	—			
18. Early Starting–Pressure-Prompted	-.01	-.04	-.11	-.09	-.13	.23	.22	.16	.20	.23	.09	.07	.00	-.05	.03	.43	.48	—		
19. Scheduled–Spontaneous	-.08	-.07	-.13	-.14	-.18	.43	.38	.30	.33	.45	.20	.15	.02	.05	.12	.74	.74	.55	—	
20. Methodical–Emergent	.01	-.02	-.07	-.03	-.05	.16	.13	.07	.12	.15	.14	.12	.08	.02	.08	.47	.50	.53	.56	—

Note: N = 3,578.

Table 23 | Internal consistency and test-retest reliabilities of Global Step II™ facet continuous scores: US (English) sample

Global Step II™ facet	Cronbach's alpha	Test-retest correlation
<b>E–I facets</b>		
Initiating–Receiving	.84	.84
Expressive–Contained	.74	.83
Gregarious–Intimate	.63	.77
Active–Reflective	.64	.78
Enthusiastic–Quiet	.72	.77
<b>S–N facets</b>		
Concrete–Abstract	.77	.81
Realistic–Imaginative	.75	.81
Practical–Conceptual	.64	.76
Experiential–Theoretical	.75	.74
Traditional–Original	.71	.79
<b>T–F facets</b>		
Logical–Empathetic	.82	.86
Reasonable–Compassionate	.80	.80
Questioning–Accommodating	.64	.76
Critical–Accepting	.64	.73
Tough–Tender	.77	.79
<b>J–P facets</b>		
Systematic–Casual	.76	.81
Planful–Open-Ended	.80	.79
Early Starting–Pressure-Prompted	.63	.65
Scheduled–Spontaneous	.82	.80
Methodical–Emergent	.66	.67

Note:  $N = 3,578$ ; test-retest,  $n = 236$ .

Table 24 | Percentage of reported out-of-preference Global Step II™ facet scores: US (English) sample

Preference pair	Number of out-of-preference facet scores (%)					
	0	1	2	3	4	5
<b>E–I</b>	72	22	6	<1	0	0
<b>S–N</b>	73	22	5	<1	0	0
<b>T–F</b>	75	17	6	2	0	0
<b>J–P</b>	62	28	10	1	0	0

Note:  $N = 3,578$ .

Correlations between facets and preference pairs are presented in table 25. The correlation between each facet and its corresponding preference pair is significantly higher than those between the facet and the other three preference pairs. This is “compelling evidence for the theoretical hierarchical structure of the Step II facets in relation to the Step I scales” (Quenk, Hammer, & Majors,

Table 25 | Correlations between Global Step II™ facets and preference pairs: US (English) sample

Global Step II™ facet	Preference pair			
	E–I	S–N	T–F	J–P
<b>E–I facets</b>				
Initiating–Receiving	.87	–.16	–.11	–.09
Expressive–Contained	.78	–.12	–.24	–.08
Gregarious–Intimate	.75	–.14	–.11	–.14
Active–Reflective	.83	–.15	–.13	–.12
Enthusiastic–Quiet	.83	–.29	–.18	–.20
<b>S–N facets</b>				
Concrete–Abstract	–.18	.89	.32	.44
Realistic–Imaginative	–.19	.86	.27	.39
Practical–Conceptual	–.16	.76	.11	.32
Experiential–Theoretical	–.13	.74	.15	.31
Traditional–Original	–.18	.80	.11	.46
<b>T–F facets</b>				
Logical–Empathetic	–.20	.30	.91	.24
Reasonable–Compassionate	–.18	.26	.92	.20
Questioning–Accommodating	–.04	.01	.69	.06
Critical–Accepting	–.18	.20	.73	.11
Tough–Tender	–.11	.24	.83	.16
<b>J–P facets</b>				
Systematic–Casual	–.22	.57	.41	.83
Planful–Open-Ended	–.11	.35	.15	.86
Early Starting–Pressure-Prompted	–.08	.25	.07	.61
Scheduled–Spontaneous	–.14	.46	.17	.94
Methodical–Emergent	–.02	.17	.13	.62

Note:  $N = 3,578$ .

2001, p. 104). The US (English) sample correlations are comparable to those reported in the *MBTI® Step II™ Manual* (Quenk et al., 2001) and the *MBTI® Step II™ Manual, European Edition* (Quenk, Hammer, & Majors, 2004). The lowest correlation between a facet and its corresponding preference pair is between Early Starting–Pressure-Prompted and J–P.

To further demonstrate convergent and divergent validity of the MBTI Global Step II facets using the North American English version, the facets were correlated with scales of two other assessments, the *Adjective Check List* (ACL) and the *CPI 260®* assessment. Descriptions of the relationships between the MBTI assessment and the other assessments follow.

**ACL assessment.** ACL scales correlated with the Global Step II facets; a selection of these correlations is presented in table 26. The relationships between the MBTI Global Step II assessment and the ACL are

Table 26 | Selected correlations between Global Step II™ facets and ACL scales: US (English) sample

Global Step II™ facet scale	ACL scale												
	Communality	Dominance	Endurance	Order	Nurturance	Affiliation	Exhibition	Change	Deference	Self-Control	Self-Confidence	Personal Adjustment	Creative Personality
<b>E–I facet scales</b>													
Initiating–Receiving	-.02	-.45	-.12	.01	-.16	-.23	-.45	-.26	.20	.34	-.44	-.18	-.30
Expressive–Contained	-.02	-.21	-.10	-.04	-.25	-.24	-.29	-.19	-.01	.17	-.28	-.17	-.16
Gregarious–Intimate	.01	-.25	-.01	.07	-.10	-.16	-.31	-.22	.11	.20	-.29	-.13	-.19
Active–Reflective	.03	-.37	-.05	.08	-.10	-.19	-.47	-.31	.26	.40	-.36	-.08	-.25
Enthusiastic–Quiet	.00	-.37	-.04	.09	-.11	-.21	-.54	-.36	.31	.46	-.41	-.12	-.26
<b>S–N facet scales</b>													
Concrete–Abstract	.10	.02	-.03	-.05	.16	.17	.15	.37	-.05	-.18	.15	.11	.33
Realistic–Imaginative	.12	.04	.02	-.01	.17	.19	.16	.37	-.04	-.17	.17	.12	.39
Practical–Conceptual	.07	.00	-.02	-.04	.09	.15	.13	.34	-.09	-.21	.11	.03	.32
Experiential–Theoretical	.02	.00	-.03	-.03	.05	.13	.11	.26	-.06	-.09	.11	.04	.27
Traditional–Original	.19	.14	.14	.10	.23	.26	.19	.37	-.09	-.18	.24	.20	.41
<b>T–F facet scales</b>													
Logical–Empathetic	.03	.04	-.04	-.18	.35	.25	.08	.20	.16	-.10	.11	.15	.05
Reasonable–Compassionate	.00	-.06	-.09	-.19	.33	.22	.04	.18	.24	-.04	.03	.13	.01
Questioning–Accommodating	.09	-.22	-.10	-.12	.30	.17	-.17	.05	.36	.20	-.10	.14	-.10
Critical–Accepting	.23	-.01	.06	.00	.50	.29	-.07	.14	.33	.14	.11	.32	.08
Tough–Tender	.10	-.11	-.04	-.08	.40	.23	-.04	.16	.26	.04	.00	.19	.06
<b>J–P facet scales</b>													
Systematic–Casual	.10	.02	-.14	-.23	.18	.14	.20	.38	-.07	-.24	.10	.03	.20
Planful–Open-Ended	.06	.06	-.13	-.16	.08	.06	.17	.24	-.11	-.22	.06	-.01	.15
Early Starting–Pressure-Prompted	-.07	-.10	-.24	-.22	-.11	-.07	.11	.11	-.10	-.18	-.09	-.16	.06
Scheduled–Spontaneous	-.02	.00	-.22	-.25	-.01	-.03	.13	.24	-.13	-.20	-.01	-.08	.12
Methodical–Emergent	-.04	-.10	-.26	-.29	-.02	-.07	.03	.07	-.03	-.07	-.08	-.07	-.02

Note: n = 306.

consistent with those reported in the *MBTI® Step II™ Manual* (Quenk et al., 2001) and the *MBTI® Step II™ Manual, European Edition* (Quenk et al., 2004).

**CPI 260™ assessment.** Correlations between the Global Step II facets and CPI 260 scales for the US sample are shown in table 27. The correlations reported here are similar to those found in the *MBTI® Step II™ Manual* for the CPI 434 assessment (Quenk et al., 2001), providing additional evidence of the validity of the MBTI Global Step II assessment.

### Global Step II™ Facet Distributions

Determining whether a particular score is in-preference, midzone, or out-of-preference provides the basis for recognizing and understanding individual differences among people of the same type. When giving feedback

to respondents, for practitioners the most important verification issue is the accuracy with which the scores reflect their placement at either pole or in the midzone. If a respondent disagrees with results on a facet, interpretation will be affected. For example, a respondent may judge a facet score that was reported as midzone to be actually out-of-preference or in-preference. In such an instance, statements in the report will be incorrect for that facet, so the practitioner must provide appropriate interpretive information that corresponds to the respondent’s verified placement.

Table 28 shows the percentages and rank order of in-preference, midzone, and out-of-preference scores for the 20 Global Step II facets for the US (English) sample. Interpreters may find this table useful because it shows which facets are more or less likely to yield scores in these three categories. There are wide variations in the

Table 27 | Correlations between Global Step II™ facets and CPI 260® scales: US (English) sample

Global Step II™ facet scale	CPI 260® scale																												
	Do	Cs	Sy	Sp	Sa	In	Em	Re	So	Sc	Gi	Cm	Wb	To	Ac	Ai	Cf	Is	Fx	Sn	Mp	Wo	Ct	Lp	Ami	Leo	v.1	v.2	v.3
<b>E–I facet scales</b>																													
Initiating–Receiving	-.70	-.60	-.77	-.58	-.69	-.55	-.64	-.23	-.30	.03	-.24	-.07	-.43	-.30	-.30	-.29	-.47	-.21	-.08	.48	-.53	-.35	-.41	-.64	-.28	-.29	.54	-.23	-.35
Expressive–Contained	-.56	-.48	-.63	-.46	-.52	-.48	-.57	-.27	-.32	-.08	-.33	-.10	-.40	-.35	-.31	-.30	-.42	-.20	-.11	.33	-.50	-.37	-.39	-.55	-.33	-.30	.41	-.26	-.41
Gregarious–Intimate	-.49	-.45	-.57	-.50	-.47	-.37	-.47	-.23	-.27	.02	-.19	.02	-.35	-.25	-.25	-.22	-.32	-.12	-.13	.27	-.43	-.28	-.35	-.44	-.28	-.21	.43	-.22	-.33
Active–Reflective	-.58	-.47	-.64	-.48	-.55	-.43	-.53	-.18	-.21	.08	-.17	-.06	-.34	-.23	-.22	-.23	-.35	-.14	-.11	.38	-.44	-.26	-.39	-.50	-.19	-.25	.48	-.18	-.26
Enthusiastic–Quiet	-.51	-.49	-.62	-.56	-.52	-.37	-.51	-.06	-.15	.20	-.07	.02	-.27	-.20	-.13	-.19	-.29	-.07	-.11	.32	-.36	-.17	-.45	-.44	-.13	-.07	.51	-.09	-.22
<b>S–N facet scales</b>																													
Concrete–Abstract	.08	.27	.19	.26	.17	.18	.31	-.01	-.13	-.18	-.13	-.01	-.03	.14	-.12	.21	.08	.13	.32	.09	.03	.01	.46	.07	-.03	-.24	-.15	-.23	.09
Realistic–Imaginative	.11	.25	.18	.25	.16	.19	.24	.02	-.12	-.18	-.15	-.08	-.01	.11	-.11	.14	.08	.10	.28	.02	.08	.00	.44	.09	-.05	-.24	-.19	-.19	.07
Practical–Conceptual	.17	.28	.24	.29	.24	.18	.24	-.09	-.16	-.25	-.23	-.07	-.08	.04	-.14	.09	.11	.07	.26	-.02	.07	-.08	.36	.11	-.14	-.16	-.26	-.24	-.02
Experiential–Theoretical	.08	.24	.10	.15	.18	.15	.23	-.09	-.10	-.16	-.19	-.16	-.08	.07	-.15	.12	.02	.10	.26	.13	-.01	-.09	.43	.02	-.08	-.22	-.13	-.21	.01
Traditional–Original	.19	.28	.22	.29	.20	.31	.28	.02	-.10	-.15	-.12	-.08	.03	.14	-.09	.18	.17	.20	.29	-.08	.08	.05	.46	.16	-.04	-.15	-.20	-.23	.11
<b>T–F facet scales</b>																													
Logical–Empathetic	.03	.02	.14	.09	.05	-.02	.13	.03	-.04	-.05	-.03	.06	-.02	.04	-.06	-.03	.03	-.10	.12	.19	-.01	.03	.16	.04	-.02	-.08	-.02	-.02	-.02
Reasonable–Compassionate	.02	.04	.14	.07	.04	-.01	.20	.12	.01	.02	.05	.08	.03	.09	.04	.11	.04	-.03	.13	.23	.04	.10	.18	.07	.07	-.10	.00	.04	.06
Questioning–Accommodating	-.15	-.05	-.01	-.04	-.16	-.15	.06	.16	.12	.11	.16	.11	.06	.14	.04	.02	-.07	-.14	.10	.22	-.01	.16	.02	-.07	.20	-.05	.18	.06	.14
Critical–Accepting	.04	.09	.17	.07	.03	.04	.25	.27	.15	.15	.22	.21	.17	.26	.15	.15	.08	-.01	.13	.18	.18	.27	.17	.11	.27	-.01	.03	.12	.23
Tough–Tender	.02	.10	.15	.10	.06	-.03	.25	.21	.05	.07	.09	.16	.04	.18	.10	.12	.05	.01	.18	.23	.08	.18	.17	.08	.16	-.07	.00	.06	.13
<b>J–P facet scales</b>																													
Systematic–Casual	.10	.14	.21	.28	.15	.17	.26	-.08	-.13	-.16	-.10	-.04	.01	.10	-.24	.09	.02	.02	.37	.00	.02	.00	.43	.07	-.04	-.16	-.13	-.28	.10
Planful–Open-Ended	.01	.09	.07	.21	.05	.15	.22	-.06	-.10	-.12	-.08	-.09	.03	.11	-.24	.08	-.02	.07	.38	-.05	-.01	.03	.40	.00	.02	-.17	-.04	-.29	.13
Early Starting–Pressure-Prompted	-.04	.06	-.01	.11	-.01	.02	.12	-.19	-.20	-.21	-.17	-.23	-.13	.03	-.32	.06	-.09	.01	.43	-.08	-.03	-.12	.33	-.11	-.09	-.22	-.05	-.34	.07
Scheduled–Spontaneous	.01	.06	.09	.20	.07	.11	.13	-.13	-.16	-.18	-.18	-.13	-.01	.06	-.30	.01	-.09	.00	.40	-.05	-.03	-.06	.39	-.04	-.03	-.22	-.07	-.36	.08
Methodical–Emergent	-.04	-.04	-.09	.03	-.06	.04	.05	-.14	-.14	-.08	-.14	-.19	-.05	.06	-.29	.00	-.06	-.05	.38	.01	-.05	-.09	.25	-.08	-.02	-.14	.04	-.36	.05

Note: n = 167.

Table 28 | In-preference, midzone, and out-of-preference percentages and rankings for the Global Step II<sup>™</sup> facets: US (English) sample

Global Step II <sup>™</sup> facet	In-preference		Midzone		Out-of-preference	
	%	Rank	%	Rank	%	Rank
<b>E–I facets</b>						
Initiating–Receiving	63.64	7	31.75	10	4.61	16
Expressive–Contained	54.78	18	37.95	3	7.27	8
Gregarious–Intimate	61.77	12	28.81	15	9.42	6
Active–Reflective	58.61	15	35.30	5	6.09	10
Enthusiastic–Quiet	65.85	3	27.42	16	6.74	9
<b>S–N facets</b>						
Concrete–Abstract	62.80	10	33.76	7	3.44	17
Realistic–Imaginative	65.90	2	29.18	14	4.92	15
Practical–Conceptual	56.18	17	35.49	4	8.33	7
Experiential–Theoretical	63.30	8	26.10	18	10.59	4
Traditional–Original	54.53	19	40.16	1	5.31	13
<b>T–F facets</b>						
Logical–Empathetic	64.90	4	32.92	8	2.18	19
Reasonable–Compassionate	66.29	1	30.91	13	2.79	18
Questioning–Accommodating	50.20	20	40.08	2	9.73	5
Critical–Accepting	59.11	14	27.25	17	13.64	3
Tough–Tender	62.91	9	31.13	11	5.95	11
<b>J–P facets</b>						
Systematic–Casual	61.29	13	32.90	9	5.81	12
Planful–Open-Ended	63.97	6	30.97	12	5.06	14
Early Starting–Pressure-Prompted	58.19	16	21.24	19	20.57	1
Scheduled–Spontaneous	64.03	5	34.74	6	1.23	20
Methodical–Emergent	62.13	11	20.21	20	17.66	2

Note: N = 3,578.

frequency with which facet scores are likely to be out-of-preference. Here, the facet with the highest percentage of out-of-preference scores is Early Starting–Pressure-Prompted at 20.57%, followed by Methodical–Emergent at 17.66%. The Scheduled–Spontaneous facet (1.23%) and the Logical–Empathetic facet (2.18%) appear least likely to elicit out-of-preference responses.

Gender differences on the Step II facets in the US (English) sample are presented in table 29.

## CONCLUSION

Initial analyses of the North American English versions of the MBTI Global Step I and Step II assessments used in the US demonstrate that they each have good internal

consistency and test-retest reliabilities and are consistent with those of prior forms of the MBTI assessment (i.e., Form M and Form Q, European Step I and Step II). Validity was established in several ways. First, included in this supplement are mean ACL and CPI 260 scale differences between Global Step I preferences. The differences show meaningful and expected relationships between the assessments. Next, correlations of the Global Step II assessment with two other assessments (the ACL and CPI 260) show anticipated relationships. The percentage of out-of-preference facet scores is also presented. While more research should be conducted, all these analyses show that the North American English versions of the MBTI Global Step I and Step II assessments have adequate reliability and validity and are appropriate for use with individuals in the US who read and understand North American English.

Table 29 | Means, standard deviations, and Cohen's *d* of the Global Step II™ facets by total sample and gender: US (English) sample

Global Step II™ facet	Total sample ( <i>N</i> = 3,578)		Men ( <i>n</i> = 1,686)		Women ( <i>n</i> = 1,892)		Gender difference
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	Cohen's <i>d</i>
<b><i>E–I facets</i></b>							
Initiating–Receiving	0.13	0.92	0.13	0.89	0.12	0.95	0.01
Expressive–Contained	0.09	0.84	0.09	0.82	0.09	0.86	0.00
Gregarious–Intimate	0.18	0.78	0.13	0.78	0.22	0.79	–0.12
Active–Reflective	0.14	0.82	0.11	0.82	0.15	0.82	–0.05
Enthusiastic–Quiet	0.24	0.87	0.28	0.85	0.20	0.88	0.09
<b><i>S–N facets</i></b>							
Concrete–Abstract	–0.24	0.92	–0.31	0.91	–0.18	0.93	–0.14
Realistic–Imaginative	–0.29	0.87	–0.32	0.86	–0.27	0.88	–0.05
Practical–Conceptual	–0.19	0.78	–0.20	0.77	–0.19	0.78	0.00
Experiential–Theoretical	–0.12	0.88	–0.07	0.90	–0.16	0.85	0.10
Traditional–Original	–0.24	0.85	–0.23	0.86	–0.24	0.84	0.02
<b><i>T–F facets</i></b>							
Logical–Empathetic	–0.08	0.91	–0.41	0.82	0.22	0.89	–0.73
Reasonable–Compassionate	0.08	0.93	–0.22	0.88	0.36	0.88	–0.65
Questioning–Accommodating	0.06	0.82	–0.18	0.80	0.28	0.78	–0.58
Critical–Accepting	0.06	0.81	–0.22	0.81	0.31	0.73	–0.68
Tough–Tender	–0.09	0.91	–0.37	0.89	0.15	0.85	–0.60
<b><i>J–P facets</i></b>							
Systematic–Casual	–0.05	0.88	–0.11	0.87	0.00	0.89	–0.13
Planful–Open-Ended	0.01	0.89	0.07	0.85	–0.04	0.91	0.12
Early Starting–Pressure-Prompted	–0.10	0.76	–0.05	0.76	–0.14	0.75	0.12
Scheduled–Spontaneous	–0.14	0.92	–0.06	0.93	–0.21	0.92	0.16
Methodical–Emergent	–0.04	0.81	0.01	0.79	–0.08	0.82	0.10

Note: For information on Cohen's *d*, see note 3, below.

## NOTES

1. Originally, samples from India (North American English) and Saudi Arabia (Arabic) were collected, but these were later dropped from the global sample due to sample composition and psychometric concerns.
2. Correlation coefficients range from –1 to 1 and can be squared and used as effect sizes (measures of the practical significance of the relationship between the two variables in question). Cohen's guidelines regarding effect sizes indicate that  $r^2 = .10$  is a small effect size,  $r^2 = .30$  is medium, and  $r^2 = .50$  is large (Cohen, 1988, 1992).

3. Cohen's *d* is an estimate of an effect size computed by taking the difference between the means of two groups and dividing by their pooled standard deviations. Because the metric is in standard deviation units, effect sizes can easily be compared to evaluate the magnitude of a difference. Cohen (1992) provides an overview of the computation of a variety of effect sizes, along with guidance on interpretation. Cohen proposed that  $d = .20$  be considered small,  $d = .50$  be considered medium, and  $d = .80$  be considered large. In psychological research, small to medium effect sizes are typical.

## REFERENCES

---

- Capraro, R. M., & Capraro, M. M. (2002). Myers-Briggs Type Indicator® score reliability across studies: A meta-analytic reliability generalization study (Form M). *Educational & Psychological Measurement, 62*(4), 590–602.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*, 155–159.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*(3), 297–334.
- Davis, R. V. (1987). Scale construction. *Journal of Counseling Psychology, 34*, 481–489.
- Ghiselli, E. E., Campbell, J. P., & Zedeck, S. (1981). *Measurement theory for the behavioral sciences*. San Francisco: W. H. Freeman.
- Gough, H. G., & Bradley, P. (2005). *CPI 260® manual*. Sunnyvale, CA: The Myers-Briggs Company.
- Gough, H. G., & Heilbrun, A. B. (1983). *The Adjective Check List manual*. Mountain View, CA: CPP, Inc.
- Murphy, K. R., & Davidshofer, C. O. (2005). *Psychological testing* (6th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Myers, I. B., McCaulley, M. H., Quenk, N. L., & Hammer, A. L. (1998). *MBTI® manual: A guide to the development and use of the Myers-Briggs Type Indicator® instrument* (3rd ed.). Sunnyvale, CA: The Myers-Briggs Company.
- Myers, I. B., McCaulley, M. H., Quenk, N. L., & Hammer, A. L. (2018). *MBTI® manual for the Global Step I™ and Step II™ assessments* (4th ed.). Sunnyvale, CA: The Myers-Briggs Company.
- Quenk, N. L., Hammer, A. L., & Majors, M. S. (2001). *MBTI® Step II™ manual*. Sunnyvale, CA: The Myers-Briggs Company.
- Quenk, N. L., Hammer, A. L., & Majors, M. S. (2004). *MBTI® Step II™ manual, European edition*. Sunnyvale, CA: The Myers-Briggs Company.