MBTI® MANUAL GLOBAL SUPPLEMENT SERIES

Greece (Greek)

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 and compiling new representative samples was a high priority. The previous revision of the MBTI assessment culminated in 1998 in the 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. 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 represe1ntative 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 II 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 Greece (Greek) sample—hereafter, *Greek* sample—to the Global Step I and Step II assessments translated into the Greek 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 Greek 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.
*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 is based on industry-standard methods for assessment translation (International Test Commission, 2005).[1] Because each of the languages included in this project has a different history of translation and use, the process varied somewhat for different languages.

The original Greek translations of the MBTI European Step I and Step II assessments were developed using the standard translation processes but were not evaluated statistically due to the fact that the research on the Step II assessment had shown consistent results in other European languages (Quenk, Hammer, & Majors, 2004). Regardless, the European Step II items were used as a starting point for the development of the 230-item

research version of the MBTI assessment used in this global project.

OPP's original Greek 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 Greek 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 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 yielding respondents' best-fit type results. (For details on best-fit type, see chapter 7 in the 2018 MBTI manual.) As MBTI®Complete was not used in collecting the Greek 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 Greek sample are shown 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 incentives by an external market research firm. Such firms maintain panels of participants who have expressed willingness to participate in research. These participants were compensated for completing some combination of demographic items, the MBTI research form, and/or other validity assessments. For some samples—for example, Brazil (Brazilian Portuguese)—the locally based MBTI distributor led the data collection effort. Once data were collected, all cases were thoroughly examined, and invalid cases (e.g., those with too many response omissions or where a participant had selected only the "A" response option across 230 items) were removed. This cleaning step, while reducing final sample sizes, was required to ensure that only the highest-quality data remained for analysis.

Table 2 | **Demographic summary: Greek sample**

Demographic	Target %	Actual %
Age group		
15–24 years	13	18
25–44 years	36	64
45–64 years	30	18
65+ years	22	0
Mean age: 34 years	—	—
Gender		
Female	50	62
Male	50	38
Employment status		
Working full-time	46	63
Working part-time	3	4
Student	11	14
Looking after family/home	15	3
Long-term sick	14	0
Retired / not working for income / none of the above	11	16
Self-employed		
Yes	17	19
No	83	43
No response	—	38
Country of residence		
Greece	—	100

Note: N = 277. Percentages in a given category may not total 100% due to the rounding of decimals.

A representative sample of individuals in Greece who read Greek was obtained from a market research firm. Targets provided by OPP Ltd were set based on the population of Greece. Table 2 shows the demographic target and actual percentages obtained. The resulting Greek sample consists of 277 individuals, 62% women and 38% men. The age range is 16–64, with an average of 34 years (standard deviation = 10.3). All individuals reported residing in Greece.

MBTI® GLOBAL STEP I™ ASSESSMENT RESULTS FOR THE GREEK 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

Table 3 | **Reported MBTI® type distribution: Greek sample**

Sensing		Intuition			
Thinking	**Feeling**		**Thinking**		
ISTJ *n* = 57 20.6%	**ISFJ** *n* = 11 4.0%	**INFJ** *n* = 6 2.2%	**INTJ** *n* = 5 1.8%	Judging	Introversion
ISTP *n* = 11 4.0%	**ISFP** *n* = 7 2.5%	**INFP** *n* = 15 5.4%	**INTP** *n* = 12 4.3%	Perceiving	
ESTP *n* = 25 9.0%	**ESFP** *n* = 14 5.1%	**ENFP** *n* = 41 14.8%	**ENTP** *n* = 14 5.1%		Extraversion
ESTJ *n* = 31 11.2%	**ESFJ** *n* = 13 4.7%	**ENFJ** *n* = 8 2.9%	**ENTJ** *n* = 7 2.5%	Judging	

Note: *N* = 277. Percentages may not total 100% due to the rounding of decimals.

Table 4 | **Reported MBTI® preference and preference combination distributions: Greek sample**

Preferences			Orientation pairs			Process pairs			Orientation of energy and perceiving pairs			Judging and external orientation pairs		
	n	%		*n*	%		*n*	%		*n*	%		*n*	%
E	153	55.2	**EJ**	59	21.3	**ST**	124	44.8	**ES**	83	30.0	**TJ**	100	36.1
I	124	44.8	**EP**	94	33.9	**SF**	45	16.2	**EN**	70	25.3	**TP**	62	22.4
S	169	61.0	**IJ**	79	28.5	**NF**	70	25.3	**IS**	86	31.0	**FJ**	38	13.7
N	108	39.0	**IP**	45	16.2	**NT**	38	13.7	**IN**	38	13.7	**FP**	77	27.8
T	162	58.5												
F	115	41.5												
J	138	49.8												
P	139	50.2												

Note: *N* = 277. Percentages may not total 100% due to the rounding of decimals.

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 Greek 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 are ISTJ and ENFP. The least common types for this group are INTJ and INFJ. 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 orientation of energy and perceiving pairs, ESs, ENs, and ISs occur about equally, and more frequently than INs. In addition, Ss are more prevalent than Ns, and Ts more than Fs, while the other preferences are more evenly distributed.

Tables 5–8 show type and preference distributions by gender. For men, as seen in table 5, the most common MBTI types are ISTJ (22.9%), ESTJ (13.3%), and ESTP (12.4%), and the least common type is ENFJ (0%). For women, as seen in table 7, the most common MBTI types

Table 5 | **Reported MBTI® type distribution for men: Greek sample**

Sensing		Intuition			
Thinking	**Feeling**		**Thinking**		
ISTJ *n* = 24 22.9%	**ISFJ** *n* = 3 2.9%	**INFJ** *n* = 1 1.0%	**INTJ** *n* = 2 1.9%	Judging	Introversion
ISTP *n* = 6 5.7%	**ISFP** *n* = 5 4.8%	**INFP** *n* = 5 4.8%	**INTP** *n* = 5 4.8%	Perceiving	
ESTP *n* = 13 12.4%	**ESFP** *n* = 5 4.8%	**ENFP** *n* = 11 10.5%	**ENTP** *n* = 5 4.8%		Extraversion
ESTJ *n* = 14 13.3%	**ESFJ** *n* = 4 3.8%	**ENFJ** *n* = 0 0.0%	**ENTJ** *n* = 2 1.9%	Judging	

Note: *n* = 105. Percentages may not total 100% due to the rounding of decimals.

Table 6 | **Reported MBTI® preference and preference combination distributions for men: Greek sample**

Preferences			Orientation pairs			Process pairs			Orientation of energy and perceiving pairs			Judging and external orientation pairs		
	n	%		*n*	%		*n*	%		*n*	%		*n*	%
E	54	51.4	**EJ**	20	19.0	**ST**	57	54.3	**ES**	36	34.3	**TJ**	42	40.0
I	51	48.6	**EP**	34	32.4	**SF**	17	16.2	**EN**	18	17.1	**TP**	29	27.6
S	74	70.5	**IJ**	30	28.6	**NF**	17	16.2	**IS**	38	36.2	**FJ**	8	7.6
N	31	29.5	**IP**	21	20.0	**NT**	14	13.3	**IN**	13	12.4	**FP**	26	24.8
T	71	67.6												
F	34	32.4												
J	50	47.6												
P	55	52.4												

Note: *n* = 105.

are ISTJ (19.2%) and ENFP (17.4%). The least common types for women are ISFP (1.2%) and INTJ (1.7%).

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 Greek sample are shown in table 9.[2] The overall agreement rate of whole types between the Global Step I and Form M assessments was 79%, while between the Global Step I and European Step I assessments it was 53%. 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).

Global Step I™ Preference Pair Intercorrelations

Intercorrelations of Global Step I preference pair continuous scores in the Greek 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

Table 7 | **Reported MBTI® type distribution for women: Greek sample**

Sensing		Intuition			
Thinking	**Feeling**		**Thinking**		
ISTJ *n* = 33 19.2%	**ISFJ** *n* = 8 4.7%	**INFJ** *n* = 5 2.9%	**INTJ** *n* = 3 1.7%	Judging	Introversion
ISTP *n* = 5 2.9%	**ISFP** *n* = 2 1.2%	**INFP** *n* = 10 5.8%	**INTP** *n* = 7 4.1%	Perceiving	
ESTP *n* = 12 7.0%	**ESFP** *n* = 9 5.2%	**ENFP** *n* = 30 17.4%	**ENTP** *n* = 9 5.2%		Extraversion
ESTJ *n* = 17 9.9%	**ESFJ** *n* = 9 5.2%	**ENFJ** *n* = 8 4.7%	**ENTJ** *n* = 5 2.9%	Judging	

Note: *n* = 172.

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

Preferences			Orientation pairs			Process pairs			Orientation of energy and perceiving pairs			Judging and external orientation pairs		
	n	%		*n*	%		*n*	%		*n*	%		*n*	%
E	99	57.6	**EJ**	39	22.7	**ST**	67	39.0	**ES**	47	27.3	**TJ**	58	33.7
I	73	42.4	**EP**	60	34.9	**SF**	28	16.3	**EN**	52	30.2	**TP**	33	19.2
S	95	55.2	**IJ**	49	28.5	**NF**	53	30.8	**IS**	48	27.9	**FJ**	30	17.4
N	77	44.8	**IP**	24	14.0	**NT**	24	14.0	**IN**	25	14.5	**FP**	51	29.7
T	91	52.9												
F	81	47.1												
J	88	51.2												
P	84	48.8												

Note: *n* = 172. Percentages may not total 100% due to the rounding of decimals.

are very similar to those found for the global sample, shown in table 10 above the diagonal. The Greek sample findings are likewise consistent with those reported for Form M in the 1998 MBTI® Manual (Myers et al.).

Reliability of Global Step I™ Results

This section covers the measurement properties for the Greek translation of the MBTI Global Step I assessment used in Greece. 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 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 assessment (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

Table 9 | **Relationships between MBTI® Global Step I™, Form M, and European Step I™ preference pair results: Greek sample**

	Global Step I™ and Form M		Global Step I™ and European Step I™	
Preference pair	Correlation between continuous scores	Agreement rate (%)	Correlation between continuous scores	Agreement rate (%)
E–I	.96	92	..92	87
S–N	.95	92	.90	83
T–F	.98	97	.89	87
J–P	.97	94	.92	83
Overall agreement rate for whole types		*79*		*53*

Note: N = 277.

Table 10 | **Intercorrelations of Global Step I™ preference pair continuous scores: Greek and global samples**

Preference pair	E–I	S–N	T–F	J–P
E–I	—	–.20	–.15	–.15
S–N	–.32	—	.27	.48
T–F	–.19	.50	—	.23
J–P	–.28	.53	.41	—

Note: Correlations for the Greek sample (*N* = 277) are below the diagonal; those for the global sample (*N* = 16,773) are above the diagonal.

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 Greek sample and for the global sample for comparison purposes. The Greek sample alphas range from .83 to .91.

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

Table 12 shows the percentage of individuals in the Greek sample who reported zero, one, two, three, or four preferences the same upon retest. Eighty percent of individuals reported having either three or four preferences the same at time of retest.

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

		Cronbach's alpha			
Sample	*N*	E–I	S–N	T–F	J–P
Greek	277	.89	.83	.88	.91
Global	16,773	.89	.87	.89	.88
		Test-retest correlation			
Sample (interval)	*n*	E–I	S–N	T–F	J–P
Greek (≤15 weeks)	64	.85	.86	.78	.77
Global (≤15 weeks)	1,721	.86	.83	.82	.81
		Test-retest agreement rate (%)			
Sample (interval)	*n*	E–I	S–N	T–F	J–P
Greek (≤15 weeks)	64	83	83	77	78
Global (≤15 weeks)	1,721	84	86	79	79

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

		Number of preferences the same at retest (%)				
Sample (interval)	*n*	4	3	2	1	0
Greek (≤15 weeks)	64	47	33	16	3	2

MBTI® GLOBAL STEP II™ ASSESSMENT RESULTS FOR THE GREEK 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 13). 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 13 presents the relationships between MBTI Global Step II, Form Q, and European Step II facet results for the Greek sample. Most facet 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.

Table 13 | **Correlations between Global Step II™, Form Q, and European Step II™ continuous scores: Greek sample**

Global Step II™ facet	Form Q correlation	European Step II™ correlation
E–I facets		
Initiating–Receiving	.97	.95
Expressive–Contained	.98	.93
Gregarious–Intimate	.97	.99
Active–Reflective	.85	.89
Enthusiastic–Quiet	.98	.97
S–N facets		
Concrete–Abstract	.95	.93
Realistic–Imaginative	.99	.99
Practical–Conceptual	.78	.79
Experiential–Theoretical	.95	.98
Traditional–Original	.96	.96
T–F facets		
Logical–Empathetic	.95	.96
Reasonable–Compassionate	.93	.96
Questioning–Accommodating	.50	.64
Critical–Accepting	.78	.76
Tough–Tender	.96	.94
J–P facets		
Systematic–Casual	.95	.98
Planful–Open-Ended	.97	.98
Early Starting–Pressure-Prompted	.94	.93
Scheduled–Spontaneous	.95	.94
Methodical–Emergent	.96	.90

Note: N = 277.

Global Step II™ Facet Intercorrelations

Intercorrelations of Global Step II facets are presented in table 14. Facets within each preference pair correlate more highly 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 Greek 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 Greek sample are presented in table 15.

VALIDITY

Reported here as evidence of the validity of the Greek translation of the MBTI Global Step II assessment are the percentage of out-of-preference facet scores for each preference pair as well as correlations between facets and preference pairs.

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 three or more facets out-of-preference for any preference pair. The percentage of out-of-preference facet scores for each preference pair in the Greek sample is shown in table 16.

Correlations between facets and preference pairs are presented in table 17. 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 Greek sample correlations

Table 14 | **Intercorrelations of Global Step II™ facets: Greek 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	.54	—																		
3. Gregarious–Intimate	.65	.46	—																	
4. Active–Reflective	.69	.46	.54	—																
5. Enthusiastic–Quiet	.59	.43	.61	.54	—															
S–N facets																				
6. Concrete–Abstract	–.24	–.16	–.23	–.15	–.33	—														
7. Realistic–Imaginative	–.28	–.19	–.25	–.20	–.44	.62	—													
8. Practical–Conceptual	–.21	–.06	–.20	–.15	–.29	.42	.62	—												
9. Experiential–Theoretical	–.13	–.10	–.11	–.10	–.18	.42	.30	.17	—											
10. Traditional–Original	–.23	–.01	–.22	–.14	–.40	.50	.58	.60	.19	—										
T–F facets																				
11. Logical–Empathetic	–.18	–.20	–.12	–.15	–.34	.45	.54	.32	.29	.29	—									
12. Reasonable–Compassionate	–.10	–.14	–.04	–.09	–.24	.37	.41	.21	.33	.19	.75	—								
13. Questioning–Accommodating	–.08	–.19	.00	–.08	–.13	.22	.29	.03	.26	–.08	.43	.50	—							
14. Critical–Accepting	–.24	–.22	–.10	–.14	–.27	.36	.45	.24	.32	.19	.55	.57	.66	—						
15. Tough–Tender	–.07	–.11	.00	–.04	–.15	.25	.32	.14	.25	.12	.56	.62	.56	.54	—					
J–P facets																				
16. Systematic–Casual	–.30	–.19	–.30	–.24	–.48	.58	.56	.34	.29	.52	.56	.46	.26	.40	.28	—				
17. Planful–Open-Ended	–.17	–.08	–.18	–.11	–.25	.39	.35	.22	.18	.33	.32	.30	.15	.24	.13	.68	—			
18. Early Starting–Pressure-Prompted	–.18	–.17	–.17	–.14	–.24	.31	.27	.13	.17	.20	.23	.19	.09	.12	.05	.56	.63	—		
19. Scheduled–Spontaneous	–.25	–.13	–.23	–.23	–.40	.49	.45	.30	.23	.47	.42	.33	.21	.32	.20	.81	.75	.61	—	
20. Methodical–Emergent	–.15	–.10	–.17	–.18	–.28	.30	.26	.13	.20	.24	.33	.24	.20	.22	.13	.60	.55	.56	.67	—

Note: N = 277.

Table 15 | **Internal consistency and test-retest reliabilities of Global Step II™ facet continuous scores: Greek sample**

Global Step II™ facet	Cronbach's alpha	Test-retest correlation
E–I facets		
Initiating–Receiving	.82	.82
Expressive–Contained	.74	.70
Gregarious–Intimate	.64	.68
Active–Reflective	.61	.61
Enthusiastic–Quiet	.67	.76
S–N facets		
Concrete–Abstract	.65	.71
Realistic–Imaginative	.73	.83
Practical–Conceptual	.65	.69
Experiential–Theoretical	.64	.76
Traditional–Original	.73	.67
T–F facets		
Logical–Empathetic	.85	.75
Reasonable–Compassionate	.79	.67
Questioning–Accommodating	.39	.73
Critical–Accepting	.47	.68
Tough–Tender	.65	.69
J–P facets		
Systematic–Casual	.83	.80
Planful–Open-Ended	.78	.70
Early Starting–Pressure-Prompted	.71	.69
Scheduled–Spontaneous	.84	.74
Methodical–Emergent	.66	.48

Note: N = 277; test-retest, *n* = 64.

Table 16 | **Percentage of reported out-of-preference Global Step II™ facet scores: Greek sample**

Preference pair	Number of out-of-preference facet scores (%)					
	0	1	2	3	4	5
E–I	65	30	5	0	0	0
S–N	56	35	9	<1	0	0
T–F	72	20	6	2	0	0
J–P	68	21	9	2	0	0

Note: N = 277. Percentages may not total 100% due to the rounding of decimals.

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.

Table 17 | **Correlations between Global Step II™ facets and preference pairs: Greek sample**

Global Step II™ facet	Preference pair			
	E–I	S–N	T–F	J–P
E–I facets				
Initiating–Receiving	.88	–.30	–.14	–.26
Expressive–Contained	.70	–.14	–.18	–.15
Gregarious–Intimate	.76	–.29	–.06	–.24
Active–Reflective	.78	–.21	–.11	–.20
Enthusiastic–Quiet	.76	–.46	–.29	–.38
S–N facets				
Concrete–Abstract	–.25	.81	.44	.49
Realistic–Imaginative	–.33	.84	.52	.45
Practical–Conceptual	–.23	.71	.26	.28
Experiential–Theoretical	–.16	.50	.36	.25
Traditional–Original	–.23	.76	.23	.44
T–F facets				
Logical–Empathetic	–.24	.52	.91	.44
Reasonable–Compassionate	–.14	.41	.89	.37
Questioning–Accommodating	–.10	.20	.58	.21
Critical–Accepting	–.25	.42	.67	.30
Tough–Tender	–.09	.29	.74	.18
J–P facets				
Systematic–Casual	–.35	.64	.52	.87
Planful–Open-Ended	–.17	.42	.32	.87
Early Starting–Pressure-Prompted	–.19	.30	.20	.72
Scheduled–Spontaneous	–.27	.54	.39	.94
Methodical–Emergent	–.18	.32	.30	.71

Note: N = 277.

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 &

Table 18 | **In-preference, midzone, and out-of-preference percentages and rankings for the Global Step II™ facets: Greek sample**

	In-preference		Midzone		Out-of-preference	
Global Step II™ facet	%	Rank	%	Rank	%	Rank
E–I facets						
Initiating–Receiving	62.09	7	35.38	10	2.53	19
Expressive–Contained	51.62	15	37.18	7	11.19	6
Gregarious–Intimate	54.51	14	36.10	9	9.39	10
Active–Reflective	58.48	10	32.49	12	9.03	11
Enthusiastic–Quiet	58.84	9	33.21	11	7.94	12
S–N facets						
Concrete–Abstract	57.04	12	39.35	5	3.61	17
Realistic–Imaginative	57.76	11	36.46	8	5.78	14
Practical–Conceptual	55.23	13	27.44	18	17.33	2
Experiential–Theoretical	50.90	16	31.05	13	18.05	1
Traditional–Original	49.46	17	40.79	3	9.75	7
T–F facets						
Logical–Empathetic	66.43	2	30.32	14	3.25	18
Reasonable–Compassionate	65.34	3	30.32	14	4.33	16
Questioning–Accommodating	33.94	20	56.32	1	9.75	7
Critical–Accepting	48.74	18	41.52	2	9.75	7
Tough–Tender	47.65	19	40.79	3	11.55	5
J–P facets						
Systematic–Casual	63.90	5	28.88	16	7.22	13
Planful–Open-Ended	66.79	1	28.52	17	4.69	15
Early Starting–Pressure-Prompted	63.90	5	19.49	20	16.61	3
Scheduled–Spontaneous	60.65	8	37.91	6	1.44	20
Methodical–Emergent	64.26	4	19.86	19	15.88	4

Note: N = 277.

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

Table 18 shows the percentages and rank order of in-preference, midzone, and out-of-preference scores for the 20 Global Step II facets for the Greek 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-of-preference. Here, the facet with the highest percentage of out-of-preference scores is Experiential–Theoretical at 18.05%, followed by Practical–Conceptual at 17.33%. The Scheduled–Spontaneous facet (1.44%) and the Initiating–Receiving facet (2.53%) appear least likely to elicit out-of-preference responses.

Gender differences on the Step II facets in the Greek sample are presented in table 19. Cohen's *d* (Cohen, 1992; mean differences expressed in units of standard deviation[3]) shows the magnitude of the difference in mean scores and standard deviations for men and women.

Table 19 | **Means, standard deviations, and Cohen's *d* of the Global Step II™ facets by total sample and gender: Greek sample**

	Total sample (N = 277)		Men (n = 105)		Women (n = 172)		Gender difference
Global Step II™ facet	***M***	***SD***	***M***	***SD***	***M***	***SD***	**Cohen's *d***
E–I facets							
Initiating–Receiving	0.02	0.83	0.02	0.79	0.02	0.86	0.00
Expressive–Contained	−0.09	0.85	−0.03	0.75	−0.12	0.90	0.11
Gregarious–Intimate	−0.08	0.77	−0.12	0.75	−0.06	0.78	−0.07
Active–Reflective	−0.04	0.80	−0.10	0.78	0.00	0.81	−0.12
Enthusiastic–Quiet	−0.10	0.79	0.00	0.84	−0.16	0.76	0.20
S–N facets							
Concrete–Abstract	−0.43	0.75	−0.53	0.73	−0.37	0.76	−0.22
Realistic–Imaginative	−0.02	0.85	−0.19	0.82	0.09	0.86	−0.34
Practical–Conceptual	0.20	0.78	0.05	0.81	0.29	0.75	−0.31
Experiential–Theoretical	−0.15	0.77	−0.22	0.77	−0.11	0.76	−0.14
Traditional–Original	−0.08	0.85	−0.16	0.85	−0.03	0.85	−0.15
T–F facets							
Logical–Empathetic	0.00	0.95	−0.25	0.95	0.15	0.92	−0.43
Reasonable–Compassionate	−0.39	0.87	−0.53	0.82	−0.30	0.88	−0.26
Questioning–Accommodating	−0.14	0.62	−0.30	0.59	−0.05	0.62	−0.41
Critical–Accepting	−0.24	0.71	−0.44	0.63	−0.11	0.73	−0.48
Tough–Tender	−0.13	0.75	−0.25	0.80	−0.06	0.72	−0.25
J–P facets							
Systematic–Casual	−0.25	0.97	−0.36	1.02	−0.18	0.93	−0.19
Planful–Open-Ended	0.04	0.85	0.04	0.90	0.04	0.82	0.01
Early Starting–Pressure-Prompted	−0.02	0.83	−0.05	0.84	−0.01	0.83	−0.05
Scheduled–Spontaneous	0.11	0.97	0.13	1.05	0.09	0.92	0.04
Methodical–Emergent	−0.05	0.80	−0.02	0.82	−0.07	0.78	0.06

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

CONCLUSION

Initial analyses of the Greek translations of the MBTI Global Step I and Step II assessments demonstrate that they each have good internal consistency and test-retest reliabilities and are consistent with previous forms of the MBTI assessment (i.e., Form M and Form Q, European Step I and Step II). Validity was established by showing the proportion of out-of-preference facet scores. While more research should be conducted, all these analyses show that the Greek translations of the MBTI Global Step I and Step II assessments are appropriate for use with individuals in Greece who read and understand Greek.

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-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.
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^2 = .10 is a small effect size, r^2 = .30 is medium, and r^2 = .50 is large (Cohen, 1988, 1992).
3. Cohen's *d* is an estimate of an effect size computed by taking the difference between the means of two groups and dividing by their pooled standard deviations. Because the metric is in standard deviation units, effect sizes can easily be compared to evaluate the magnitude of a difference. Cohen (1992) provides an overview of the computation of a variety of effect sizes, along with guidance on interpretation. Cohen proposed that *d* = .20 be considered small, *d* = .50 be considered medium, and *d* = .80 be considered large. In psychological research, small to medium effect sizes are typical.

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