

**MBTI® MANUAL GLOBAL SUPPLEMENT SERIES** 

# South Africa (Afrikaans) Supplement to the MBTI<sup>®</sup> Manual for the Global Step I<sup>™</sup> and Step II<sup>™</sup> Assessments

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



+1 800 624 1765 | www.themyersbriggs.com

South Africa (Afrikaans) Supplement to the MBTI<sup>+</sup> Manual for the Global Step I<sup>+</sup> and Step II<sup>+</sup> Assessments Copyright 2018 by Peter B. Myers and Katharine D. Myers. Myers-Briggs Type Indicator, MBTI, Step I, Step I, I, the MBTI logo, and The Myers-Briggs Company logo are trademarks or registered trademarks of The Myers & Briggs Foundation in the United States and other countries. CPI and CPI 260 are trademarks or registered trademarks of The Myers & Briggs Foundation in the United States and other countries. CPI and CPI 260 are trademarks or registered trademarks of The Myers & Briggs Foundation in the United States and other countries.

# **South Africa (Afrikaans)** Supplement to the MBTI<sup>®</sup> Manual for the Global Step I<sup>™</sup> and Step II<sup>™</sup> Assessments

## CONTENTS

Introduction	1
Translation Process	2
Data Collection	3
MBTI° Global Step I <sup>®</sup> Assessment Results for	
the South Africa (Afrikaans) Sample	3
MBTI® Type and Preference Distributions	3
Relationships Between MBTI® Global Step I <sup>®</sup> and Form M Preference Pair Results	4
Global Step I <sup>**</sup> Preference Pair Intercorrelations	7
Reliability of Global Step I <sup>®</sup> Results	7
MDTI® Clobal Stan II <sup>™</sup> Assessment Desults for	
MBTI° Global Step II <sup>®</sup> Assessment Results for the South Africa (Afrikaans) Sample	8
	0
Relationships Between MBTI® Global Step II <sup>™</sup> and Form Q Facet Results	8
Global Step II" Facet Intercorrelations	8
Reliability and Validity of Global Step II <sup>™</sup> Results	8
Global Step II <sup>®</sup> Facet Distributions	10
Conclusion	11
Notes	12
References	13

# **INTRODUCTION**

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

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

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

MBTI research form containing all items on then-current forms of the assessment (i.e., MBTI Form M and Form Q, and European Step I and Step II); common demographic items; and other validation assessments. Respondents who completed North American English or European English versions of the assessment also completed an online interpretation session through The Myers-Briggs Company's MBTI<sup>®</sup>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 South Africa (Afrikaans) sample—hereafter, *South Africa (Afrikaans)* sample—to the Global Step I and Step II assessments translated into Afrikaans. 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).<sup>a</sup> 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 230-item research version of the MBTI assessment was originally translated into Afrikaans for The Myers-Briggs Company by a professional linguist using a translation of MBTI Form G as a guide. The translation was evaluated by in-country expert reviewers and iterated until a satisfactory version of the 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<sup>®</sup>Complete was not used in collecting the South Africa (Afrikaans) sample, best-fit type data for the sample are unavailable.

For the MBTI research form, specific sampling targets were set for each sample (table 2). Local MBTI distributors helped determine the final targets for samples in their respective countries or regions by selecting appropriate official sources. In general, sampling targets were designed to mirror the working-age population.

Once the websites were prepared and the sampling targets were set, data collection began. For most samples, the majority of participants were provided with incentives by an external market research firm. Such firms maintain panels of participants who have expressed willingness to participate in research. These participants were compensated for completing some combination of demographic items, the MBTI research form, and/ or other validity assessments. For some samples-for example, South Africa (Afrikaans)—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-guality data remained for analysis. Data from Afrikaans translations of the ACL and CPI 260° assessments were collected. but due to insufficient sample sizes the results are not included in this supplement.

A convenience sample of individuals in South Africa who read Afrikaans was obtained from a market research firm. Table 2 shows the demographic percentages obtained. The resulting South Africa (Afrikaans) sample consists of 505 individuals, 72.3% women and 27.7% men. The age range is 18–81, with an average of 39 years (standard deviation = 11.0). All individuals reported residing in South Africa.

# Table 2 | Demographic summary: South Africa (Afrikaans) sample

Demographic	Sample %
Age group	
18–24 years	7
25–34 years	33
35–44 years	29
45–54 years	23
55–64 years	7
65+ years	1
Mean age: 39 years	-
Gender	
Female	72
Male	28
Country of residence	
South Africa	100
Employment status	
Working full-time	83
Working part-time	9
Student	2
Retired	1
Not working for income	3
None of the above	2
No response	1

*Note:* N = 505. Percentages in a given category may not total 100% due to rounding of decimals.

# MBTI<sup>®</sup> GLOBAL STEP I<sup>®</sup> ASSESSMENT RESULTS FOR THE SOUTH AFRICA (AFRIKAANS) 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<sup>®</sup> Type and Preference Distributions**

MBTI type was computed for all participants in the South Africa (Afrikaans) 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 INTP. The least common types are ENFJ and ENTJ. Table 4 shows the distributions of preferences as well as four two-preference combinations: (1) *orientation* pairs, (2) *process* pairs,

Se	nsing	Intuition				
Thinking	Fee	ling	Thinking			
<b>ISTJ</b> n = 82 16.2%	<b>ISFJ</b> n = 28 5.5%	<b>INFJ</b> n = 19 3.8%	<b>INTJ</b> n = 23 4.6%	Judging	Introv	
<b>ISTP</b> n = 33 6.5%	<b>ISFP</b> n = 16 3.2%	<b>INFP</b> n = 36 7.1%	<b>INTP</b> n = 47 9.3%	Perceiving	Introversion	
<b>ESTP</b> n = 25 5.0%	<b>ESFP</b> n = 15 3.0%	<b>ENFP</b> <i>n</i> = 41 8.1%	<b>ENTP</b> n = 44 8.7%	iving	Extrav	
<b>ESTJ</b> n = 43 8.5%	<b>ESFJ</b> n = 29 5.7%	<b>ENFJ</b> n = 12 2.4%	<b>ENTJ</b> n = 12 2.4%	Judging	Extraversion	

#### Table 3 | Reported MBTI° type distribution: South Africa (Afrikaans) sample

Note: N = 505.

# Table 4 | Reported MBTI° type preference and preference combination distributions: South Africa (Afrikaans) sample

F	Preferences		Preferences Orientation pairs		Pi	Process pairs			Orientation of energy and perceiving pairs			Judging and external orientation pairs		
	n	%		n	%		n	%		n	%		n	%
Е	221	43.8	EJ	96	19.0	ST	183	36.2	ES	112	22.2	тj	160	31.7
I	284	56.2	EP	125	24.8	SF	88	17.4	EN	109	21.6	ТР	149	29.5
S	271	53.7	IJ	152	30.1	NF	108	21.4	IS	159	31.5	FJ	8	17.4
Ν	234	46.3	IP	132	26.1	NT	126	25.0	IN	125	24.8	FP	108	21.4
т	309	61.2												
F	196	38.8												
J	248	49.1												
Р	257	50.9												

Note: N = 505.

(3) orientation of energy and perceiving process pairs, and (4) *judging process* and *external orientation* pairs. The table shows that Ts are more prevalent than Fs, while the other preferences are more evenly distributed.

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

# Relationships Between MBTI° Global Step I<sup>™</sup> and Form M Preference Pair Results

Correlations between MBTI Global Step I and Form M preference pair results for the South Africa (Afrikaans) sample are shown in table 9.<sup>3</sup> The overall agreement rate of whole types between the Global Step I and Form M assessments is 80%, higher than the 60% agreement rate between Form G and Form M reported in the 1998 *MBTI*<sup>®</sup> *Manual* (Myers, McCaulley, Quenk, & Hammer).

Sei	nsing	Intu			
Thinking	Fee	ling	Thinking		
<b>ISTJ</b> n = 24 17.1%	<b>ISFJ</b> n = 3 2.1%	<b>INFJ</b> n = 4 2.9%	<b>INTJ</b> n = 6 4.3%	Judging	Introv
<b>ISTP</b> n = 18 12.9%	<b>ISFP</b> n = 1 0.7%	<b>INFP</b> n = 11 7.9%	<b>INTP</b> <i>n</i> = 14 10.0%	Perceiving	Introversion
<b>ESTP</b> n = 11 7.9%	<b>ESFP</b> n = 4 2.9%	<b>ENFP</b> n = 6 4.3%	<b>ENTP</b> <i>n</i> = 14 10.0%	eiving	Extrav
<b>ESTJ</b> n = 15 10.7%	<b>ESFJ</b> n = 2 1.4%	<b>ENFJ</b> <i>n</i> = 1 0.7%	<b>ENTJ</b> n = 6 4.3%	Judging	Extraversion

#### Table 5 | Reported MBTI° type distribution for men: South Africa (Afrikaans) sample

Note: n = 140.

# Table 6 | Reported MBTI° type preference and preference combination distributions for men: South Africa (Afrikaans) sample

F	Preferences		Preferences Orientation pairs			pairs	Process pairs			Orientation of energy and perceiving pairs			Judging and external orientation pairs		
	n	%		n	%		n	%		n	%		n	%	
Е	59	42.1	EJ	24	17.1	SТ	68	48.6	ES	32	22.9	тј	51	36.4	
Т	81	57.9	EP	35	25.0	SF	10	7.1	EN	27	19.3	ТР	57	40.7	
S	78	55.7	IJ	37	26.4	NF	22	15.7	IS	46	32.9	FJ	10	7.1	
Ν	62	44.3	IP	44	31.4	NT	40	28.6	IN	35	25.0	FP	22	15.7	
т	108	77.1													
F	32	22.9													
J	61	43.6													
Р	79	56.4													

*Note: n* = 140.

Se	nsing	Intu			
Thinking	Fee	Feeling			
<b>ISTJ</b> n = 58 15.9%	<b>ISFJ</b> n = 25 6.8%	<b>INFJ</b> n = 15 4.1%	<b>INTJ</b> n = 17 4.7%	Judging	Introv
<b>ISTP</b> n = 15 4.1%	<b>ISFP</b> n = 15 4.1%	<b>INFP</b> n = 25 6.8%	<b>INTP</b> n = 33 9.0%	Perceiving	Introversion
<b>ESTP</b> n = 14 3.8%	<b>ESFP</b> <i>n</i> = 11 3.0%	<b>ENFP</b> n = 35 9.6%	<b>ENTP</b> n = 30 8.2%	eiving	Extrav
<b>ESTJ</b> n = 28 7.7%	<b>ESFJ</b> n = 27 7.4%	<b>ENFJ</b> <i>n</i> = 11 3.0%	<b>ENTJ</b> n = 6 1.6%	Judging	Extraversion

## Table 7 | Reported MBTI<sup>®</sup> type distribution for women: South Africa (Afrikaans) sample

Note: n = 365.

# Table 8 | Reported MBTI° type preference and preference combination distributions for women: South Africa (Afrikaans) sample

Preferences		references Orientation pairs		Process pairs			Orientation of energy and perceiving pairs			Judging and external orientation pairs				
	n	%		n	%		n	%		n	%		n	%
Е	162	44.4	EJ	72	19.7	ST	115	31.5	ES	80	21.9	ТJ	109	29.9
L	203	55.6	EP	90	24.7	SF	78	21.4	EN	82	22.5	ТР	92	25.2
S	193	52.9	IJ	115	31.5	NF	86	23.6	IS	113	31.0	FJ	78	21.4
Ν	172	47.1	IP	88	24.1	NT	86	23.6	IN	90	24.7	FP	86	23.6
т	201	55.1												
F	164	44.9												
J	187	51.2												
Р	178	48.8												

Note: n = 365.

### Global Step I<sup>®</sup> Preference Pair Intercorrelations

Intercorrelations of Global Step I continuous scores in the South Africa (Afrikaans) 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 South Africa (Afrikaans) sample findings are likewise consistent with those reported for Form M in the 1998 *MBTI*<sup>®</sup> *Manual* (Myers et al.).

### Reliability of Global Step I" Results

This section covers the internal consistency reliability for the Afrikaans translation of the MBTI Global Step I assessment. For full reliability and validity information for the global sample, refer to the *MBTI*<sup>\*</sup> *Manual for the Global Step I*<sup>\*\*</sup> and Step II<sup>\*\*</sup> 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 South Africa (Afrikaans) sample and for the global sample for comparison purposes. The South Africa (Afrikaans) sample alphas range from .90 to .92.

# Table 9 | Relationships between MBTI° GlobalStep I° and Form M preference pair results:South Africa (Afrikaans) sample

	Global Step I" and Form M preference pair results						
Preference pair	Correlation between continuous scores	Agreement rate (%)					
E—I	.97	94					
S-N	.97	94					
T–F	.98	97					
J-P	.98	93					
Overall agreement	rate	80					

Note: N = 505.

#### Table 10 | Intercorrelations of Global Step I" continuous scores: South Africa (Afrikaans) sample

Preference pair	E-I	S-N	T-F	J-P
E–I S–N T–F J–P	14 16 19	20  .22 .53	15 .27 .17	15 .48 .23

*Note:* Correlations for the South Africa (Afrikaans) sample (N = 505) 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<sup>®</sup> preference pair continuous scores: South Africa (Afrikaans) and global samples

		Cronbach's alpha					
Sample	N	E-I	S-N	T-F	J-P		
South Africa (Afrikaans) Global	505 16,773		.91 .87		.92 .88		

# MBTI<sup>®</sup> GLOBAL STEP II<sup>®</sup> ASSESSMENT RESULTS FOR THE SOUTH AFRICA (AFRIKAANS) 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 12). The Global Step II assessment replaces the Form Q assessment and the European Step II assessment.

# Relationships Between MBTI° Global Step II<sup>™</sup> and Form Q Facet Results

Table 12 presents the relationships between MBTI Global Step II and Form Q facet results for the South Africa (Afrikaans) sample.

## **Global Step II**<sup>\*\*</sup> Facet Intercorrelations

Intercorrelations of Global Step II facets are presented in table 13. 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<sup>™</sup> Results

This section covers measurement properties for the Afrikaans translation 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*<sup>®</sup> *Manual for the Global Step I*<sup>®</sup> *and Step II*<sup>®</sup> *Assessments* (Myers et al., 2018).

#### RELIABILITY

Internal consistency reliabilities for Global Step II facets in the South Africa (Afrikaans) sample are presented in table 14.

#### VALIDITY

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

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

#### Table 12 | Relationships between Global Step II<sup>\*\*</sup> and Form Q facet results: South Africa (Afrikaans) sample

-	
Global Step II <sup>°</sup> facet	Correlation between Global Step II" and Form Q facet results
E–I facets	
Initiating-Receiving	.98
Expressive-Contained	.99
Gregarious-Intimate	.98
Active-Reflective	.89
Enthusiastic-Quiet	.99
S–N facets	
Concrete-Abstract	.98
Realistic-Imaginative	.99
Practical-Conceptual	.86
Experiential-Theoretical	.96
Traditional-Original	.97
T–F facets	
Logical-Empathetic	.95
Reasonable-Compassionate	.94
Questioning-Accommodating	
Critical–Accepting	.60
Tough-Tender	
	.81
	.98
J–P facets	
Systematic-Casual	.92
Planful–Open-Ended	.98
Early Starting-	.96
Pressure-Prompted	26
Scheduled-Spontaneous	.96
Methodical-Emergent	.96

Note: N = 505.

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 South Africa (Afrikaans) sample is shown in table 15.

Correlations between facets and preference pairs are presented in table 16. 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 South Africa (Afrikaans) sample correlations are comparable to those reported in the *MBTI*<sup>®</sup> *Step II*<sup>™</sup> *Manual* (Quenk et al., 2001) and the *MBTI*<sup>®</sup>

Global Step II <sup>®</sup> facet	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	<b>16</b> .	17.	18.	19.	20.
E–I facets																				
1. Initiating-Receiving	_																			
2. Expressive-Contained	.59	_																		
3. Gregarious-Intimate	.66	.59	_																	
4. Active-Reflective	.74	.64	.64	_																
5. Enthusiastic-Quiet	.70	.64	.67	.71	-															
S–N facets																				
6. Concrete-Abstract	04	04	.01	01	12	_														
7. Realistic-Imaginative	11	12	06	10	22	.72	_													
8. Practical-Conceptual	10	07	.00	04	15	.63	.69	_												
9. Experiential-Theoretical	02	06	.02	01	05	.67	.55	.54	_											
10. Traditional–Original	16	10	10	10	21	.66	.59	.64	.55	_										
T–F facets																				
11. Logical-Empathetic	11	21	16	18	23	.18	.29	.06	.10	06	_									
12. Reasonable-Compassionate	08	20	12	16	20	.24	.26	.06	.14	01	.74	-								
13. Questioning-Accommodating	.05	09	05	02	04	.02	.09	12	06	29	.58	.63	_							
14. Critical-Accepting	12	19	18	16	22	.16	.24	.08	.06	07	.62	.69	.76	—						
15. Tough–Tender	.04	10	03	03	07	.23	.23	.11	.17	02	.58	.71	.71	.68	-					
J–P facets																				
16. Systematic-Casual	22	16	24	22	33	.54	.51	.38	.36	.58	.28	.28	.07	.23	.23	_				
17. Planful–Open-Ended	14	08	17	15	19	.38	.32	.24	.24	.49	.10	.13	.00	.08	.11	.72	_			
18. Early Starting-Pressure-Prompted	13	09	15	16	19	.33	.26	.22	.23	.41	.05	.05	08	.02	.02	.61	.67	_		
19. Scheduled-Spontaneous	14	08	15	12	20	.49	.45	.37	.36	.61	.09	.12	06	.06	.12	.80	.80	.68	_	
20. Methodical-Emergent	.00	05	11	06	11	.30	.28	.20	.21	.35	.12	.12	.03	.11	.09	.59	.60	.60	.64	_

## Table 13 | Intercorrelations of Global Step II<sup>®</sup> facets: South Africa (Afrikaans) sample

Note: N = 505.

#### Table 14 | Internal consistency and reliabilities of Global Step II<sup>®</sup> facet continuous scores: South Africa (Afrikaans) sample

Global Step II" facet	Cronbach's alpha
E–I facets	
Initiating-Receiving	.86
Expressive-Contained	.79
Gregarious-Intimate	.74
Active-Reflective	.70
Enthusiastic-Quiet	.74
S–N facets	
Concrete-Abstract	.84
Realistic-Imaginative	.77
Practical-Conceptual	.71
Experiential-Theoretical	.75
Traditional-Original	.79
T-F facets	
Logical–Empathetic	.84
Reasonable-Compassionate	.76
Questioning-Accommodating	.67
Critical-Accepting	.61
Tough-Tender	.77
J–P facets	
Systematic–Casual	.81
Planful-Open-Ended	.86
Early Starting-Pressure-Prompted	.81
Scheduled-Spontaneous	.87
Methodical-Emergent	.71

*Note:* N = 505.

#### Table 15 | Percentage of reported out-ofpreference Global Step II" facet scores: South Africa (Afrikaans) sample

Preference	Numl	Number of out-of-preference facet scores (%)										
pair	0	1	2	3	4	5						
E–I	71	23	5	1	0	0						
S-N	69	25	6	0	0	0						
T-F	77	17	5	1	0	0						
J-P	67	23	9	2	0	0						

Note: N = 505.

Step II<sup>®</sup> Manual, European Edition (Quenk, Hammer, & Majors, 2004). The lowest correlation between a facet and its corresponding preference pair is between the Methodical–Emergent facet and J–P.

#### Table 16 | Correlations between Global Step II<sup>™</sup> facets and preference pairs: South Africa (Afrikaans) sample

	Preference pair						
Global Step II <sup>®</sup> facet	E-I	S–N	T-F	J-P			
E–I facets							
Initiating-Receiving	.88	10	07	16			
Expressive-Contained	.80	10	20	09			
Gregarious-Intimate	.79	04	14	18			
Active-Reflective	.85	07	16	16			
Enthusiastic-Quiet	.86	19	21	23			
S-N facets							
Concrete-Abstract	07	.90	.23	.49			
Realistic-Imaginative	15	.85	.30	.44			
Practical-Conceptual	11	.79	.08	.35			
Experiential–Theoretical	05	.75	.14	.34			
Traditional–Original	18	.79	05	.59			
T–F facets							
Logical-Empathetic	20	.18	.90	.14			
Reasonable– Compassionate	16	.22	.90	.16			
Questioning-	.00	03	.74	01			
Accommodating Critical-Accepting	19	.16	.76	.11			
Tough-Tender	02	.22	.80	.11			
J–P facets							
Systematic–Casual	26	.59	.29	.86			
Planful-Open-Ended	17	.40	.13	.90			
Early Starting– Pressure-Prompted	17	.34	.05	.75			
Scheduled-Spontaneous	17	.55	.12	.95			
Methodical-Emergent	06	.32	.12	.70			

*Note:* N = 505.

#### **Global Step II**<sup>\*\*</sup> 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 17 | In-preference, midzone, and out-of-preference percentages and rankings for the Global Step II<sup>®</sup> facets: South Africa (Afrikaans) sample

	In-pre	ference	Mid	zone	Out-of-p	reference
Global Step II <sup>®</sup> facet	%	Rank	%	Rank	%	Rank
E–I facets						
Initiating-Receiving	69.70	4	25.15	15	5.15	13
Expressive-Contained	65.54	11	26.93	10	7.52	10
Gregarious-Intimate	69.31	5	19.80	19	10.89	3
Active-Reflective	61.19	17	34.85	4	3.96	16
Enthusiastic-Quiet	66.73	8	25.15	15	8.12	9
S–N facets						
Concrete-Abstract	69.31	5	27.33	9	3.37	17
Realistic-Imaginative	66.73	8	28.51	7	4.75	14
Practical-Conceptual	64.36	13	25.35	13	10.30	6
Experiential-Theoretical	63.96	14	25.35	13	10.69	4
Traditional–Original	55.64	18	36.83	2	7.52	10
T–F facets						
Logical–Empathetic	71.09	3	25.74	12	3.17	18
Reasonable-Compassionate	63.56	15	34.06	5	2.38	19
Questioning-Accommodating	53.86	20	39.41	1	6.73	12
Critical-Accepting	55.05	19	36.24	3	8.71	7
Tough-Tender	64.95	12	26.53	11	8.51	8
J–P facets						
Systematic-Casual	61.78	16	27.72	8	10.50	5
Planful–Open-Ended	72.28	1	22.97	17	4.75	14
Early Starting-Pressure-Prompted	71.88	2	12.08	20	16.04	1
Scheduled-Spontaneous	69.11	7	29.90	6	0.99	20
Methodical-Emergent	65.74	10	21.78	18	12.48	2

Note: N = 505.

Table 17 shows the percentages and rank order of inpreference, midzone, and out-of-preference scores for the 20 Global Step II facets for the South Africa (Afrikaans) 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 16.04%, followed by Methodical–Emergent at 12.48%. The Scheduled–Spontaneous facet (0.99%) and the Reasonable–Compassionate facet (2.38%) appear least likely to elicit out-of-preference responses.

Gender differences on the Step II facets in the South Africa (Afrikaans) sample are presented in table 18.

#### CONCLUSION

Initial analyses of the Afrikaans translations of the MBTI Global Step I and Step II assessments demonstrate that they each have good internal consistency reliabilities and are consistent with those of prior versions of the MBTI assessment (i.e., Form M and Form Q). Validity was established by the percentage of out-of-preference facet scores and correlations between Step II facets and Step I preferences. While more research should be conducted, all these analyses show that the Afrikaans translations of the MBTI Global Step I and Step II assessments are appropriate for use with individuals in South Africa who read and understand Afrikaans.

# Table 18 | Means, standard deviations, and Cohen's *d* of the Global Step II<sup>®</sup> facets by total sample and gender: South Africa (Afrikaans) sample

		<b>Total sample</b> ( <i>N</i> = 505)		<b>en</b> 140)	<b>Wo</b> i ( <i>n</i> =	Gender difference	
Global Step II" facet	М	SD	М	SD	М	SD	Cohen's d
E–I facets							
Initiating-Receiving	0.06	0.95	0.13	0.96	0.03	0.95	0.10
Expressive-Contained	0.11	0.92	0.18	0.88	0.09	0.94	0.10
Gregarious-Intimate	0.24	0.85	0.23	0.83	0.24	0.85	-0.01
Active-Reflective	0.17	0.83	0.29	0.78	0.13	0.84	0.19
Enthusiastic-Quiet	-0.03	0.87	0.01	0.84	-0.05	0.88	0.07
S–N facets							
Concrete-Abstract	0.07	1.02	0.04	1.00	0.09	1.03	-0.05
Realistic-Imaginative	-0.10	0.92	-0.16	0.92	-0.08	0.92	-0.09
Practical–Conceptual	0.03	0.85	0.14	0.89	-0.01	0.84	0.17
Experiential-Theoretical	0.19	0.85	0.22	0.88	0.18	0.85	0.04
Traditional-Original	0.06	0.94	0.19	0.95	0.01	0.93	0.20
T–F facets							
Logical–Empathetic	-0.23	0.93	-0.53	0.84	-0.12	0.93	-0.45
Reasonable-Compassionate	-0.16	0.86	-0.39	0.81	-0.08	0.86	-0.37
Questioning-Accommodating	-0.32	0.82	-0.57	0.79	-0.23	0.82	-0.42
Critical-Accepting	-0.19	0.78	-0.38	0.79	-0.12	0.77	-0.34
Tough-Tender	-0.37	0.89	-0.60	0.85	-0.28	0.89	-0.37
J–P facets							
Systematic-Casual	-0.37	0.90	-0.36	0.92	-0.38	0.89	0.02
Planful–Open-Ended	-0.07	0.98	0.15	0.97	-0.15	0.97	0.31
Early Starting-Pressure-Prompted	0.14	0.96	0.30	0.98	0.08	0.95	0.23
Scheduled-Spontaneous	-0.01	1.02	0.23	1.00	-0.10	1.01	0.33
Methodical-Emergent	0.07	0.85	0.27	0.84	0.00	0.85	0.32

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

### NOTES

- 1. Originally, samples from India (North American English) and Saudi Arabia (Arabic) were collected, but these were later dropped from the global sample due to sample composition and psychometric concerns.
- 2. 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.
- 3. 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).
- 4. 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<sup>®</sup> 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.
- Dawis, R. V. (1987). Scale construction. *Journal of Counseling Psychology*, *34*, 481–489.
- International Test Commission. (2005). *International guidelines on test adaptation*. Retrieved from www.intestcom.org/files/guideline\_test\_adaptation.pdf

- Myers, I. B., McCaulley, M. H., Quenk, N. L., & Hammer, A. L. (1998). MBTI<sup>®</sup> manual: A guide to the development and use of the Myers-Briggs Type Indicator<sup>®</sup> instrument (3rd ed.). Sunnyvale, CA: The Myers-Briggs Company.
- Myers, I. B., McCaulley, M. H., Quenk, N. L., & Hammer, A. L. (2018). *MBTI*<sup>\*</sup> manual for the Global Step I<sup>\*</sup> and Step II<sup>\*</sup> assessments (4th ed.). Sunnyvale, CA: The Myers-Briggs Company.
- Quenk, N. L., Hammer, A. L., & Majors, M. S. (2001). *MBTI*<sup>\*</sup> *Step II*<sup>\*</sup> *manual*. Sunnyvale, CA: The Myers-Briggs Company.
- Quenk, N. L., Hammer, A. L., & Majors, M. S. (2004). *MBTI*<sup>®</sup> Step II<sup>®</sup> manual, European edition. Sunnyvale, CA: The Myers-Briggs Company.