MBTI® MANUAL GLOBAL SUPPLEMENT SERIES



Italy (Italian) 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. 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. Participants 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 participants, 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 chapter 7 of 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 Il assessments. It is critical to keep in mind that while analyses were conducted for each country/language sample used in this supplement series, 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 Italy (Italian) sample hereafter, Italian sample—to the Global Step I and Step II assessments translated into the Italian language. Included in this supplement are a description of the sample and data collection efforts, type distribution tables specific to the sample, analyses of Step I and Step II scales, and the results of reliability and validity studies conducted on the Italian sample.

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.

†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). 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 the 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

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

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 Italian-language version used in this global project.

OPP's original Italian translation 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 Italian version was again evaluated by a professional linguist as well as in-country expert reviewers; modifications were made to item wordings 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 agreedupon 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-Englishspeaking 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 bestfit type, see chapter 7 in the 2018 MBTI manual.) As MBTI Complete was not used in collecting the Italian sample, best-fit type data for the sample are unavailable.

For the MBTI research form, specific sampling targets were set for each sample. The targets for the Italian sample are provided in 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

Table 2 | Demographic summary: Italian sample

D	Target	Actual
Demographic	%	%
Age group		
17–24 years	12	12
25-44 years	35	35
45-64 years	30	31
65+ years	23	22
Mean age: 47 years	_	_
Gender		
Female	51	52
Male	49	48
Employment status		
Working full-time	39	43
Working part-time	6	9
Student	12	11
Looking after family/home	16	12
Long-term sick	15	<1
Retired / not working for income / none of the above	12	26
No response	_	<1
Self-employed		
Yes	11	13
No	89	36
No response	_	51
Country of residence		
Italy	_	100

Note: N = 458. Percentages in a given category may not total 100% due to rounding of decimals.

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 Italy who read Italian was obtained from a market research firm. Targets provided by OPP Ltd were set based on the population of Italy. Table 2 shows the demographic target and actual obtained percentages. The resulting Italian sample consists of 458 individuals, 52.2% women and 47.8% men. The age range is 17-81, with an average of 47 years (standard deviation = 16.8). All individuals reported residing in Italy.

Table 3 | Reported MBTI° type distribution: Italian sample

Ser	sing	Intui	tion		
Thinking	Fee	Thinking			
ISTJ n = 81 17.7%	ISFJ n = 29 6.3%	INFJ n = 7 1.5%	INTJ n = 9 2.0%	Judging	Introv
ISTP <i>n</i> = 49 10.7%	ISFP n = 41 9.0%	INFP n = 18 3.9%	INTP n = 20 4.4%	Perceiving	Introversion
ESTP <i>n</i> = 36 7.9%	ESFP n = 34 7.4%	ENFP <i>n</i> = 35 7.6%	ENTP <i>n</i> = 13 2.8%	iving	Extrav
ESTJ <i>n</i> = 49 10.7%	ESFJ <i>n</i> = 30 6.6%	ENFJ n = 6 1.3%	ENTJ <i>n</i> = 1 0.2%	Judging	Extraversion

Note: N = 458.

Table 4 | Reported MBTI° preference and preference combination distributions: Italian sample

Preferences		Preferences Orientation pairs		Pı	Process pairs			Orientation of energy and perceiving pairs			Judging and external orientation pairs			
	n	%		n	%		n	%		n	%		n	%
E	204	44.5	EJ	86	18.8	ST	215	46.9	ES	149	32.5	ТJ	140	30.6
ı	254	55.5	EP	118	25.8	SF	134	29.3	EN	55	12.0	TP	118	25.8
S	349	76.2	IJ	126	27.5	NF	66	14.4	IS	200	43.7	FJ	72	15.7
N	109	23.8	IP	128	27.9	NT	43	9.4	IN	54	11.8	FP	128	27.9
Т	258	56.3												
F	200	43.7												
J	212	46.3												
Р	246	53.7												

Note: N = 458.

MBTI° GLOBAL STEP I" ASSESSMENT RESULTS FOR THE ITALIAN 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 Italian 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, ESTJ, and ISTP. The least common types are ENTJ and ENFJ. As reported in the MBTI® Step I™ Instrument European Data Supplement (OPP Ltd, 2011), the most common types in an Italian sample of professionals and managers (N = 1,987) at that time were

Table 5 | Reported MBTI° type distribution for men: Italian sample

Sen	sing	Intui	tion		
Thinking	Fee	Thinking			
ISTJ <i>n</i> = 55 25.1%	ISFJ n = 5 2.3%	INFJ n = 0 0.0 %	INTJ n = 4 1.8%	Judging	Introv
ISTP <i>n</i> = 28 12.8%	ISFP n = 18 8.2%	INFP n = 6 2.7%	INTP n = 12 5.5%	Perceiving	Introversion
ESTP <i>n</i> = 21 9.6%	ESFP <i>n</i> = 13 5.9%	ENFP n = 9 4.1%	ENTP n = 8 3.7%	iving	Extrav
ESTJ <i>n</i> = 26 11.9%	ESFJ <i>n</i> = 13 5.9%	ENFJ n = 1 0.5%	ENTJ <i>n</i> = 0 0.0%	Judging	Extraversion

Note: n = 219.

Table 6 | Reported MBTI° preference and preference combination distributions for men: Italian sample

Preferences		Preferences Orientation pairs		Pi	Process pairs			Orientation of energy and perceiving pairs			Judging and external orientation pairs			
	n	%		n	%		n	%		n	%		n	%
E	91	41.6	EJ	40	18.3	ST	130	59.4	ES	73	33.3	ТJ	85	38.8
ı	128	58.4	EP	51	23.3	SF	49	22.4	EN	18	8.2	TP	69	31.5
S	179	81.7	IJ	64	29.2	NF	16	7.3	IS	106	48.4	FJ	19	8.7
Ν	40	18.3	IP	64	29.2	NT	24	11.0	IN	22	10.0	FP	46	21.0
Т	154	70.3												
F	65	29.7												
J	104	47.5												
Р	115	52.5												

Note: n = 219. Percentages may not total 100% due to rounding of decimals.

ESTJ and ENTJ. The least common types in that sample were ISFP and INFP.

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 three of the orientation pairs, IJs, IPs, and EPs, occur about equally, and are more common than EJs. In addition, Ss are more prevalent than Ns, while the other preferences are more evenly distributed.

Tables 5–8 show type and preference distributions by gender. As seen in table 5, for men, ISTJ is the most common type. As seen in table 7, for women, ISTJ and ENFP are the most common types.

Table 7 | Reported MBTI° type distribution for women: Italian sample

Sen	sing	Intui	tion		
Thinking	Fee	Thinking			
ISTJ n = 26 10.9%	ISFJ <i>n</i> = 24 10.0%	INFJ n = 7 2.9%	INTJ n = 5 2.1%	Judging	Introv
ISTP n = 21 8.8%	ISFP n = 23 9.6%	INFP n = 12 5.0%	INTP n = 8 3.3%	Perceiving	Introversion
ESTP <i>n</i> = 15 6.3%	ESFP <i>n</i> = 21 8.8%	ENFP <i>n</i> = 26 10.9%	ENTP n = 5 2.1%	iving	Extrav
ESTJ n = 23 9.6%	ESFJ <i>n</i> = 17 7.1%	ENFJ <i>n</i> = 5 2.1%	ENTJ <i>n</i> = 1 0.4%	Judging	Extraversion

Note: n = 239. Percentages may not total 100% due to rounding of decimals.

Table 8 | Reported MBTI® preference and preference combination distributions for women: Italian sample

Preferences		Preferences Orientation pairs		pairs	Process pairs			Orientation of energy and perceiving pairs			Judging and external orientation pairs			
	n	%		n	%		n	%		n	%		n	%
E	113	47.3	EJ	46	19.2	ST	85	35.6	ES	76	31.8	ТJ	55	23.0
ı	126	52.7	EP	67	28.0	SF	85	35.6	EN	37	15.5	TP	49	20.5
S	170	71.1	IJ	62	25.9	NF	50	20.9	IS	94	39.3	FJ	53	22.2
N	69	28.9	IP	64	26.8	NT	19	7.9	IN	32	13.4	FP	82	34.3
Т	104	43.5												
F	135	56.5												
J	108	45.2												
Р	131	54.8												

Note: n = 239. Percentages may not total 100% due to rounding of decimals.

Table 9 | Relationships between MBTI° Global Step I", Form M, and European Step I" preference pair results: Italian sample

Preference pair	Global Step I [™] a	nd Form M	Global Step I" and European Step I"			
	Correlation between continuous scores	Agreement rate (%)	Correlation between continuous scores	Agreement rate (%)		
E-I	.96	93	.91	87		
S-N	.95	93	.88	86		
T-F	.98	94	.87	85		
J-P	.95	92	.82	72		
Overall agreement ra	ate for whole types	76		47		

Note: N = 458

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 Italian sample are shown in table 9.2 The overall agreement rate for whole types between the Global Step I and Form M assessments was 76%. 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). The overall agreement rate for whole types between Global Step I and European Step I was 47%, and the agreement rate for three of the four letters between Global Step I and European Step I was 83%.

Global Step I™ Preference Pair **Intercorrelations**

Intercorrelations of Global Step I preference pair continuous scores in the Italian 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 similar to those found for the global sample, shown in table 10 above the diagonal. The Italian sample findings are likewise consistent with those reported for Form M in the 1998 MBTI® Manual (Myers et al.).

Table 10 | Intercorrelations of Global Step I[™] preference pair continuous scores: Italian and global samples

Preference pair	E-I	S-N	T-F	J-P
E–I S–N T–F J–P	- 22 28 15	20 - .33 .51	15 .27 - .28	15 .48 .23

Note: Correlations for the Italian sample (N = 458) are below the diagonal; those for the global sample (N = 16,773) are above the diagonal.

Reliability and Validity of Global Step I™ Results

This section covers measurement properties for the Italian translation of the MBTI Global Step I assessment used in Italy, including reliability and validity. For full Step I reliability and validity information for the global sample, refer to chapters 8 and 9 of 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 Italian sample and in the global sample for comparison purposes. The Italian sample alphas range from .82 to .89.

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 Italian sample are also presented in table 11. The testretest interval was ≤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 Italian sample. Eighty-three 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 Italian version of the MBTI Global Step I assessment and the CPI 260° assessment (Gough & Bradley, 2005).

CPI 260° assessment. The CPI 260 assessment measures personality characteristics and is intended to provide a clear and accurate description of the respondent to increase self-awareness and understanding (Gough & Bradley, 2005). A portion of the Italian sample (n = 89)also completed the CPI 260 assessment. CPI 260 scale means, standard deviations, and Cohen's d (Cohen, 1992; mean differences expressed in units of standard deviation³) for each of the four preference pairs are shown in tables 13–16.

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

		Cronbach's alpha					
Sample	N	E-I	S-N	T-F	J-P		
Italian Global	458 16,773	.89 .89	.82 .87		.83 .88		
		Test-retest correlation					
Sample (interval)	n	E-I	S-N	T-F	J-P		
Italian (≤15 weeks) Global (≤15 weeks)	81 1,721	.85 .86	.83 .83	.81 .82	.77 .81		
		Test-retest agreement rate (%)					
Sample (interval)	n	E-I	S-N	T-F	J-P		
Italian (≤15 weeks) Global (≤15 weeks)	81 1,721	81 84	84 86	77 79	78 79		

Table 12 | Percentage of individuals with preferences the same at retest: Italian sample

			Number of preference the same at retest (9					
Sample (interval)	n	4	3	2	1	0		
Italian (≤15 weeks)	81	41	42	14	4	0		

Table 13 | CPI 260° scale means, standard deviations, and Cohen's d for Global Step I™ E−I preferences: Italian sample

		Extrave	rsion	Introve	rsion	
CPI 260° scale	CPI 260° scale description	М	SD	М	SD	Cohen's
Dominance (Do)	Prosocial interpersonal power and influence	19.52	5.35	14.95	5.17	-0.87
Capacity for Status (Cs)	Ambition for challenge and social status	13.16	3.68	10.47	3.83	-0.71
Sociability (Sy)	Social participation	15.23	3.54	12.21	3.70	-0.83
Social Presence (Sp)	Poise and comfort with attention and recognition	16.90	3.47	15.16	3.96	-0.46
Self-acceptance (Sa)	Sense of personal worth and self-confidence	13.52	3.08	11.31	3.47	-0.66
Independence (In)	Self-sufficiency and self-directedness	12.71	4.38	10.81	3.55	-0.49
Empathy (Em)	Capacity to understand and respond to others' needs	13.29	3.07	11.21	3.22	-0.66
Responsibility (Re)	Conscientiousness and follow-through	14.06	3.22	14.90	3.19	0.26
Social Conformity (So)	Conformance with social norms and customs	18.87	4.24	18.52	3.78	-0.09
Self-control (Sc)	Cautiousness and self-regulation	14.19	3.82	14.71	4.17	0.13
Good Impression (Gi)	Tact and positive self-presentation	15.00	3.79	13.12	4.54	-0.44
Communality (Cm)	Conventional behavior and attitudes	17.35	3.71	17.84	3.62	0.13
Well-being (Wb)	Overall sense of health and optimism	12.71	3.73	10.71	3.92	-0.52
Tolerance (To)	Open-mindedness and respect for others	9.10	3.39	8.59	2.85	-0.17
Achievement via Conformance (Ac)	Motivation within organized settings	17.19	3.65	17.19	3.41	0.00
Achievement via Independence (Ai)	Motivation within unstructured settings	11.87	3.11	11.28	3.37	-0.18
Conceptual Fluency (Cf)	Comfort with intellectual and conceptual matters	16.81	3.38	15.95	3.55	-0.25
Insightfulness (Is)	Analytical insight into the motivations of others	10.00	2.90	9.71	2.94	-0.10
Flexibility (Fx)	Adaptability and comfort with change	6.84	3.28	7.02	3.46	0.05
Sensitivity (Sn)	Tough- versus tender-mindedness	13.65	2.97	14.45	3.27	0.25
Managerial Potential (Mp)	Inclination for supervisory responsibilities	13.35	3.51	11.24	3.35	-0.62
Work Orientation (Wo)	Sense of dedication to work	13.06	3.56	11.83	3.80	-0.33
Creative Temperament (Ct)	Individualization and capacity for innovativeness	13.42	3.36	12.24	3.74	-0.33
Leadership (Lp)	Initiative and effectiveness in leading others	22.16	5.62	17.74	4.94	-0.85
Amicability (Ami)	Cooperation and friendliness	15.03	4.53	14.71	4.41	-0.07
Law Enforcement Orientation (Leo)	Conventional and practical values	17.58	3.95	15.97	2.62	-0.51
Vector 1 (v.1)	Extraversion versus introversion	8.65	4.47	11.38	4.13	0.64
Vector 2 (v.2)	Rule-following versus rule-questioning	12.68	2.47	12.67	3.19	0.00
Vector 3 (v.3)	Fulfillment of personal potential	12.74	5.05	12.10	4.36	-0.14

Note: Extraversion, n = 31; Introversion, n = 58. See appendix C of the 2018 MBTI manual for more detailed descriptions of the CPI 260 scales. For information on Cohen's d, see note 3 at the back of this supplement.

Table 14 | CPI 260° scale means, standard deviations, and Cohen's *d* for Global Step I[™] S−N preferences: Italian sample

		Sens	ing	Intuit	ion	
CPI 260° scale	CPI 260° scale description	М	SD	М	SD	Cohen's d
Dominance (Do)	Prosocial interpersonal power and influence	16.25	5.35	17.55	6.61	0.23
Capacity for Status (Cs)	Ambition for challenge and social status	10.83	3.99	13.40	3.27	0.67
Sociability (Sy)	Social participation	12.93	3.90	14.40	3.76	0.38
Social Presence (Sp)	Poise and comfort with attention and recognition	15.17	3.66	17.80	3.96	0.70
Self-acceptance (Sa)	Sense of personal worth and self-confidence	12.00	3.35	12.35	3.99	0.10
Independence (In)	Self-sufficiency and self-directedness	11.36	3.63	11.85	4.98	0.12
Empathy (Em)	Capacity to understand and respond to others' needs	11.48	3.31	13.50	2.82	0.63
Responsibility (Re)	Conscientiousness and follow-through	14.70	3.32	14.30	2.83	-0.12
Social Conformity (So)	Conformance with social norms and customs	19.01	3.84	17.35	4.04	-0.43
Self-control (Sc)	Cautiousness and self-regulation	14.59	4.21	14.30	3.48	-0.07
Good Impression (Gi)	Tact and positive self-presentation	13.39	4.41	15.10	4.04	0.39
Communality (Cm)	Conventional behavior and attitudes	17.67	3.79	17.70	3.13	0.01
Well-being (Wb)	Overall sense of health and optimism	11.29	4.00	11.80	3.83	0.13
Tolerance (To)	Open-mindedness and respect for others	8.64	3.12	9.20	2.76	0.18
Achievement via Conformance (Ac)	Motivation within organized settings	17.20	3.29	17.15	4.15	-0.02
Achievement via Independence (Ai)	Motivation within unstructured settings	11.26	3.17	12.25	3.57	0.30
Conceptual Fluency (Cf)	Comfort with intellectual and conceptual matters	15.99	3.41	17.15	3.75	0.33
Insightfulness (Is)	Analytical insight into the motivations of others	9.72	2.78	10.10	3.39	0.13
Flexibility (Fx)	Adaptability and comfort with change	6.52	3.40	8.45	2.89	0.58
Sensitivity (Sn)	Tough- versus tender-mindedness	13.90	2.91	15.10	3.92	0.38
Managerial Potential (Mp)	Inclination for supervisory responsibilities	11.84	3.30	12.45	4.30	0.17
Work Orientation (Wo)	Sense of dedication to work	12.16	3.85	12.60	3.41	0.12
Creative Temperament (Ct)	Individualization and capacity for innovativeness	12.20	3.59	14.20	3.44	0.56
Leadership (Lp)	Initiative and effectiveness in leading others	19.06	5.19	20.05	6.82	0.18
Amicability (Ami)	Cooperation and friendliness	14.62	4.53	15.50	4.08	0.20
Law Enforcement Orientation (Leo)	Conventional and practical values	16.54	3.21	16.50	3.33	-0.01
Vector 1 (v.1)	Extraversion versus introversion	10.78	4.29	9.20	4.76	-0.36
Vector 2 (v.2)	Rule-following versus rule-questioning	12.99	2.80	11.60	3.23	-0.48
Vector 3 (v.3)	Fulfillment of personal potential	11.72	4.60	14.40	4.01	0.60

Note: Sensing, n = 69; Intuition, n = 20.

Table 15 | CPI 260° scale means, standard deviations, and Cohen's *d* for Global Step I™ T−F preferences: Italian sample

		Think	ing	Feeli	ng	
CPI 260° scale	CPI 260° scale description	М	SD	М	SD	Cohen's d
Dominance (Do)	Prosocial interpersonal power and influence	16.23	5.58	17.17	5.82	0.17
Capacity for Status (Cs)	Ambition for challenge and social status	11.10	3.64	12.03	4.59	0.24
Sociability (Sy)	Social participation	12.82	3.93	14.17	3.73	0.35
Social Presence (Sp)	Poise and comfort with attention and recognition	15.70	3.84	15.90	3.99	0.05
Self-acceptance (Sa)	Sense of personal worth and self-confidence	11.73	3.44	12.79	3.52	0.31
Independence (In)	Self-sufficiency and self-directedness	11.28	3.82	11.86	4.23	0.15
Empathy (Em)	Capacity to understand and respond to others' needs	11.87	3.16	12.07	3.63	0.06
Responsibility (Re)	Conscientiousness and follow-through	14.50	3.17	14.83	3.33	0.10
Social Conformity (So)	Conformance with social norms and customs	18.73	3.85	18.45	4.15	-0.07
Self-control (Sc)	Cautiousness and self-regulation	14.53	4.28	14.52	3.56	0.00
Good Impression (Gi)	Tact and positive self-presentation	13.75	4.25	13.83	4.67	0.02
Communality (Cm)	Conventional behavior and attitudes	17.90	3.65	17.21	3.63	-0.19
Well-being (Wb)	Overall sense of health and optimism	11.55	3.74	11.10	4.39	-0.11
Tolerance (To)	Open-mindedness and respect for others	8.63	3.00	9.03	3.17	0.13
Achievement via Conformance (Ac)	Motivation within organized settings	17.33	3.66	16.90	3.10	-0.13
Achievement via Independence (Ai)	Motivation within unstructured settings	11.68	3.12	11.07	3.58	-0.19
Conceptual Fluency (Cf)	Comfort with intellectual and conceptual matters	16.40	3.41	15.93	3.71	-0.13
Insightfulness (Is)	Analytical insight into the motivations of others	9.93	2.98	9.55	2.80	-0.13
Flexibility (Fx)	Adaptability and comfort with change	6.52	3.48	7.86	3.01	0.40
Sensitivity (Sn)	Tough- versus tender-mindedness	14.10	3.15	14.31	3.29	0.07
Managerial Potential (Mp)	Inclination for supervisory responsibilities	12.28	3.29	11.34	3.97	-0.27
Work Orientation (Wo)	Sense of dedication to work	12.52	3.70	11.72	3.83	-0.21
Creative Temperament (Ct)	Individualization and capacity for innovativeness	12.38	3.59	13.21	3.74	0.23
Leadership (Lp)	Initiative and effectiveness in leading others	19.13	5.34	19.59	6.12	0.08
Amicability (Ami)	Cooperation and friendliness	14.85	4.34	14.76	4.67	-0.02
Law Enforcement Orientation (Leo)	Conventional and practical values	16.53	3.07	16.52	3.56	0.00
Vector 1 (v.1)	Extraversion versus introversion	10.40	4.32	10.48	4.70	0.02
Vector 2 (v.2)	Rule-following versus rule-questioning	12.73	2.90	12.55	3.08	-0.06
Vector 3 (v.3)	Fulfillment of personal potential	12.27	4.54	12.45	4.77	0.04

Note: Thinking, n = 60; Feeling, n = 29.

Table 16 | CPI 260° scale means, standard deviations, and Cohen's *d* for Global Step I[™] J−P preferences: Italian sample

		Judg	ing	Percei	ving	
CPI 260° scale	CPI 260° scale description	М	SD	М	SD	Cohen's d
Dominance (Do)	Prosocial interpersonal power and influence	16.24	5.17	16.86	6.16	0.11
Capacity for Status (Cs)	Ambition for challenge and social status	11.00	4.06	11.84	3.88	0.21
Sociability (Sy)	Social participation	12.87	3.88	13.67	3.93	0.21
Social Presence (Sp)	Poise and comfort with attention and recognition	15.39	3.92	16.16	3.81	0.20
Self-acceptance (Sa)	Sense of personal worth and self-confidence	12.02	3.30	12.14	3.70	0.03
Independence (In)	Self-sufficiency and self-directedness	10.96	3.64	12.02	4.22	0.27
Empathy (Em)	Capacity to understand and respond to others' needs	11.35	3.29	12.56	3.24	0.37
Responsibility (Re)	Conscientiousness and follow-through	15.11	3.52	14.07	2.77	-0.33
Social Conformity (So)	Conformance with social norms and customs	19.39	3.64	17.84	4.10	-0.40
Self-control (Sc)	Cautiousness and self-regulation	15.13	4.41	13.88	3.54	- 0.31
Good Impression (Gi)	Tact and positive self-presentation	14.00	4.70	13.53	4.02	-0.11
Communality (Cm)	Conventional behavior and attitudes	18.43	3.36	16.86	3.79	-0.44
Well-being (Wb)	Overall sense of health and optimism	11.70	3.93	11.09	3.99	-0.15
Tolerance (To)	Open-mindedness and respect for others	8.93	3.15	8.58	2.95	-0.12
Achievement via Conformance (Ac)	Motivation within organized settings	18.00	3.14	16.33	3.64	-0.49
Achievement via Independence (Ai)	Motivation within unstructured settings	11.70	3.16	11.26	3.41	-0.13
Conceptual Fluency (Cf)	Comfort with intellectual and conceptual matters	16.61	3.40	15.86	3.60	-0.21
Insightfulness (Is)	Analytical insight into the motivations of others	10.07	2.98	9.53	2.85	-0.18
Flexibility (Fx)	Adaptability and comfort with change	6.33	3.29	7.63	3.37	0.39
Sensitivity (Sn)	Tough- versus tender-mindedness	14.39	3.12	13.93	3.25	-0.14
Managerial Potential (Mp)	Inclination for supervisory responsibilities	12.00	3.53	11.95	3.57	-0.01
Work Orientation (Wo)	Sense of dedication to work	12.52	3.79	11.98	3.72	-0.15
Creative Temperament (Ct)	Individualization and capacity for innovativeness	12.02	3.44	13.33	3.76	0.36
Leadership (Lp)	Initiative and effectiveness in leading others	19.02	5.35	19.56	5.85	0.10
Amicability (Ami)	Cooperation and friendliness	15.02	4.59	14.60	4.29	-0.09
Law Enforcement Orientation (Leo)	Conventional and practical values	16.96	2.83	16.07	3.57	-0.28
Vector 1 (v.1)	Extraversion versus introversion	10.91	4.37	9.91	4.47	-0.23
Vector 2 (v.2)	Rule-following versus rule-questioning	13.54	2.36	11.74	3.23	-0.64
Vector 3 (v.3)	Fulfillment of personal potential	12.39	4.60	12.26	4.64	-0.03

Note: Judging, n = 46; Perceiving, n = 43.

MBTI® GLOBAL STEP II ASSESSMENT RESULTS FOR THE ITALIAN 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 17). The Global Step II assessment replaces the Form Q assessment and the European Step II assessment.

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

Table 17 presents the relationships between MBTI Global Step II, Form Q, and European Step II facet results for the Italian sample. Most scales are highly correlated, as the table shows. The lower correlation on the Questioning-Accommodating scale reflects changes made to that scale when creating the Global Step II assessment.

Global Step II[™] Facet Intercorrelations

Intercorrelations of Global Step II facets are presented in table 18. 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 Italian translation of the MBTI Global Step II assessment, including reliability and validity. For full Step II reliability and validity information for the global sample, refer to chapters 8 and 10 of 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 Italian sample are presented in table 19. Several of the facets have lower estimates than desired, and we recommend some degree of caution in using the facet scales in Italy. Nonetheless, even those scales that have lower internal consistency estimates have reasonable test-retest reliabilities, indicating a fair degree of stability. Once sufficient data are available these numbers can be estimated again.

VALIDITY

Reported here as evidence of the validity of the Italian translation 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 the CPI 260 assessment.

Table 17 | Correlations between Global Step II[™], Form Q, and European Step II[™] continuous scores: Italian sample

Global Step II [™] facet	Form Q correlation	European Step II* correlation
E-I facets		
Initiating-Receiving	.97	.95
Expressive-Contained	.98	.94
Gregarious-Intimate	.96	.98
Active-Reflective	.84	.88
Enthusiastic-Quiet	.99	.97
S-N facets		
Concrete-Abstract	.94	.92
Realistic-Imaginative	.99	.99
Practical-Conceptual	.83	.85
Experiential-Theoretical	.93	.97
Traditional-Original	.95	.94
T–F facets		
Logical-Empathetic	.93	.94
Reasonable – Compassionate	.92	.94
Questioning – Accommodating	.53	.61
Critical-Accepting	.76	.78
Tough-Tender	.97	.95
J-P facets		
Systematic-Casual	.92	.96
Planful-Open-Ended	.97	.97
Early Starting – Pressure-Prompted	.92	.92
Scheduled- Spontaneous	.90	.87
Methodical-Emergent	.95	.85

Note: N = 458

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 on the Gregarious-Intimate facet. 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 a preference for I, N, F, or P; or from 2 to 5 when a respondent has a preference 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 on three or more facets within any one preference pair. The percentage of outof-preference facet scores for each preference pair in the Italian sample is shown in table 20

Table 18 | Intercorrelations of Global Step II[™] facets: Italian 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
E-I facets																				
1. Initiating-Receiving	_																			
2. Expressive-Contained	66	_																		
3. Gregarious-Intimate	.60	.57	_																	
4. Active-Reflective	.71	.56	.50	_																
5. Enthusiastic-Quiet	.56	.56	.55	.51	_															
S-N facets																				
6. Concrete-Abstract	07	09	14	02	28	_														
7. Realistic–Imaginative	17	18	21	18	39	.65	_													
8. Practical-Conceptual	09	05	09	04	26	.58	.65	_												
9. Experiential—Theoretical	.03	01	02	02	09	.50	.32	.29	_											
10. Traditional–Original	20	14	12	15	33	.52	.53	.54	.19	_										
T–F facets																				
11. Logical–Empathetic	15	26	20	13	25	.32	.38	.30	.04	.18	_									
12. Reasonable–Compassionate	17	23	23	16	26	.33	.36	.22	.17	.14	.66	_								
13. Questioning–Accommodating	04	14	17	12	13	.12	.20	.01	.05	03	.49	.51	_							
14. Critical–Accepting	21	29	26	21	27	.26	.32	.20	03	.21	.55	.46	.62	_						
15. Tough–Tender	11	24	20	13	20	.27	.30	. 19.	.06	.17	.64	.56	.63	.62	_					
J-P facets																				
16. Systematic–Casual	24	23	23	18	36	.43	.49	.39	.19	.58	.38	.35	.17	.33	.34	_				
17. Planful-Open-Ended	12	12	15	08	22	.35	.36	.28	.25	.42	.19	.21	.09	.16	.16	.61	_			
18. Early Starting-Pressure-Prompted	.00	.01	08	01	11	.23	.26	.19	.25	.20	02	.10	01	05	01	.33	.52	_		
19. Scheduled-Spontaneous	14	13	12	14	26	.35	.41	.29	.27	.44	.21	.25	.14	.17	.16	.68	.67	.45	_	
20. Methodical–Emergent	08	07	11	06	18	.14	.17	.09	.12	.13	.20	.23	.17	.10	.14	.38	.52	.43	.49	-

Note: N = 458.

Table 19 | Internal consistency and test-retest reliabilities of Global Step II[™] facet continuous scores: Italian sample

Global Step II" facet	Cronbach's alpha	Test-retest correlation
E-I facets		
Initiating-Receiving	.78	.84
Expressive-Contained	.74	.78
Gregarious-Intimate	.60	.76
Active-Reflective	.57	.68
Enthusiastic-Quiet	.66	.69
S-N facets		
Concrete-Abstract	.69	.72
Realistic-Imaginative	.65	.62
Practical-Conceptual	.66	.74
Experiential-Theoretical	.57	.67
Traditional-Original	.70	.82
T–F facets		
Logical-Empathetic	.80	.74
Reasonable-Compassionate	.67	.68
Questioning-Accommodating	.52	.70
Critical-Accepting	.46	.65
Tough-Tender	.68	.68
J-P facets		
Systematic-Casual	.68	.72
Planful-Open-Ended	.73	.70
Early Starting-Pressure-Prompted	.60	.62
Scheduled-Spontaneous	.72	.70
Methodical-Emergent	.50	.45

Note: N = 458; test-retest, n = 81.

Table 20 | Percentage of reported out-ofpreference Global Step II[™] facet scores: Italian sample

Preference	Numl	per of out	t-of-pref	erence fa	cet score	es (%)
pair	0	1	2	3	4	5
E-I	67	24	8	1	0	0
S-N	66	27	7	<1	0	0
T-F	69	24	7	<1	0	0
J-P	60	30	9	1	0	0

Note: N = 458.

Correlations between facets and preference pairs are presented in table 21. 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, &

Table 21 | Correlations between Global Step II[™] facets and preference pairs: Italian sample

		Prefere	nce pair	
Global Step II [™] facet	E-I	S-N	T-F	J-P
E-I facets				
Initiating-Receiving	.88	16	19	13
Expressive-Contained	.80	15	29	12
Gregarious-Intimate	.71	19	25	14
Active-Reflective	.81	13	18	09
Enthusiastic-Quiet	.74	37	28	28
S-N facets				
Concrete-Abstract	11	.85	.32	.41
Realistic-Imaginative	25	.83	.38	.44
Practical-Conceptual	11	.77	.25	.33
Experiential-Theoretical	.00	.52	.07	.27
Traditional-Original	23	.73	.19	.47
T–F facets				
Logical-Empathetic	24	.33	.90	.25
Reasonable – Compassionate	25	.32	.82	.30
Questioning – Accommodating	14	.10	.63	.14
Critical-Accepting	28	.26	.66	.19
Tough–Tender	21	.25	.81	.20
J-P facets				
Systematic-Casual	27	.56	.40	.77
Planful-Open-Ended	14	.45	.22	.85
Early Starting – Pressure-Prompted	01	.29	.00	.58
Scheduled-Spontaneous	18	.46	.24	.91
Methodical–Emergent	11	.16	.22	.58

Note: N = 458.

Majors, 2001, p. 104). The Italian 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 Experiential-Theoretical and S-N.

To further demonstrate convergent and divergent validity of the MBTI Global Step II facets in the Italian version, the facets were correlated with scales of a translated version of the CPI 260 assessment. Descriptions of the relationships between the MBTI assessment and the CPI 260 assessment follow.

CPI 260° assessment. Correlations between the Global Step II facets and CPI 260 scales for the Italian sample are shown in table 22. The correlations reported here are similar to those found in the MBTI® Step II™ Manual (Quenk et al., 2001) for the CPI[™] 434 assessment,

Table 22 | Correlations between Global Step II[™] facets and CPI 260[®] scales: Italian sample

														CPI	260° s	cale													
Global Step II [®] facet	Do	Cs	Sy	Sp	Sa	ln	Em	Re	So	Sc	Gi	Cm	Wb	То	Ac	Ai	Cf	ls	Fx	Sn	Мр	Wo	Ct	Lp	Ami	Leo	v.1	v.2	v.
E-I facets																													
Initiating-Receiving	56	46	56	36	46	40	40	04	.06	.07	18	.05	25	20	08	25	25	15	07	.15	35	23	27	47	08	14	.39	.00	1
Expressive-Contained	30	32	37	21	28	22	25	.08	.07	.04	21	.21	21	14	01	03	05	06	01	.16	13	17	21	28	06	13	.28	06	1
Gregarious-Intimate	31	38	35	22	41	23	22	.14	02	.18	-09	.14	16	19	.01	08	08	17	04	.13	17	20	17	26	10	13	.28	06	1
Active-Reflective	48	33	45	25	39	27	25	.13	.02	.17	16	.08	18	09	04	01	05	07	.05	.25	31	14	08	43	05	25	.44	17	0
Enthusiastic-Quiet	43	58	45	27	34	28	40	.08	.09	.09	.–30	.23	16	25	07	23	15	21	33	.15	27	24	37	36	10	15	.32	.14	2
S-N facets																													
Concrete-Abstract	.02	.30	.14	.23	05	.11	.28	11	16	12	01	23	.01	.09	.05	.21	01	.16	.32	.15	03	.08	.34	.01	.02	19	19	17	.0
Realistic-Imaginative	.13	.39	.28	.41	.08	.07	.46	15	24	19	.08	10	02	.06	18	.21	.09	.02	.44	.22	03	.01	.37	.07	.01	09	20	34	.1
Practical-Conceptual	.11	.39	.16	.25	.13	.09	.37	.01	09 -	04	.06	22	.05	.20	.05	.34	.20	.15	.34	.14	.11	.04	.37	.14	.07	06	14	27	.1
Experiential-Theoretical	05	.10	.02	04	02	04	.06	22	27 ·	20	01	34	04	02	02	07	22	.07	01	.04	01	02	.05	01	01	20	19	.04	1
Traditional-Original	.16	.32	.28	.23	.02	.15	.41	.10	16 ·	05	.13	.01	.05	.06	.09	.18	.19	.01	.17	.03	.13	.08	.34	.19	.00	.04	17	25	.1
T–F facets																													
Logical-Empathetic	.09	.12	.17	.12	.03	.00	.07	.02	07 ·	08	02	09	02	.00	08	.00	08	09	.22	.09	17	14	.10	.05	05	.01	10	04	(
Reasonable – Compassionate	.05	.19	.21	.04	.11	.00	.05	.03	17	14	.04	29	09	.03	09	05	14	10	.19	.14	20	13	.16	.05	05	14	14	06	C
Questioning – Accommodating	08	.01	.08	.16	10	04	.04	.01	.02	07	.14	.04	.04	05	.04	11	.01	18	.00	.30	29	.03	02	06	.02	12	.03	.10	0
Critical-Accepting	03	.14	.10	.08	03	.01	.21	08	16	07	.21	11	04	01	09	.01	09	04	.06	.21	14	04	.10	.03	03	13	09	03	.0
Tough–Tender	11	.00	.05	.07	11	04	.11	.07	06	.01	.08	01	09	02	.00	03	.02	17	.07	.30	25	11	.09	10	02	17	.10	05	.0
J-P facets																													
Systematic-Casual	.15	.22	.25	.27	.06	.27	.31	02	24	13	02	14	.02	.02	15	.10	.08	04	.36	.03	02	04	.44	.17	05	15	12	46	.1
Planful-Open-Ended	.14	.17	.27	.22	.14	.23	.16	20	15 ·	20	05	19	03	.02	22	.08	.03	03	.22	07	.05	02	.35	.16	06	02	15	31	.0
Early Starting— Pressure-Prompted	.14	.21	.24	.21	.20	.19	.22	16	14	25	16	32	05	03	16	.02	08	06	.31	13	.03	14	.38	.12	05	17	25	25	0
Scheduled-Spontaneous	.03	.09	.11	.12	.00	.10	.20	18	26	19	06	18	05	15	28	11	14	15	.13	.01	09	09	.24	.05	11	08	12	32	0
Methodical-Emergent	.02	.07	.08	.13	.06	.04			09											.02	08	16	.23	.02	16	04	13	28	(

Note: n = 89.

Table 23 | In-preference, midzone, and out-of-preference percentages and rankings for the Global Step II™ facets: Italian sample

	In-pre	ference	Mid	zone	Out-of-p	reference
Global Step II [™] facet	%	Rank	%	Rank	%	Rank
E-I facets						
Initiating-Receiving	59.39	9	37.99	8	2.62	19
Expressive-Contained	54.37	12	38.86	7	6.77	11
Gregarious-Intimate	51.09	16	35.15	11	13.76	4
Active-Reflective	59.61	6	33.84	13	6.55	13
Enthusiastic-Quiet	60.92	4	27.07	19	12.01	5
S-N facets						
Concrete-Abstract	63.76	1	33.41	14	2.84	18
Realistic-Imaginative	60.04	5	35.81	10	4.15	16
Practical-Conceptual	62.23	2	27.29	18	10.48	7
Experiential-Theoretical	57.86	11	28.17	17	13.97	3
Traditional-Original	49.13	17	41.05	5	9.83	9
T–F facets						
Logical-Empathetic	59.61	6	36.03	9	4.37	15
Reasonable-Compassionate	54.15	13	40.61	6	5.24	14
Questioning-Accommodating	38.43	20	51.31	1	10.26	8
Critical-Accepting	46.72	19	41.27	4	12.01	5
Tough-Tender	59.61	6	33.19	15	7.21	10
J-P facets						
Systematic-Casual	47.82	18	45.41	3	6.77	11
Planful-Open-Ended	61.57	3	34.72	12	3.71	17
Early Starting-Pressure-Prompted	58.73	10	18.34	20	22.93	1
Scheduled-Spontaneous	52.40	15	45.63	2	1.97	20
Methodical-Emergent	52.62	14	31.66	16	15.72	2

Note: N = 458.

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 practitioners give feedback to respondents, the most important verification issue is the accuracy with which the scores reflect respondents' 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. Practitioners may refer to Understanding Your MBTI® Step II™ Results (Kummerow & Quenk, 2018) and MBTI® Step II™ User's Guide (Quenk

& Kummerow, 2019) for interpretations of all possible Step II facet results.

Table 23 shows the percentages and rank order of in-preference, midzone, and out-of-preference scores for the 20 Global Step II facets for the Italian 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 frequency with which facet scores are likely to be out-ofpreference. Here, the facet with the highest percentage of out-of-preference scores is Early Starting-Pressure-Prompted at 22.93%, followed by Methodical-Emergent at 15.72%. The Scheduled-Spontaneous facet (1.97%) and the Initiating-Receiving facet (2.62%) appear least likely to elicit out-of-preference responses.

Gender differences on the Step II facets in the Italian sample are presented in table 24.

Table 24 | Means, standard deviations, and Cohen's d of the Global Step II[™] facets by total sample and gender: Italian sample

Global Step II" facet	Total sample (<i>N</i> = 458)		Men (<i>n</i> = 219)		Women (<i>n</i> = 239)		Gender difference
	М	SD	М	SD	М	SD	Cohen's d
E-I facets							
Initiating-Receiving	0.05	0.81	0.10	0.76	0.01	0.85	0.12
Expressive-Contained	0.09	0.86	0.11	0.82	0.08	0.89	0.04
Gregarious-Intimate	-0.01	0.76	-0.02	0.76	0.01	0.75	-0.04
Active-Reflective	-0.04	0.78	-0.02	0.79	-0.06	0.78	0.05
Enthusiastic-Quiet	0.14	0.83	0.24	0.82	0.04	0.84	0.24
S-N facets							
Concrete-Abstract	-0.49	0.80	-0.56	0.74	-0.42	0.85	-0.17
Realistic-Imaginative	-0.30	0.80	-0.45	0.72	-0.17	0.84	-0.35
Practical-Conceptual	-0.26	0.81	-0.37	0.77	-0.16	0.83	-0.27
Experiential-Theoretical	-0.40	0.67	-0.41	0.67	-0.40	0.66	-0.01
Traditional-Original	-0.16	0.81	-0.27	0.82	-0.06	0.79	-0.27
T–F facets							
Logical-Empathetic	0.03	0.85	-0.23	0.80	0.27	0.83	-0.62
Reasonable-Compassionate	-0.39	0.73	-0.55	0.70	-0.23	0.72	-0.46
Questioning-Accommodating	-0.21	0.68	-0.39	0.63	-0.04	0.69	-0.52
Critical-Accepting	-0.43	0.69	-0.63	0.67	-0.26	0.66	-0.56
Tough-Tender	-0.07	0.83	-0.25	0.82	0.10	0.79	-0.43
J-P facets							
Systematic-Casual	0.02	0.76	-0.08	0.77	0.12	0.75	-0.26
Planful-Open-Ended	-0.02	0.80	-0.02	0.78	-0.03	0.83	0.01
Early Starting-Pressure-Prompted	-0.08	0.75	-0.08	0.74	-0.08	0.76	0.00
Scheduled-Spontaneous	0.04	0.76	0.01	0.72	0.07	0.79	-0.08
Methodical-Emergent	0.07	0.69	0.05	0.67	0.09	0.72	-0.05

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

CONCLUSION

Initial analyses of the Italian translations of the MBTI Global Step I and Step II assessments demonstrate that they each have good internal consistency and test-retest reliabilities that 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 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 the CPI 260 assessment 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 Italian translations of the MBTI Global Step I and Step II assessments have adequate reliability and validity and are appropriate for use with individuals in Italy who read and understand Italian.

NOTES

- 1. 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-forword 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.
- 2. Correlation coefficients (typically identified by *r*) 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 = .10 is a small effect size, r = .30 is medium, and r = .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 = .20be considered small, d = .50 be considered medium, and d = .80 be considered large. In psychological research, small to medium effect sizes are typical.

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