



MBTI® MANUAL GLOBAL SUPPLEMENT SERIES

Ireland (European English)

Supplement to the **MBTI® Manual** for the **Global Step I™** and **Step II™ Assessments**

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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.¹ 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 Ireland (European English) sample—hereafter, *Ireland (English)* sample—to the Global Step I and Step II assessments in European 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
Large samples	
Australia (North American English)	776
Canada (North American English)	939
United Kingdom (European English)	2,831
United States (North American English)	3,578
Moderate-size samples	
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.

TRANSLATION PROCESS

The Myers-Briggs® Company's translation process for the MBTI Global Step I and Step II assessments was based on industry-standard methods for assessment translation (International Test Commission, 2005).² Because each of the languages included in this project has a different history of translation and use, the process varied somewhat for different languages.

As part of the research process to develop the MBTI® European Step II™ assessment, a research form containing 230 items from Myers' pool of existing items (and known as the Pan-European Step II™—Trial Form) was created (see Quenk, Hammer, & Majors, 2004, for details). This form was translated into nine European languages—Danish, Dutch, English, French, German, Italian, Norwegian, Spanish, and Swedish—and used to collect MBTI assessment data. It later was refined to become the 166-item European Step II assessment, with a version for each language; all versions have been used extensively since their release. Additional research on these different

language versions of the assessment, and on others developed since that time, has been reported by OPP Ltd (2009). The 230-item research form became the starting point for the translation of the European English version used in this global project.

OPP’s original European English version was created by a professional linguist; it was evaluated by in-country expert reviewers and iterated until a satisfactory version of the translation was developed. For this global project, the European English version was again evaluated by a professional linguist as well as in-country expert reviewers; modifications were made to item wordings to reflect improvements, changes in language usage since the original translation, or other corrections needed to further improve the quality and accuracy of the translation. All changes were reviewed by the linguist as well as in-country expert reviewers, iteratively, until an agreed-upon translation was developed.

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 Ireland (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

Table 2 | Demographic summary: Ireland (English) sample

Demographic	Target %	Actual %
Age group		
15–24 years	18	22
25–44 years	41	44
45–64 years	28	33
65+ years	14	<1
Mean age: 37 years	—	—
Gender		
Female	50	58
Male	50	42
Country of residence		
Ireland	—	100
Employment status		
Working full-time	48	48
Working part-time	11	14
Student	9	10
Looking after family/home	12	9
Long-term sick	11	2
Retired / not working for income / none of the above	9	14
No response	—	3
Self-employed		
Yes	10	7
No	90	35
No response	—	58

Note: *N* = 383. Percentages in a given category may not total 100% due to rounding of decimals.

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 Ireland who read European English was obtained from a market research firm. Targets were set based on the population of Ireland and provided by OPP Ltd. Table 2 shows the demographic target and actual obtained percentages. The resulting Ireland (English) sample consists of 383 individuals, 58.5% women and 41.5% men. The age range is 15–66, with an average of 37 years (standard deviation = 12.1). All individuals reported residing in Ireland.

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

Sensing		Intuition			
Thinking	Feeling	Thinking			
ISTJ n = 55 14.4%	ISFJ n = 37 9.7%	INFJ n = 15 3.9%	INTJ n = 15 3.9%	Judging	Introversion
ISTP n = 27 7.0%	ISFP n = 22 5.7%	INFP n = 37 9.7%	INTP n = 14 3.7%		
ESTP n = 16 4.2%	ESFP n = 17 4.4%	ENFP n = 46 12.0%	ENTP n = 15 3.9%	Judging	
ESTJ n = 25 6.5%	ESFJ n = 23 6.0%	ENFJ n = 9 2.3%	ENTJ n = 10 2.6%		

Note: N = 383.

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

Preferences		Orientation pairs		Process pairs		Orientation of energy and perceiving pairs		Judging and external orientation pairs						
n	%	n	%	n	%	n	%	n	%					
E	161	42.0	EJ	67	17.5	ST	123	32.1	ES	81	21.1	TJ	105	27.4
I	222	58.0	EP	94	24.5	SF	99	25.8	EN	80	20.9	TP	72	18.8
S	222	58.0	IJ	122	31.9	NF	107	27.9	IS	141	36.8	FJ	84	21.9
N	161	42.0	IP	100	26.1	NT	54	14.1	IN	81	21.1	FP	122	31.9
T	177	46.2												
F	206	53.8												
J	189	49.3												
P	194	50.7												

Note: N = 383.

MBTI® GLOBAL STEP I™ ASSESSMENT RESULTS FOR THE IRELAND (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 Ireland (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 ENFP. The least common types are ENTJ and ENFJ. As reported in the *MBTI® Step II™ European Data Supplement* (OPP, 2009), the most common types in an Ireland (English) sample (N = 7,710) at that time were ESTJ and ENTJ. The least common types in that sample were ISFP and INFJ.

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

Sensing		Intuition			
Thinking	Feeling	Thinking			
ISTJ n = 33 20.8%	ISFJ n = 7 4.4%	INFJ n = 2 1.3%	INTJ n = 5 3.1%	Judging	Introversion
ISTP n = 19 11.9%	ISFP n = 3 1.9%	INFP n = 19 11.9%	INTP n = 6 3.8%		
ESTP n = 11 6.9%	ESFP n = 9 5.7%	ENFP n = 16 10.1%	ENTP n = 10 6.3%	Judging	
ESTJ n = 10 6.3%	ESFJ n = 4 2.5%	ENFJ n = 1 0.6%	ENTJ n = 4 2.5%		

Note: n = 159.

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

Preferences		Orientation pairs		Process pairs		Orientation of energy and perceiving pairs		Judging and external orientation pairs	
n	%	n	%	n	%	n	%	n	%
E	65 40.9	EJ	19 11.9	ST	73 45.9	ES	34 21.4	TJ	52 32.7
I	94 59.1	EP	46 28.9	SF	23 14.5	EN	31 19.5	TP	46 28.9
S	96 60.4	IJ	47 29.6	NF	38 23.9	IS	62 39.0	FJ	14 8.8
N	63 39.6	IP	47 29.6	NT	25 15.7	IN	32 20.1	FP	47 29.6
T	98 61.6								
F	61 38.4								
J	66 41.5								
P	93 58.5								

Note: n = 159.

Table 4 shows the distributions of preferences as well as four two-preference 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 are more prevalent than Es, and Ss more than Ns, while the other preferences are more evenly distributed.

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

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

Sensing		Intuition			
Thinking	Feeling	Thinking			
ISTJ n = 22 9.8%	ISFJ n = 30 13.4%	INFJ n = 13 5.8%	INTJ n = 10 4.5%	Judging	Introversion
ISTP n = 8 3.6%	ISFP n = 19 8.5%	INFP n = 18 8.0%	INTP n = 8 3.6%		
ESTP n = 5 2.2%	ESFP n = 8 3.6%	ENFP n = 30 13.4%	ENTP n = 5 2.2%	Judging	
ESTJ n = 15 6.7%	ESFJ n = 19 8.5%	ENFJ n = 8 3.6%	ENTJ n = 6 2.7%		

Note: n = 224.

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

Preferences		Orientation pairs		Process pairs		Orientation of energy and perceiving pairs		Judging and external orientation pairs	
n	%	n	%	n	%	n	%	n	%
E	96 42.9	EJ	48 21.4	ST	50 22.3	ES	47 21.0	TJ	53 23.7
I	128 57.1	EP	48 21.4	SF	76 33.9	EN	49 21.9	TP	26 11.6
S	126 56.3	IJ	75 33.5	NF	69 30.8	IS	79 35.3	FJ	70 31.3
N	98 43.8	IP	53 23.7	NT	29 12.9	IN	49 21.9	FP	75 33.5
T	79 35.3								
F	145 64.7								
J	123 54.9								
P	101 45.1								

Note: n = 224.

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

Correlations between MBTI Global Step I, Form M, and European Step I preference pair results for the Ireland (English) sample are shown in table 9. The overall agreement rate of whole types between the Global Step I and Form M assessments is 82%, while between the Global Step I and European Step I assessments it is 60%.

The agreement rate between the Global Step I and Form M assessments is higher than the 60% agreement rate between Form G and Form M reported in the 1998 *MBTI® Manual* (Myers, McCaulley, Quenk, & Hammer).

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

Preference pair	Global Step I™ and Form M preference pair results		Global Step I™ and European Step I™ preference pair results	
	Correlation between continuous scores	Agreement rate (%)	Correlation between continuous scores	Agreement rate (%)
E-I	.97	94	.93	88
S-N	.96	95	.91	90
T-F	.98	96	.89	86
J-P	.97	96	.91	84
Overall agreement rate		82	60	

Note: N = 383.

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

Preference pair	E-I	S-N	T-F	J-P
E-I	—	-.20	-.15	-.15
S-N	-.22	—	.27	.48
T-F	-.20	.26	—	.23
J-P	-.18	.51	.20	—

Note: Correlations for the Ireland (English) sample (N = 383) are below the diagonal; those for the global sample (N = 16,773) are above the diagonal.

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

Sample	N	Cronbach's alpha			
		E-I	S-N	T-F	J-P
Ireland (English)	383	.88	.89	.90	.89
Global	16,773	.89	.87	.89	.88

Global Step I™ Preference Pair Intercorrelations

Intercorrelations of Global Step I continuous scores in the Ireland (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 Ireland (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 European English version of the MBTI Global Step I assessment used in Ireland, 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

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 Ireland (English) sample and in the global sample for comparison purposes. The Ireland (English) sample alphas range from .88 to .90.

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 European 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 Ireland (English) sample participants ($n = 60$) also completed a translated version of 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 deviation⁴) for MBTI preferences for the Ireland (English) sample are presented in tables 12–15.

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 Ireland (English) sample ($n = 56$) 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 16–19.

Table 12 | ACL scale means, standard deviations, and Cohen's *d* for Global Step I™ E–I preferences: Ireland (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>	
Sum of number checked	Total number of adjectives checked	76.03	39.82	87.48	40.54	0.28
Sum of favorable checked	Total number of favorable adjectives checked	38.69	15.84	39.77	17.48	0.06
Sum of unfavorable checked	Total number of unfavorable adjectives checked	5.97	8.43	8.26	5.14	0.33
Communality	An indicator of providing common or similar responses compared to the responses of people in general	9.28	3.89	9.94	4.45	0.16
Achievement	To strive to be outstanding in pursuits of socially recognized significance	8.93	5.73	7.55	5.69	-0.24
Dominance	To seek and maintain a role as leader in groups, or to be influential and controlling in individual relationships	5.79	4.96	2.94	6.15	-0.51
Endurance	To persist in any task undertaken	5.07	5.26	5.52	5.51	0.08
Order	To place special emphasis on neatness, organization, and planning in one's activities	3.86	4.32	5.03	4.80	0.26
Intracception	To engage in attempts to understand one's behavior or the behavior of others	10.34	4.82	10.77	6.07	0.08
Nurturance	To engage in behaviors that provide material or emotional benefits to others	12.07	4.71	9.97	6.82	-0.36
Affiliation	To seek and maintain numerous personal friendships	16.00	7.13	15.71	8.18	-0.04
Exhibition	To behave in such a way as to elicit the immediate attention of others	3.76	3.45	0.61	5.21	-0.71
Autonomy	To act independently of others or of social values and expectations	2.97	4.10	2.45	5.63	-0.10
Aggression	To engage in behaviors that attack or hurt others	1.28	3.28	-1.00	5.57	-0.49
Change	To seek novelty of experience and to avoid routine	4.34	3.00	3.55	4.43	-0.21
Succorance	To solicit sympathy, affection, or emotional support from others	-0.28	2.97	0.06	2.84	0.12
Deference	To seek and maintain subordinate roles in relationships with others	-0.34	4.11	1.39	5.36	0.36
Self-Control	To control one's behaviors and emotions	-1.76	3.46	-0.84	4.12	0.24
Self-Confidence	Poise, self-assurance, and belief in one's ability to achieve one's goals	8.48	5.28	6.26	5.23	-0.42
Personal Adjustment	The ability to cope with situational and interpersonal demands, and a feeling of efficacy	7.14	3.65	6.26	3.66	-0.24
Ideal Self	Strong sense of personal worth; or harmony between what one is and what one wants to be	4.66	4.54	3.58	4.97	-0.23
Creative Personality	The desire to do and think differently from the norm, and a talent for originality	4.14	3.67	3.68	4.24	-0.12
Military Leadership	Steadiness, self-discipline, and good judgment of the kind required in positions of military (or related) leadership	7.03	5.19	5.87	4.40	-0.24
Adult	Attitudes of independence, objectivity, and industriousness associated with the concept of "mature adult"	5.41	5.20	4.29	4.66	-0.23

Note: Extraversion, *n* = 29; Introversion, *n* = 31. For information on Cohen's *d*, see note 4 at the back of this supplement.

Table 13 | ACL scale means, standard deviations, and Cohen's *d* for Global Step I™ S–N preferences: Ireland (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>	
Sum of number checked	Total number of adjectives checked	75.86	37.86	90.48	42.72	0.37
Sum of favorable checked	Total number of favorable adjectives checked	36.31	17.67	43.36	14.25	0.43
Sum of unfavorable checked	Total number of unfavorable adjectives checked	6.80	5.26	7.64	8.92	0.12
Communality	An indicator of providing common or similar responses compared to the responses of people in general	9.17	4.24	10.24	4.06	0.26
Achievement	To strive to be outstanding in pursuits of socially recognized significance	8.03	5.56	8.48	6.00	0.08
Dominance	To seek and maintain a role as leader in groups, or to be influential and controlling in individual relationships	4.43	5.32	4.16	6.40	–0.05
Endurance	To persist in any task undertaken	6.26	5.08	3.96	5.53	–0.44
Order	To place special emphasis on neatness, organization, and planning in one's activities	5.14	4.78	3.52	4.17	–0.36
Intracception	To engage in attempts to understand one's behavior or the behavior of others	9.40	6.07	12.20	4.04	0.53
Nurturance	To engage in behaviors that provide material or emotional benefits to others	10.26	6.74	12.00	4.54	0.29
Affiliation	To seek and maintain numerous personal friendships	14.69	7.79	17.48	7.22	0.37
Exhibition	To behave in such a way as to elicit the immediate attention of others	1.43	3.99	3.12	5.44	0.36
Autonomy	To act independently of others or of social values and expectations	2.06	4.49	3.60	5.42	0.32
Aggression	To engage in behaviors that attack or hurt others	–0.31	4.40	0.68	5.15	0.21
Change	To seek novelty of experience and to avoid routine	2.66	3.50	5.72	3.52	0.87
Succorance	To solicit sympathy, affection, or emotional support from others	–0.09	2.81	–0.12	3.05	–0.01
Deference	To seek and maintain subordinate roles in relationships with others	1.20	4.55	–0.36	5.16	–0.32
Self-Control	To control one's behaviors and emotions	–0.23	3.56	–2.76	3.72	–0.70
Self-Confidence	Poise, self-assurance, and belief in one's ability to achieve one's goals	6.83	5.43	8.04	5.22	0.23
Personal Adjustment	The ability to cope with situational and interpersonal demands, and a feeling of efficacy	6.20	3.98	7.36	3.08	0.32
Ideal Self	Strong sense of personal worth; or harmony between what one is and what one wants to be	3.77	4.88	4.56	4.64	0.16
Creative Personality	The desire to do and think differently from the norm, and a talent for originality	2.80	3.92	5.44	3.51	0.70
Military Leadership	Steadiness, self-discipline, and good judgment of the kind required in positions of military (or related) leadership	6.20	4.87	6.76	4.75	0.12
Adult	Attitudes of independence, objectivity, and industriousness associated with the concept of "mature adult"	5.11	4.96	4.44	4.93	–0.14

Note: Sensing, *n* = 35; Intuition, *n* = 25.

Table 14 | ACL scale means, standard deviations, and Cohen's *d* for Global Step I™ T–F preferences: Ireland (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>	
Sum of number checked	Total number of adjectives checked	84.54	46.31	79.97	35.56	-0.11
Sum of favorable checked	Total number of favorable adjectives checked	37.85	18.10	40.32	15.50	0.15
Sum of unfavorable checked	Total number of unfavorable adjectives checked	9.50	8.44	5.35	5.00	-0.62
Communality	An indicator of providing common or similar responses compared to the responses of people in general	8.88	4.82	10.18	3.56	0.31
Achievement	To strive to be outstanding in pursuits of socially recognized significance	8.92	5.62	7.68	5.79	-0.22
Dominance	To seek and maintain a role as leader in groups, or to be influential and controlling in individual relationships	6.31	4.90	2.79	5.94	-0.64
Endurance	To persist in any task undertaken	5.38	4.67	5.24	5.88	-0.03
Order	To place special emphasis on neatness, organization, and planning in one's activities	4.27	3.91	4.62	5.08	0.08
Intracception	To engage in attempts to understand one's behavior or the behavior of others	9.46	5.83	11.41	5.08	0.36
Nurturance	To engage in behaviors that provide material or emotional benefits to others	8.58	6.55	12.82	4.76	0.76
Affiliation	To seek and maintain numerous personal friendships	14.62	8.57	16.79	6.80	0.29
Exhibition	To behave in such a way as to elicit the immediate attention of others	4.08	3.92	0.65	4.73	-0.78
Autonomy	To act independently of others or of social values and expectations	5.27	4.42	0.74	4.38	-1.03
Aggression	To engage in behaviors that attack or hurt others	2.23	3.85	-1.53	4.70	-0.86
Change	To seek novelty of experience and to avoid routine	4.81	3.25	3.26	4.08	-0.41
Succorance	To solicit sympathy, affection, or emotional support from others	-0.92	3.27	0.53	2.42	0.52
Deference	To seek and maintain subordinate roles in relationships with others	-2.23	4.13	2.68	4.25	1.17
Self-Control	To control one's behaviors and emotions	-2.58	3.32	-0.29	3.90	0.62
Self-Confidence	Poise, self-assurance, and belief in one's ability to achieve one's goals	8.31	4.96	6.59	5.55	-0.32
Personal Adjustment	The ability to cope with situational and interpersonal demands, and a feeling of efficacy	6.31	3.71	6.97	3.64	0.18
Ideal Self	Strong sense of personal worth; or harmony between what one is and what one wants to be	4.12	4.84	4.09	4.76	-0.01
Creative Personality	The desire to do and think differently from the norm, and a talent for originality	5.19	3.70	2.91	3.90	-0.60
Military Leadership	Steadiness, self-discipline, and good judgment of the kind required in positions of military (or related) leadership	6.04	5.17	6.74	4.53	0.14
Adult	Attitudes of independence, objectivity, and industriousness associated with the concept of "mature adult"	4.73	5.02	4.91	4.91	0.04

Note: Thinking, *n* = 26; Feeling, *n* = 34.

Table 15 | ACL scale means, standard deviations, and Cohen's *d* for Global Step I™ J–P preferences: Ireland (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>	
Sum of number checked	Total number of adjectives checked	76.06	39.45	88.68	40.84	0.31
Sum of favorable checked	Total number of favorable adjectives checked	37.47	16.36	41.29	16.88	0.23
Sum of unfavorable checked	Total number of unfavorable adjectives checked	6.56	5.97	7.82	8.00	0.18
Communality	An indicator of providing common or similar responses compared to the responses of people in general	9.56	4.20	9.68	4.20	0.03
Achievement	To strive to be outstanding in pursuits of socially recognized significance	8.28	5.75	8.14	5.75	–0.02
Dominance	To seek and maintain a role as leader in groups, or to be influential and controlling in individual relationships	4.47	5.80	4.14	5.77	–0.06
Endurance	To persist in any task undertaken	6.94	4.98	3.43	5.22	–0.69
Order	To place special emphasis on neatness, organization, and planning in one's activities	5.78	4.72	2.96	3.97	–0.64
Intracception	To engage in attempts to understand one's behavior or the behavior of others	9.94	5.42	11.29	5.52	0.25
Nurturance	To engage in behaviors that provide material or emotional benefits to others	10.47	5.18	11.57	6.76	0.18
Affiliation	To seek and maintain numerous personal friendships	14.88	7.16	16.96	8.12	0.27
Exhibition	To behave in such a way as to elicit the immediate attention of others	1.84	4.79	2.46	4.63	0.13
Autonomy	To act independently of others or of social values and expectations	1.81	5.20	3.71	4.44	0.39
Aggression	To engage in behaviors that attack or hurt others	–0.47	4.87	0.75	4.53	0.26
Change	To seek novelty of experience and to avoid routine	2.38	3.74	5.71	3.04	0.97
Succorance	To solicit sympathy, affection, or emotional support from others	0.03	2.75	–0.25	3.07	–0.10
Deference	To seek and maintain subordinate roles in relationships with others	1.50	4.89	–0.54	4.62	–0.43
Self-Control	To control one's behaviors and emotions	–0.34	3.92	–2.36	3.43	–0.54
Self-Confidence	Poise, self-assurance, and belief in one's ability to achieve one's goals	7.19	5.40	7.50	5.34	0.06
Personal Adjustment	The ability to cope with situational and interpersonal demands, and a feeling of efficacy	6.13	3.54	7.32	3.74	0.33
Ideal Self	Strong sense of personal worth; or harmony between what one is and what one wants to be	4.81	4.69	3.29	4.79	–0.32
Creative Personality	The desire to do and think differently from the norm, and a talent for originality	3.09	4.09	4.82	3.63	0.44
Military Leadership	Steadiness, self-discipline, and good judgment of the kind required in positions of military (or related) leadership	6.13	4.75	6.79	4.90	0.14
Adult	Attitudes of independence, objectivity, and industriousness associated with the concept of "mature adult"	5.88	4.58	3.64	5.10	–0.46

Note: Judging, *n* = 32; Perceiving, *n* = 28.

Table 16 | CPI 260® scale means, standard deviations, and Cohen's *d* for Global Step I™ E–I preferences: Ireland (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>	
Dominance (Do)	Prosocial interpersonal power and influence	21.06	5.12	17.25	7.43	–0.61
Capacity for Status (Cs)	Ambition for challenge and social status	15.38	3.39	13.25	4.81	–0.52
Sociability (Sy)	Social participation	16.34	2.94	12.29	5.18	–1.00
Social Presence (Sp)	Poise and comfort with attention and recognition	18.66	3.39	15.46	4.25	–0.85
Self-acceptance (Sa)	Sense of personal worth and self-confidence	14.41	2.64	12.29	4.61	–0.59
Independence (In)	Self-sufficiency and self-directedness	13.56	3.93	11.38	5.22	–0.48
Empathy (Em)	Capacity to understand and respond to others' needs	14.34	3.13	12.58	2.92	–0.58
Responsibility (Re)	Conscientiousness and follow-through	13.38	3.84	14.13	3.60	0.20
Social Conformity (So)	Conformance with social norms and customs	18.91	4.75	16.96	5.43	–0.39
Self-control (Sc)	Cautiousness and self-regulation	13.78	5.16	13.58	4.68	–0.04
Good Impression (Gi)	Tact and positive self-presentation	12.25	4.68	11.25	3.60	–0.24
Communality (Cm)	Conventional behavior and attitudes	17.97	2.55	17.63	2.58	–0.13
Well-being (Wb)	Overall sense of health and optimism	13.81	3.58	10.83	4.50	–0.75
Tolerance (To)	Open-mindedness and respect for others	10.84	3.98	9.50	4.02	–0.34
Achievement via Conformance (Ac)	Motivation within organized settings	18.03	5.07	17.25	4.77	–0.16
Achievement via Independence (Ai)	Motivation within unstructured settings	14.47	4.52	13.38	4.56	–0.24
Conceptual Fluency (Cf)	Comfort with intellectual and conceptual matters	20.13	4.65	17.46	5.17	–0.55
Insightfulness (Is)	Analytical insight into the motivations of others	12.25	2.90	11.04	2.84	–0.42
Flexibility (Fx)	Adaptability and comfort with change	10.31	3.65	9.29	3.83	–0.27
Sensitivity (Sn)	Tough- versus tender-mindedness	13.63	2.62	15.29	2.96	0.60
Managerial Potential (Mp)	Inclination for supervisory responsibilities	13.88	3.98	12.13	4.10	–0.43
Work Orientation (Wo)	Sense of dedication to work	14.69	3.70	11.88	3.92	–0.74
Creative Temperament (Ct)	Individualization and capacity for innovativeness	15.91	3.92	14.38	4.60	–0.36
Leadership (Lp)	Initiative and effectiveness in leading others	24.69	6.09	20.50	7.47	–0.62
Amicability (Ami)	Cooperation and friendliness	14.84	4.88	13.08	4.51	–0.37
Law Enforcement Orientation (Leo)	Conventional and practical values	16.28	3.32	15.29	3.78	–0.28
Vector 1 (v.1)	Extraversion versus introversion	8.72	3.99	9.42	4.74	0.16
Vector 2 (v.2)	Rule-following versus rule-questioning	12.00	3.45	11.67	3.34	–0.10
Vector 3 (v.3)	Fulfillment of personal potential	15.81	5.89	13.21	5.77	–0.45

Note: Extraversion, *n* = 32; Introversion, *n* = 24. For information on Cohen's *d*, see note 4 at the back of this supplement.

Table 17 | CPI 260® scale means, standard deviations, and Cohen's *d* for Global Step I™ S–N preferences: Ireland (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>	
Dominance (Do)	Prosocial interpersonal power and influence	18.24	6.33	21.13	6.34	0.46
Capacity for Status (Cs)	Ambition for challenge and social status	13.39	3.73	16.00	4.33	0.65
Sociability (Sy)	Social participation	13.73	4.67	15.87	3.99	0.49
Social Presence (Sp)	Poise and comfort with attention and recognition	16.03	3.74	19.09	3.92	0.80
Self-acceptance (Sa)	Sense of personal worth and self-confidence	13.36	3.80	13.70	3.71	0.09
Independence (In)	Self-sufficiency and self-directedness	11.52	4.66	14.22	4.14	0.61
Empathy (Em)	Capacity to understand and respond to others' needs	12.82	3.18	14.70	2.79	0.62
Responsibility (Re)	Conscientiousness and follow-through	13.42	3.97	14.09	3.40	0.18
Social Conformity (So)	Conformance with social norms and customs	18.06	5.49	18.09	4.60	0.01
Self-control (Sc)	Cautiousness and self-regulation	14.42	4.72	12.65	5.10	-0.36
Good Impression (Gi)	Tact and positive self-presentation	12.30	4.26	11.13	4.21	-0.28
Communality (Cm)	Conventional behavior and attitudes	17.79	2.77	17.87	2.24	0.03
Well-being (Wb)	Overall sense of health and optimism	12.03	4.43	13.26	3.90	0.29
Tolerance (To)	Open-mindedness and respect for others	9.91	3.94	10.78	4.17	0.22
Achievement via Conformance (Ac)	Motivation within organized settings	18.03	5.30	17.22	4.37	-0.16
Achievement via Independence (Ai)	Motivation within unstructured settings	13.45	4.24	14.78	4.91	0.29
Conceptual Fluency (Cf)	Comfort with intellectual and conceptual matters	18.33	4.81	19.91	5.26	0.32
Insightfulness (Is)	Analytical insight into the motivations of others	11.52	2.71	12.04	3.21	0.18
Flexibility (Fx)	Adaptability and comfort with change	8.91	3.60	11.26	3.53	0.66
Sensitivity (Sn)	Tough- versus tender-mindedness	14.73	2.98	13.78	2.66	-0.33
Managerial Potential (Mp)	Inclination for supervisory responsibilities	12.76	3.85	13.65	4.45	0.22
Work Orientation (Wo)	Sense of dedication to work	13.33	4.14	13.70	3.90	0.09
Creative Temperament (Ct)	Individualization and capacity for innovativeness	13.45	3.35	17.83	4.13	1.18
Leadership (Lp)	Initiative and effectiveness in leading others	21.91	7.06	24.30	6.74	0.35
Amicability (Ami)	Cooperation and friendliness	14.33	4.66	13.74	4.99	-0.12
Law Enforcement Orientation (Leo)	Conventional and practical values	16.18	3.69	15.39	3.31	-0.22
Vector 1 (v.1)	Extraversion versus introversion	9.88	4.17	7.78	4.27	-0.50
Vector 2 (v.2)	Rule-following versus rule-questioning	12.58	3.56	10.83	2.87	-0.53
Vector 3 (v.3)	Fulfillment of personal potential	14.09	5.99	15.57	5.87	0.25

Note: Sensing, *n* = 33; Intuition, *n* = 23.

Table 18 | CPI 260® scale means, standard deviations, and Cohen's *d* for Global Step I™ T–F preferences: Ireland (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>	
Dominance (Do)	Prosocial interpersonal power and influence	19.29	7.10	19.53	6.02	0.04
Capacity for Status (Cs)	Ambition for challenge and social status	14.58	4.36	14.38	4.06	-0.05
Sociability (Sy)	Social participation	14.08	4.65	15.00	4.40	0.20
Social Presence (Sp)	Poise and comfort with attention and recognition	16.42	4.29	17.94	3.83	0.38
Self-acceptance (Sa)	Sense of personal worth and self-confidence	13.17	3.48	13.75	3.94	0.16
Independence (In)	Self-sufficiency and self-directedness	12.79	4.41	12.50	4.83	-0.06
Empathy (Em)	Capacity to understand and respond to others' needs	13.63	3.03	13.56	3.26	-0.02
Responsibility (Re)	Conscientiousness and follow-through	14.04	3.79	13.44	3.72	-0.16
Social Conformity (So)	Conformance with social norms and customs	16.92	4.72	18.94	5.27	0.40
Self-control (Sc)	Cautiousness and self-regulation	13.75	4.87	13.66	5.03	-0.02
Good Impression (Gi)	Tact and positive self-presentation	12.08	3.65	11.63	4.69	-0.11
Communality (Cm)	Conventional behavior and attitudes	17.63	3.00	17.97	2.18	0.13
Well-being (Wb)	Overall sense of health and optimism	11.88	4.08	13.03	4.34	0.27
Tolerance (To)	Open-mindedness and respect for others	9.88	4.59	10.56	3.58	0.17
Achievement via Conformance (Ac)	Motivation within organized settings	17.58	4.88	17.78	5.01	0.04
Achievement via Independence (Ai)	Motivation within unstructured settings	13.79	4.59	14.16	4.55	0.08
Conceptual Fluency (Cf)	Comfort with intellectual and conceptual matters	18.71	5.27	19.19	4.89	0.09
Insightfulness (Is)	Analytical insight into the motivations of others	12.00	3.13	11.53	2.76	-0.16
Flexibility (Fx)	Adaptability and comfort with change	10.04	3.94	9.75	3.62	-0.08
Sensitivity (Sn)	Tough- versus tender-mindedness	14.33	3.17	14.34	2.67	0.00
Managerial Potential (Mp)	Inclination for supervisory responsibilities	13.42	4.14	12.91	4.11	-0.12
Work Orientation (Wo)	Sense of dedication to work	13.38	3.61	13.56	4.35	0.05
Creative Temperament (Ct)	Individualization and capacity for innovativeness	15.46	4.70	15.09	3.95	-0.09
Leadership (Lp)	Initiative and effectiveness in leading others	22.67	7.15	23.06	6.94	0.06
Amicability (Ami)	Cooperation and friendliness	13.67	4.11	14.41	5.24	0.15
Law Enforcement Orientation (Leo)	Conventional and practical values	15.08	3.13	16.44	3.74	0.39
Vector 1 (v.1)	Extraversion versus introversion	8.88	4.95	9.13	3.82	0.06
Vector 2 (v.2)	Rule-following versus rule-questioning	11.96	2.90	11.78	3.75	-0.05
Vector 3 (v.3)	Fulfillment of personal potential	14.08	6.14	15.16	5.82	0.18

Note: Thinking, *n* = 24; Feeling, *n* = 32.

Table 19 | CPI 260® scale means, standard deviations, and Cohen's *d* for Global Step I™ J–P preferences: Ireland (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>	
Dominance (Do)	Prosocial interpersonal power and influence	20.27	5.19	18.70	7.37	–0.24
Capacity for Status (Cs)	Ambition for challenge and social status	14.08	3.54	14.80	4.66	0.17
Sociability (Sy)	Social participation	14.73	3.49	14.50	5.26	–0.05
Social Presence (Sp)	Poise and comfort with attention and recognition	16.77	3.13	17.73	4.75	0.24
Self-acceptance (Sa)	Sense of personal worth and self-confidence	13.69	3.48	13.33	3.99	–0.10
Independence (In)	Self-sufficiency and self-directedness	12.62	4.62	12.63	4.69	0.00
Empathy (Em)	Capacity to understand and respond to others' needs	13.62	2.97	13.57	3.33	–0.02
Responsibility (Re)	Conscientiousness and follow-through	13.46	3.62	13.90	3.86	0.12
Social Conformity (So)	Conformance with social norms and customs	19.69	5.19	16.67	4.66	–0.62
Self-control (Sc)	Cautiousness and self-regulation	14.92	4.92	12.63	4.74	–0.47
Good Impression (Gi)	Tact and positive self-presentation	12.54	4.24	11.20	4.21	–0.32
Communality (Cm)	Conventional behavior and attitudes	18.15	2.43	17.53	2.65	–0.24
Well-being (Wb)	Overall sense of health and optimism	12.92	4.24	12.20	4.26	–0.17
Tolerance (To)	Open-mindedness and respect for others	10.35	3.78	10.20	4.28	–0.04
Achievement via Conformance (Ac)	Motivation within organized settings	19.35	4.48	16.27	4.89	–0.65
Achievement via Independence (Ai)	Motivation within unstructured settings	13.62	4.05	14.33	4.95	0.16
Conceptual Fluency (Cf)	Comfort with intellectual and conceptual matters	19.31	4.21	18.70	5.68	–0.12
Insightfulness (Is)	Analytical insight into the motivations of others	11.88	2.44	11.60	3.30	–0.10
Flexibility (Fx)	Adaptability and comfort with change	9.04	3.87	10.60	3.50	0.42
Sensitivity (Sn)	Tough- versus tender-mindedness	14.04	2.69	14.60	3.04	0.19
Managerial Potential (Mp)	Inclination for supervisory responsibilities	13.46	3.87	12.83	4.32	–0.15
Work Orientation (Wo)	Sense of dedication to work	14.00	3.89	13.03	4.13	–0.24
Creative Temperament (Ct)	Individualization and capacity for innovativeness	13.62	3.50	16.67	4.39	0.76
Leadership (Lp)	Initiative and effectiveness in leading others	24.31	6.20	21.67	7.46	–0.38
Amicability (Ami)	Cooperation and friendliness	14.46	4.59	13.77	4.97	–0.14
Law Enforcement Orientation (Leo)	Conventional and practical values	16.88	3.67	14.97	3.20	–0.56
Vector 1 (v.1)	Extraversion versus introversion	8.96	3.94	9.07	4.65	0.02
Vector 2 (v.2)	Rule-following versus rule-questioning	13.27	3.48	10.63	2.81	–0.84
Vector 3 (v.3)	Fulfillment of personal potential	14.88	5.28	14.53	6.53	–0.06

Note: Judging, *n* = 26; Perceiving, *n* = 30.

MBTI® GLOBAL STEP II™ ASSESSMENT RESULTS FOR THE IRELAND (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 20). The Global Step II assessment replaces the Form Q assessment and the European Step II assessment.

Table 20 | Relationships between Global Step II™, Form Q, and European Step II™ facet results: Ireland (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
E–I facets		
Initiating–Receiving	.98	.96
Expressive–Contained	.99	.93
Gregarious–Intimate	.97	.99
Active–Reflective	.85	.87
Enthusiastic–Quiet	.99	.97
S–N facets		
Concrete–Abstract	.97	.96
Realistic–Imaginative	.99	1.00
Practical–Conceptual	.85	.85
Experiential–Theoretical	.94	.98
Traditional–Original	.96	.95
T–F facets		
Logical–Empathetic	.94	.95
Reasonable–Compassionate	.94	.97
Questioning–Accommodating	.63	.72
Critical–Accepting	.84	.83
Tough–Tender	.98	.97
J–P facets		
Systematic–Casual	.95	.98
Planful–Open-Ended	.98	.98
Early Starting–Pressure-Prompted	.92	.93
Scheduled–Spontaneous	.96	.94
Methodical–Emergent	.96	.88

Note: *N* = 383.

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

Table 20 presents the relationships between MBTI Global Step II, Form Q, and European Step II facet results for the Ireland (English) sample.

Global Step II™ Facet Intercorrelations

Intercorrelations of Global Step II facets are presented in table 21. 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 European 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 reliabilities for Global Step II facets in the Ireland (English) sample are presented in table 22.

VALIDITY

Reported here as evidence of the validity of the European 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 Ireland (English) sample is shown in table 23.

Table 21 | Intercorrelations of Global Step II™ facets: Ireland (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.
<i>E–I facets</i>																				
1. Initiating–Receiving	–																			
2. Expressive–Contained	.62	–																		
3. Gregarious–Intimate	.52	.49	–																	
4. Active–Reflective	.70	.57	.53	–																
5. Enthusiastic–Quiet	.60	.56	.56	.64	–															
<i>S–N facets</i>																				
6. Concrete–Abstract	–.11	–.22	–.13	–.16	–.26	–														
7. Realistic–Imaginative	–.06	–.12	–.13	–.11	–.23	.73	–													
8. Practical–Conceptual	–.04	–.04	–.05	–.03	–.18	.58	.66	–												
9. Experiential–Theoretical	–.09	–.12	–.09	–.12	–.14	.66	.57	.44	–											
10. Traditional–Original	–.12	–.06	–.01	–.07	–.19	.60	.61	.61	.44	–										
<i>T–F facets</i>																				
11. Logical–Empathetic	–.20	–.28	–.16	–.22	–.22	.32	.31	.14	.17	.17	–									
12. Reasonable–Compassionate	–.17	–.23	–.10	–.15	–.16	.29	.22	.10	.20	.11	.81	–								
13. Questioning–Accommodating	–.02	–.15	–.08	–.08	–.07	.10	.07	–.09	.08	–.18	.58	.62	–							
14. Critical–Accepting	–.18	–.22	–.11	–.16	–.15	.16	.15	.03	.09	.02	.63	.65	.73	–						
15. Tough–Tender	–.07	–.16	–.04	–.10	–.10	.23	.18	.04	.15	.01	.67	.71	.71	.68	–					
<i>J–P facets</i>																				
16. Systematic–Casual	–.25	–.21	–.19	–.24	–.31	.54	.50	.36	.43	.53	.41	.40	.20	.27	.32	–				
17. Planful–Open-Ended	–.14	–.11	–.12	–.11	–.15	.33	.30	.24	.28	.45	.10	.11	.00	.05	.07	.65	–			
18. Early Starting–Pressure-Prompted	.01	–.01	–.10	–.12	–.07	.25	.25	.17	.26	.31	.03	.04	–.02	–.04	.01	.42	.51	–		
19. Scheduled–Spontaneous	–.14	–.09	–.11	–.16	–.15	.40	.38	.31	.38	.49	.16	.15	.03	.04	.07	.74	.79	.59	–	
20. Methodical–Emergent	.00	–.02	–.09	–.13	–.07	.28	.26	.17	.27	.25	.11	.14	.13	.07	.12	.51	.50	.62	.64	–

Note: N = 383.

Table 22 | Internal consistency reliabilities of Global Step II™ facet continuous scores: Ireland (English) sample

Global Step II™ facet	Cronbach's alpha
E–I facets	
Initiating–Receiving	.82
Expressive–Contained	.75
Gregarious–Intimate	.61
Active–Reflective	.63
Enthusiastic–Quiet	.69
S–N facets	
Concrete–Abstract	.79
Realistic–Imaginative	.75
Practical–Conceptual	.67
Experiential–Theoretical	.70
Traditional–Original	.73
T–F facets	
Logical–Empathetic	.81
Reasonable–Compassionate	.78
Questioning–Accommodating	.64
Critical–Accepting	.65
Tough–Tender	.77
J–P facets	
Systematic–Casual	.79
Planful–Open-Ended	.83
Early Starting–Pressure-Prompted	.64
Scheduled–Spontaneous	.85
Methodical–Emergent	.65

Note: N = 383.

Table 23 | Percentage of reported out-of-preference Global Step II™ facet scores: Ireland (English) sample

Preference pair	Number of out-of-preference facet scores (%)					
	0	1	2	3	4	5
E–I	72	19	8	1	0	0
S–N	72	25	3	1	0	0
T–F	80	15	4	1	0	0
J–P	64	24	11	1	0	0

Note: N = 383.

Correlations between facets and preference pairs are presented in table 24. 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, 2001, p. 104). The Ireland (English) sample correlations

Table 24 | Correlations between Global Step II™ facets and preference pairs: Ireland (English) sample

Global Step II™ facet	Preference pair			
	E–I	S–N	T–F	J–P
E–I facets				
Initiating–Receiving	.87	–.13	–.15	–.16
Expressive–Contained	.78	–.17	–.25	–.12
Gregarious–Intimate	.66	–.12	–.12	–.13
Active–Reflective	.83	–.15	–.18	–.17
Enthusiastic–Quiet	.80	–.26	–.17	–.19
S–N facets				
Concrete–Abstract	–.23	.88	.30	.44
Realistic–Imaginative	–.18	.86	.26	.41
Practical–Conceptual	–.10	.75	.09	.32
Experiential–Theoretical	–.16	.73	.19	.38
Traditional–Original	–.13	.78	.10	.51
T–F facets				
Logical–Empathetic	–.24	.31	.92	.20
Reasonable–Compassionate	–.19	.25	.92	.20
Questioning–Accommodating	–.08	.04	.71	.06
Critical–Accepting	–.20	.14	.74	.09
Tough–Tender	–.10	.17	.83	.13
J–P facets				
Systematic–Casual	–.30	.59	.41	.82
Planful–Open-Ended	–.15	.40	.11	.88
Early Starting–Pressure-Prompted	–.06	.30	.04	.64
Scheduled–Spontaneous	–.15	.48	.15	.95
Methodical–Emergent	–.08	.30	.14	.67

Note: N = 383.

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 European English version in Ireland, 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 25. The relationships between the MBTI Global Step II assessment and the ACL are

Table 25 | Selected correlations between Global Step II™ facets and ACL scales:
Ireland (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
E–I facet scales													
Initiating–Receiving	.03	-.42	-.05	.02	-.15	-.11	-.51	-.31	.36	.28	-.39	-.18	-.17
Expressive–Contained	.19	-.20	.06	.06	-.14	-.01	-.34	-.16	.17	.11	-.19	-.18	-.09
Gregarious–Intimate	.12	-.13	-.02	.00	-.08	.07	-.14	.01	.08	-.08	-.13	-.02	.03
Active–Reflective	.01	-.37	-.04	-.01	-.19	-.19	-.47	-.37	.37	.34	-.39	-.15	-.31
Enthusiastic–Quiet	.06	-.30	-.09	-.04	-.07	-.08	-.39	-.19	.26	.23	-.31	-.11	-.20
S–N facet scales													
Concrete–Abstract	.01	-.05	-.29	-.26	.07	.13	.23	.51	-.26	-.39	.06	.15	.36
Realistic–Imaginative	.15	.03	-.13	-.11	.18	.31	.22	.51	-.21	-.37	.10	.18	.39
Practical–Conceptual	.21	-.06	-.05	.00	.20	.35	.05	.36	-.06	-.20	.12	.27	.33
Experiential–Theoretical	-.03	-.15	-.34	-.27	-.03	.02	.10	.33	-.13	-.32	-.06	.07	.24
Traditional–Original	.02	.11	-.21	-.22	.03	.19	.33	.61	-.44	-.47	.18	.10	.46
T–F facet scales													
Logical–Empathetic	.01	-.24	-.05	-.01	.34	.10	-.22	-.14	.37	.19	-.16	.08	-.28
Reasonable–Compassionate	-.03	-.32	-.17	-.08	.31	.07	-.28	-.25	.42	.28	-.25	.04	-.32
Questioning–Accommodating	.10	-.42	-.08	-.01	.25	-.04	-.45	-.37	.63	.45	-.35	.00	-.36
Critical–Accepting	.24	-.34	-.05	.01	.48	.25	-.37	-.14	.58	.27	-.22	.19	-.34
Tough–Tender	.16	-.30	-.03	.01	.38	.15	-.31	-.24	.55	.31	-.25	.14	-.29
J–P facet scales													
Systematic–Casual	.12	-.09	-.34	-.26	.21	.25	.05	.48	-.18	-.29	.05	.09	.37
Planful–Open-Ended	.07	-.06	-.36	-.28	.12	.20	.06	.51	-.23	-.25	.06	.13	.43
Early Starting–Pressure-Prompted	.12	-.04	-.30	-.17	-.01	.18	-.03	.41	-.11	-.18	.01	.06	.38
Scheduled–Spontaneous	.06	-.01	-.37	-.33	.06	.18	.08	.53	-.27	-.38	.06	.13	.38
Methodical–Emergent	.04	-.07	-.37	-.36	-.05	.08	-.02	.43	-.13	-.29	.00	.03	.21

Note: n = 60.

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 Ireland (English) sample are shown in table 26. 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 27 shows the percentages and rank order of in-preference, midzone, and out-of-preference scores for the 20 Global Step II facets for the Ireland (English) sample. Interpreters may find this table useful because it

Table 26 | Correlations between Global Step II™ facets and CPI 260® scales: Ireland (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
E–I facet scales																													
Initiating–Receiving	-.53	-.49	-.70	-.55	-.47	-.42	-.46	-.09	-.18	.02	-.10	-.22	-.43	-.29	-.25	-.21	-.41	-.23	-.11	.34	-.37	-.35	-.30	-.50	-.15	-.17	.26	-.05	-.22
Expressive–Contained	-.38	-.23	-.53	-.37	-.28	-.31	-.37	.03	-.35	-.12	-.30	-.15	-.45	-.23	-.35	-.11	-.32	-.20	.08	.30	-.35	-.40	-.04	-.42	-.38	-.34	.20	-.30	-.18
Gregarious–Intimate	-.25	-.17	-.36	-.35	-.16	-.21	-.34	.14	-.21	.00	-.08	-.16	-.29	-.16	-.04	-.18	-.30	-.29	-.14	.32	-.19	-.26	-.13	-.31	-.17	-.20	.08	.03	-.16
Active–Reflective	-.38	-.31	-.52	-.37	-.36	-.17	-.27	.07	-.10	.14	.07	-.10	-.26	-.13	-.16	-.03	-.25	.01	.00	.28	-.22	-.17	-.08	-.31	-.08	-.27	.28	-.09	-.07
Enthusiastic–Quiet	-.38	-.28	-.46	-.40	-.40	-.31	-.26	.06	-.16	.10	.03	-.09	-.25	-.10	-.11	-.04	-.26	-.14	-.06	.31	-.24	-.25	-.16	-.34	-.05	-.30	.24	-.04	-.17
S–N facet scales																													
Concrete–Abstract	.09	.25	.19	.25	.07	.08	.24	.01	-.17	-.32	-.30	-.13	-.08	.00	-.17	.12	.07	-.04	.37	-.10	.03	-.12	.43	.00	-.19	-.26	-.21	-.28	.06
Realistic–Imaginative	.18	.43	.27	.38	.18	.20	.29	.12	-.09	-.28	-.20	.06	.06	.18	-.12	.32	.25	.25	.47	-.16	.19	.01	.45	.15	-.16	-.19	-.22	-.30	.22
Practical–Conceptual	.26	.38	.18	.29	.20	.21	.30	.18	.05	-.07	-.02	.17	.20	.20	-.03	.24	.28	.17	.25	-.08	.17	.16	.38	.23	-.03	-.12	-.26	-.21	.20
Experiential–Theoretical	.06	.24	.20	.16	.08	.17	.26	-.01	-.08	-.14	-.14	-.15	.00	.01	.00	.18	.02	-.10	.33	.00	.09	-.02	.41	.02	-.07	-.25	-.15	-.18	.10
Traditional–Original	.08	.27	.07	.32	.11	.12	.18	.10	-.19	-.34	-.26	.07	.00	.05	-.27	.17	.08	.09	.29	-.04	.02	-.10	.39	.01	-.24	-.23	-.20	-.34	.04
T–F facet scales																													
Logical–Empathetic	-.02	.01	.15	.19	-.03	-.14	-.03	-.11	.06	-.15	-.19	.03	-.02	.01	-.03	-.04	-.03	-.10	.08	.03	-.09	-.10	-.01	-.07	-.05	.13	.03	-.12	.01
Reasonable–Compassionate	-.06	-.04	.03	.14	-.09	-.07	-.02	-.08	.14	-.03	-.12	-.02	.05	.07	-.10	.04	-.04	-.07	.15	.00	-.10	-.06	.10	-.06	.05	.07	.10	-.13	.07
Questioning–Accommodating	-.25	-.19	-.16	-.11	-.22	-.22	-.15	-.02	.16	.20	.00	-.08	-.01	.04	.02	.05	-.06	-.03	.01	.10	-.08	.02	-.17	-.16	.18	.06	.29	.13	.12
Critical–Accepting	-.01	-.08	.05	.13	-.01	-.05	.02	.03	.23	.18	.03	.11	.15	.21	-.02	.15	.12	.07	.00	-.04	.02	.10	-.04	.06	.21	.12	.11	.09	.18
Tough–Tender	-.11	-.12	-.07	.04	-.12	-.12	-.07	.01	.08	.08	-.01	.06	.01	.11	.03	.11	.00	-.01	.14	.13	-.06	.03	.04	-.10	.12	.05	.15	-.08	.14
J–P facet scales																													
Systematic–Casual	.03	.24	.12	.29	.16	.05	.15	-.06	-.31	-.39	-.35	-.10	-.15	.02	-.34	.08	-.09	-.16	.34	-.01	-.03	-.16	.46	-.11	-.20	-.17	-.15	-.47	.04
Planful–Open-Ended	-.17	.02	-.17	.08	-.12	-.10	.04	.13	-.23	-.13	-.12	-.17	-.07	.03	-.32	.08	-.06	.01	.21	.08	-.09	-.10	.23	-.18	-.01	-.39	.00	-.26	.01
Early Starting–Pressure-Prompted	-.14	.01	-.21	-.07	-.05	-.16	-.16	-.03	-.35	-.21	-.21	-.35	-.31	-.18	-.29	.06	-.06	-.13	.17	.05	-.18	-.24	.15	-.23	-.24	-.30	-.10	-.19	-.10
Scheduled–Spontaneous	-.17	.06	-.12	-.01	-.03	-.12	-.02	-.07	-.42	-.33	-.32	-.34	-.29	-.16	-.42	-.07	-.18	-.22	.17	.04	-.24	-.33	.20	-.27	-.30	-.45	-.06	-.31	-.18
Methodical–Emergent	-.23	-.07	-.19	-.27	-.04	-.29	-.12	-.06	-.42	-.33	-.35	-.37	-.43	-.29	-.35	-.15	-.26	-.34	.03	.02	-.28	-.37	-.05	-.34	-.38	-.18	-.10	-.12	-.21

Note: n = 56.

Table 27 | In-preference, midzone, and out-of-preference percentages and rankings for the Global Step II™ facets: Ireland (English) sample

Global Step II™ facet	In-preference		Midzone		Out-of-preference	
	%	Rank	%	Rank	%	Rank
E–I facets						
Initiating–Receiving	66.58	3	29.24	15	4.18	14
Expressive–Contained	55.09	18	36.29	3	8.62	7
Gregarious–Intimate	55.35	17	32.90	7	11.75	3
Active–Reflective	58.49	13	35.77	4	5.74	12
Enthusiastic–Quiet	64.49	6	28.46	16	7.05	8
S–N facets						
Concrete–Abstract	61.88	10	35.51	5	2.61	17
Realistic–Imaginative	65.54	5	30.29	14	4.18	14
Practical–Conceptual	57.96	15	32.64	8	9.40	6
Experiential–Theoretical	58.22	14	31.85	11	9.92	5
Traditional–Original	51.44	19	41.51	2	7.05	8
T–F facets						
Logical–Empathetic	68.15	2	30.55	13	1.31	20
Reasonable–Compassionate	66.32	4	32.11	9	1.57	18
Questioning–Accommodating	48.04	20	45.69	1	6.27	10
Critical–Accepting	62.14	9	27.15	17	10.70	4
Tough–Tender	61.88	10	32.11	9	6.01	11
J–P facets						
Systematic–Casual	62.66	8	31.85	11	5.48	13
Planful–Open-Ended	69.97	1	26.37	18	3.66	16
Early Starting–Pressure-Prompted	56.14	16	22.19	19	21.67	1
Scheduled–Spontaneous	63.71	7	34.73	6	1.57	18
Methodical–Emergent	61.88	10	21.41	20	16.71	2

Note: N = 383.

shows which facets are more or less likely to yield scores in these three categories. There are wide variations in the 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 21.67%, followed by Methodical–Emergent at 16.71%. The Logical–Empathetic facet (1.31%), the Scheduled–Spontaneous facet (1.57%), and the Reasonable–Compassionate facet (1.57%) appear least likely to elicit out-of-preference responses.

Gender differences on the Step II facets in the Ireland (English) sample are presented in table 28.

CONCLUSION

Initial analyses of the European English translations of the MBTI Global Step I and Step II assessments used in Ireland demonstrate that they each have good internal

consistency reliability 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 European English translations of the MBTI Global Step I and Step II assessments have adequate reliability and validity and are appropriate for use with individuals in Ireland who read and understand European English.

Table 28 | Means, standard deviations, and Cohen's *d* of the Global Step II™ facets by total sample and gender: Ireland (English) sample

Global Step II™ facet	Total sample (<i>N</i> = 383)		Men (<i>n</i> = 159)		Women (<i>n</i> = 224)		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>
<i>E–I facets</i>							
Initiating–Receiving	0.12	0.90	0.17	0.83	0.09	0.95	0.10
Expressive–Contained	0.13	0.86	0.17	0.76	0.10	0.92	0.09
Gregarious–Intimate	0.06	0.77	0.00	0.76	0.10	0.77	–0.13
Active–Reflective	0.06	0.81	0.06	0.80	0.05	0.81	0.01
Enthusiastic–Quiet	0.09	0.85	0.09	0.78	0.10	0.90	–0.01
<i>S–N facets</i>							
Concrete–Abstract	–0.12	0.94	–0.18	0.90	–0.08	0.96	–0.11
Realistic–Imaginative	–0.13	0.87	–0.17	0.88	–0.11	0.86	–0.07
Practical–Conceptual	–0.15	0.80	–0.14	0.81	–0.15	0.80	0.01
Experiential–Theoretical	–0.06	0.82	0.09	0.85	–0.17	0.78	0.32
Traditional–Original	–0.08	0.87	–0.06	0.87	–0.10	0.86	0.05
<i>T–F facets</i>							
Logical–Empathetic	0.01	0.89	–0.29	0.88	0.22	0.85	–0.59
Reasonable–Compassionate	0.12	0.90	–0.11	0.88	0.28	0.88	–0.44
Questioning–Accommodating	0.01	0.80	–0.21	0.74	0.17	0.80	–0.50
Critical–Accepting	0.12	0.80	–0.15	0.81	0.31	0.73	–0.59
Tough–Tender	0.00	0.89	–0.26	0.87	0.18	0.85	–0.52
<i>J–P facets</i>							
Systematic–Casual	–0.02	0.93	0.01	0.94	–0.05	0.92	0.06
Planful–Open-Ended	0.02	0.94	0.21	0.89	–0.11	0.95	0.35
Early Starting–Pressure-Prompted	0.01	0.78	0.15	0.75	–0.09	0.79	0.31
Scheduled–Spontaneous	–0.07	0.99	0.18	0.96	–0.25	0.97	0.44
Methodical–Emergent	–0.13	0.79	–0.01	0.82	–0.22	0.76	0.26

Note: For information on Cohen's *d*, see note 4, below.

NOTES

- 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.
- The terms *translation* and *adaptation* are often used interchangeably in the testing and measurement literature. Historically, *translation* has been used to describe the process by which an assessment is converted to a language other than the one in which it was originally constructed. However, the term *adaptation* is increasingly being used to reflect the fact that an effective conversion of assessment items from one language to another often requires not a word-for-word translation but rather a modification intended to maintain the general sense or purpose of those items in a particular language. Nevertheless, as the more readily understood term, *translation* is used here.
- 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).
- 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.
- International Test Commission. (2005). *International guidelines on test adaptation*. Retrieved from www.intestcom.org/files/guideline_test_adaptation.pdf
- 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.
- OPP Ltd. (2009). *MBTI® Step II™ European data supplement*. Oxford, England: Author.
- 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.