China (Traditional Chinese)
Supplement to the **MBTI® Manual** for the **Global Step I™** and **Step II™ Assessments**

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CONTENTS

INTRODUCTION

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

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

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

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

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

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

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

This supplement to the 2018 manual summarizes results obtained from responses of the China (Traditional Chinese) sample—hereafter, *Traditional Chinese* sample—to the Global Step I and Step II assessments translated into Chinese using traditional characters. Included in this supplement is a general description of the sample, along with statistical summaries, analyses, and type distributions based on those results.

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

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

Note: Global sample, N = 16,773.
*Data collection for this sample was distributor led; it is not a representative sample.
†Germany sample includes one individual residing in Switzerland.

TRANSLATION PROCESS

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

An initial translation of the 93-item MBTI Form M assessment into Chinese using traditional Chinese characters was completed by C. J. Beuke, D. G. Freeman, and S. Wang for CPPAP (formerly Australian Psychologists Press [APP]) for use in a 2006 study on the translated version's reliability and validity (Beuke, Freeman, & Wang, 2006). The assessment used in the study included an additional 15 items thought to be potentially useful and translated by a professional linguist. This 108-item version was evaluated by in-country expert reviewers and iterated until a satisfactory version of the translation was developed. In the study, data were collected from

a sample of 100 individuals in China and analyzed using classical test theory and prediction ratios, and a final set of items was selected. A "best-fit" type study was also included in the project.

The 93-item Form M translation was later used as the basis for the 230-item research version of the MBTI assessment in Chinese set with traditional characters. For this global project, the existing 93-item Traditional Chinese version was again reviewed by a professional linguist as well as in-country expert reviewers; modifications were made to item wordings to reflect improvements, changes in language usage since originally translated, or other corrections needed to further improve the quality and accuracy of the translation. All changes were reviewed by the linguist as well as in-country expert reviewers, iteratively, until an agreed-upon translation was developed.

DATA COLLECTION

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

Table 2 | Demographic summary: Traditional Chinese sample

Demographic	Target %	Actual %
Age group		
18–24 years	—	32
25–44 years	—	58
45–64 years	—	9
65+ years	—	0
Mean age: 30 years	—	—
Gender		
Female	50	51
Male	50	49
Region of residence		
China—Hong Kong	—	85
China—mainland	—	15
No response	—	<1
Employment status		
Working full-time or part-time (women)	40	41
Working full-time or part-time (men)	40	40
Full-time student (women)	10	10
Full-time student (men)	10	9

Note: N = 477. Percentages in a given category may not total 100% due to rounding of decimals.

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 China who read Chinese set with traditional characters was obtained from a market research firm. Targets were set based on the populations of Hong Kong and mainland China and provided by CPPAP. Table 2 shows the demographic target and actual obtained percentages. The resulting Traditional Chinese sample consists of 477 individuals, 50.7% women and 49.3% men. The age range is 18–64, with an average of 30 years (standard deviation = 9.3).

MBTI® GLOBAL STEP I™ ASSESSMENT RESULTS FOR THE TRADITIONAL CHINESE 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.

Table 3 | Reported MBTI® type distribution: Traditional Chinese sample

Sensing		Intuition	
Thinking	**Feeling**		**Thinking**
ISTJ *n* = 86 18.0%	**ISFJ** *n* = 35 7.3%	**INFJ** *n* = 5 1.0%	**INTJ** *n* = 12 2.5%
ISTP *n* = 74 15.5%	**ISFP** *n* = 30 6.3%	**INFP** *n* = 28 5.9%	**INTP** *n* = 21 4.4%
ESTP *n* = 29 6.1%	**ESFP** *n* = 23 4.8%	**ENFP** *n* = 23 4.8%	**ENTP** *n* = 14 2.9%
ESTJ *n* = 54 11.3%	**ESFJ** *n* = 16 3.4%	**ENFJ** *n* = 9 1.9%	**ENTJ** *n* = 18 3.8%

Judging / Perceiving / Judging — Introversion / Extraversion

Note: N = 477.

Table 4 | Reported MBTI® type preference and preference combination distributions: Traditional Chinese sample

Preferences			Orientation pairs			Process pairs			Orientation of energy and perceiving pairs			Judging and external orientation pairs		
	n	%		*n*	%		*n*	%		*n*	%		*n*	%
E	186	39.0	EJ	97	20.3	ST	243	50.9	ES	122	25.6	TJ	170	35.6
I	291	61.0	EP	89	18.7	SF	104	21.8	EN	64	13.4	TP	138	28.9
S	347	72.7	IJ	138	28.9	NF	65	13.6	IS	225	47.2	FJ	65	13.6
N	130	27.3	IP	153	32.1	NT	65	13.6	IN	66	13.8	FP	104	21.8
T	308	64.6												
F	169	35.4												
J	235	49.3												
P	242	50.7												

Note: N = 477.

MBTI® Type and Preference Distributions

MBTI type was computed for all participants in the Traditional Chinese 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 ISTP. The least common types are INFJ and ENFJ. As reported in the *Technical Brief for the MBTI® Form M and Form Q Assessments—Traditional Chinese* (Schaubhut & Thompson, 2010), the most common types in a combined sample of research and commercial data (*N* = 131) at that time were ISTJ and

ENFP. The least common types in that sample were INFJ and ESFP. Table 4 shows the distributions of preferences as well as four two-preference combinations: (1) *orientation* pairs, (2) *process* pairs, (3) *orientation of energy* and *perceiving process* pairs, and (4) *judging process* and *external orientation* pairs. The table shows that of the preferences, Is are more prevalent than Es, Ss more than Ns, and Ts more than Fs, while Js and Ps are more evenly distributed.

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

Table 5 | Reported MBTI® type distribution for men: Traditional Chinese sample

Sensing		Intuition		
Thinking	**Feeling**		**Thinking**	
ISTJ *n* = 46 19.6%	**ISFJ** *n* = 9 3.8%	**INFJ** *n* = 0 0.0%	**INTJ** *n* = 3 1.3%	Judging — Introversion
ISTP *n* = 45 19.1%	**ISFP** *n* = 11 4.7%	**INFP** *n* = 15 6.4%	**INTP** *n* = 15 6.4%	Perceiving — Introversion
ESTP *n* = 18 7.7%	**ESFP** *n* = 9 3.8%	**ENFP** *n* = 7 3.0%	**ENTP** *n* = 5 2.1%	Perceiving — Extraversion
ESTJ *n* = 31 13.2%	**ESFJ** *n* = 4 1.7%	**ENFJ** *n* = 3 1.3%	**ENTJ** *n* = 14 6.0%	Judging — Extraversion

Note: n = 235.

Table 6 | Reported MBTI® type preference and preference combination distributions for men: Traditional Chinese sample

Preferences			Orientation pairs			Process pairs			Orientation of energy and perceiving pairs			Judging and external orientation pairs		
	n	%		*n*	%		*n*	%		*n*	%		*n*	%
E	91	38.7	EJ	52	22.1	ST	140	59.6	ES	62	26.4	TJ	94	40.0
I	144	61.3	EP	39	16.6	SF	33	14.0	EN	29	12.3	TP	83	35.3
S	173	73.6	IJ	58	24.7	NF	25	10.6	IS	111	47.2	FJ	16	6.8
N	62	26.4	IP	86	36.6	NT	37	15.7	IN	33	14.0	FP	42	17.9
T	177	75.3												
F	58	24.7												
J	110	46.8												
P	125	53.2												

Note: n = 235.

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

Correlations between MBTI Global Step I and Form M preference pair results for the Traditional Chinese sample are shown in table 9.[3] The overall agreement rate of whole types between the Global Step I and Form M assessments was 71%, 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 continuous scores in the Traditional Chinese 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 Traditional Chinese sample findings are likewise consistent with those reported for Form M in the 1998 *MBTI® Manual* (Myers et al.).

Table 7 | Reported MBTI® type distribution for women: Traditional Chinese sample

	Sensing		Intuition			
	Thinking	**Feeling**		**Thinking**		
ISTJ n = 40 16.5%	**ISFJ** n = 26 10.7%	**INFJ** n = 5 2.1%	**INTJ** n = 9 3.7%	Judging	Introversion
ISTP n = 29 12.0%	**ISFP** n = 19 7.9%	**INFP** n = 13 5.4%	**INTP** n = 6 2.5%	Perceiving	
ESTP n = 11 4.5%	**ESFP** n = 14 5.8%	**ENFP** n = 16 6.6%	**ENTP** n = 9 3.7%	Perceiving	Extraversion
ESTJ n = 23 9.5%	**ESFJ** n = 12 5.0%	**ENFJ** n = 6 2.5%	**ENTJ** n = 4 1.7%	Judging	

Note: n = 242.

Table 8 | Reported MBTI® type preference and preference combination distributions for women: Traditional Chinese sample

Preferences			Orientation pairs			Process pairs			Orientation of energy and perceiving pairs			Judging and external orientation pairs		
	n	%		*n*	%		*n*	%		*n*	%		*n*	%
E	95	39.3	EJ	45	18.6	ST	103	42.6	ES	60	24.8	TJ	76	31.4
I	147	60.7	EP	50	20.7	SF	71	29.3	EN	35	14.5	TP	55	22.7
S	174	71.9	IJ	80	33.1	NF	40	16.5	IS	114	47.1	FJ	49	20.2
N	68	28.1	IP	67	27.7	NT	28	11.6	IN	33	13.6	FP	62	25.6
T	131	54.1												
F	111	45.9												
J	125	51.7												
P	117	48.3												

Note: n = 242.

Reliability and Validity of Global Step I™ Results

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

RELIABILITY

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

Table 9 | Relationships between MBTI® Global Step I™ and Form M preference pair results: Traditional Chinese sample

	Global Step I™ and Form M preference pair results	
Preference pair	Correlation between continuous scores	Agreement rate (%)
E–I	.95	89
S–N	.95	92
T–F	.97	95
J–P	.95	90
Overall agreement rate		*71*

Note: N = 477.

Table 10 | Intercorrelations of Global Step I™ continuous scores: Traditional Chinese sample

Preference pair	E–I	S–N	T–F	J–P
E–I	—	−.20	−.15	−.15
S–N	−.29	—	.27	.48
T–F	−.13	.37	—	.23
J–P	−.04	.47	.35	—

Note: Correlations for the Traditional Chinese sample (N = 477) are below the diagonal; those for the global sample (N = 16,773) are above the diagonal.

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 Traditional Chinese sample and for the global sample for comparison purposes. The Traditional Chinese sample alphas range from .79 to .86.

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 Traditional Chinese 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. Test-retest correlations and test-retest agreement rates are also shown for the global sample in this table for comparison purposes.

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

		Cronbach's alpha			
Sample	N	E–I	S–N	T–F	J–P
Traditional Chinese	477	.86	.79	.82	.79
Global	16,773	.89	.87	.89	.88

		Test-retest correlation			
Sample (interval)	n	E–I	S–N	T–F	J–P
Traditional Chinese (≤15 weeks)	89	.67	.63	.58	.59
Global (≤15 weeks)	1,762	.86	.83	.82	.81

		Test-retest agreement rate (%)			
Sample (interval)	n	E–I	S–N	T–F	J–P
Traditional Chinese (≤15 weeks)	89	75	82	71	64
Global (≤15 weeks)	1,762	84	86	79	79

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

		Number of preferences the same at retest (%)				
Sample (interval)	n	4	3	2	1	0
Traditional Chinese (≤15 weeks)	89	33	37	22	6	2

Table 12 shows the percentage of individuals who reported zero, one, two, three, or four preferences the same upon retest in the Traditional Chinese sample. Seventy 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 Traditional Chinese version of the MBTI Global Step I assessment and the *Adjective Check List* (ACL; Gough & Heilbrun, 1983), as well as those between the Traditional Chinese translation and the CPI 260® assessment (Gough & Bradley, 2005).

ACL assessment. A portion of the Traditional Chinese sample participants (*n* = 73) also completed a translated version of the ACL when completing the research version of the MBTI assessment. The ACL consists of 300 different adjectives—such as *intelligent, alert, clear-thinking,* and *noisy*—encompassing a wide variety of behaviors. Respondents were asked to select the adjectives they believed were self-descriptive (Gough & Heilbrun, 1983). According to Gough and Heilbrun,

results for any respondent with fewer than 20 adjectives or more than 250 adjectives checked should be cautiously interpreted; those with fewer than 10 or more than 270 checked are almost always invalid. As a result, respondents with too many or too few adjectives were omitted prior to analysis. The more conservative approach was taken here, and respondents with fewer than 20 adjectives or more than 250 adjectives checked were removed from the analysis of the ACL. Scales on the ACL assessment result from combinations of adjectives. Selected ACL scale means, standard deviations, and Cohen's *d* (Cohen, 1992; mean differences expressed in units of standard deviation[4]) for MBTI preferences for the Traditional Chinese sample are presented in tables 13–16.

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

ACL scale	ACL scale description	Extraversion		Introversion		Cohen's *d*
		M	*SD*	*M*	*SD*	
Sum of number checked	Total number of adjectives checked	69.46	37.17	58.38	32.48	−0.32
Sum of favorable checked	Total number of favorable adjectives checked	30.46	19.27	17.74	11.04	−0.88
Sum of unfavorable checked	Total number of unfavorable adjectives checked	4.96	5.36	10.53	9.67	0.66
Communality	An indicator of providing common or similar responses compared to the responses of people in general	6.31	4.67	3.00	4.37	−0.74
Achievement	To strive to be outstanding in pursuits of socially recognized significance	7.42	6.33	1.40	5.70	−1.02
Dominance	To seek and maintain a role as leader in groups, or to be influential and controlling in individual relationships	1.65	5.06	−3.21	4.89	−0.98
Endurance	To persist in any task undertaken	6.73	6.26	1.83	5.77	−0.82
Order	To place special emphasis on neatness, organization, and planning in one's activities	8.12	5.67	4.32	4.73	−0.75
Intraception	To engage in attempts to understand one's behavior or the behavior of others	8.42	5.28	4.66	4.04	−0.83
Nurturance	To engage in behaviors that provide material or emotional benefits to others	8.38	6.89	3.91	4.74	−0.80
Affiliation	To seek and maintain numerous personal friendships	12.92	8.84	6.19	3.87	−1.10
Exhibition	To behave in such a way as to elicit the immediate attention of others	0.15	3.60	−2.87	3.66	−0.83
Autonomy	To act independently of others or of social values and expectations	0.46	3.24	0.04	3.34	−0.13
Aggression	To engage in behaviors that attack or hurt others	−2.50	3.70	−4.21	4.25	−0.42
Change	To seek novelty of experience and to avoid routine	1.46	2.63	−0.49	2.95	−0.69
Succorance	To solicit sympathy, affection, or emotional support from others	−0.58	3.16	2.00	3.99	0.69
Deference	To seek and maintain subordinate roles in relationships with others	2.88	3.78	1.87	3.86	−0.26
Self-Control	To control one's behaviors and emotions	2.73	3.00	3.51	3.23	0.25
Self-Confidence	Poise, self-assurance, and belief in one's ability to achieve one's goals	4.96	5.61	−0.66	4.03	−1.21
Personal Adjustment	The ability to cope with situational and interpersonal demands, and a feeling of efficacy	5.15	5.40	1.36	3.90	−0.84
Ideal Self	Strong sense of personal worth; or harmony between what one is and what one wants to be	5.77	6.91	−1.00	4.98	−1.18
Creative Personality	The desire to do and think differently from the norm, and a talent for originality	1.42	3.32	−1.64	3.14	−0.95
Military Leadership	Steadiness, self-discipline, and good judgment of the kind required in positions of military (or related) leadership	5.62	5.22	1.28	4.07	−0.96
Adult	Attitudes of independence, objectivity, and industriousness associated with the concept of "mature adult"	6.77	6.46	2.11	5.14	−0.83

Note: Extraversion, *n* = 26; Introversion, *n* = 47. For information on Cohen's *d*, see note 4 at the back of this supplement.

ACL scale	ACL scale description	Sensing		Intuition		
		M	SD	M	SD	Cohen's d
Sum of number checked	Total number of adjectives checked	59.28	30.54	76.38	47.42	0.50
Sum of favorable checked	Total number of favorable adjectives checked	21.03	15.34	28.00	16.31	0.45
Sum of unfavorable checked	Total number of unfavorable adjectives checked	8.30	8.54	9.69	10.06	0.16
Communality	An indicator of providing common or similar responses compared to the responses of people in general	3.85	4.81	5.69	4.15	0.39
Achievement	To strive to be outstanding in pursuits of socially recognized significance	3.43	6.51	4.08	7.04	0.10
Dominance	To seek and maintain a role as leader in groups, or to be influential and controlling in individual relationships	−1.43	5.16	−1.69	6.87	−0.05
Endurance	To persist in any task undertaken	3.63	6.41	3.31	6.36	−0.05
Order	To place special emphasis on neatness, organization, and planning in one's activities	5.65	5.32	5.77	5.80	0.02
Intraception	To engage in attempts to understand one's behavior or the behavior of others	5.55	4.84	8.08	4.41	0.53
Nurturance	To engage in behaviors that provide material or emotional benefits to others	4.98	5.84	7.92	6.12	0.50
Affiliation	To seek and maintain numerous personal friendships	8.12	6.85	10.77	6.80	0.39
Exhibition	To behave in such a way as to elicit the immediate attention of others	−1.63	3.63	−2.54	5.06	−0.23
Autonomy	To act independently of others or of social values and expectations	0.08	3.03	0.69	4.39	0.18
Aggression	To engage in behaviors that attack or hurt others	−3.60	3.88	−3.62	5.28	0.00
Change	To seek novelty of experience and to avoid routine	−0.10	2.88	1.62	3.10	0.59
Succorance	To solicit sympathy, affection, or emotional support from others	0.93	3.42	1.77	5.75	0.21
Deference	To seek and maintain subordinate roles in relationships with others	2.28	3.39	2.00	5.63	−0.07
Self-Control	To control one's behaviors and emotions	3.30	2.92	2.92	4.19	−0.12
Self-Confidence	Poise, self-assurance, and belief in one's ability to achieve one's goals	1.20	5.06	2.00	6.73	0.15
Personal Adjustment	The ability to cope with situational and interpersonal demands, and a feeling of efficacy	2.72	4.99	2.69	4.13	−0.01
Ideal Self	Strong sense of personal worth; or harmony between what one is and what one wants to be	1.27	6.45	2.08	7.31	0.12
Creative Personality	The desire to do and think differently from the norm, and a talent for originality	−0.68	3.16	0.08	4.94	0.22
Military Leadership	Steadiness, self-discipline, and good judgment of the kind required in positions of military (or related) leadership	2.73	5.02	3.23	4.73	0.10
Adult	Attitudes of independence, objectivity, and industriousness associated with the concept of "mature adult"	3.92	6.03	3.08	6.26	−0.14

Note: Sensing, *n* = 60; Intuition, *n* = 13.

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

ACL scale	ACL scale description	Thinking		Feeling		Cohen's d
		M	SD	M	SD	
Sum of number checked	Total number of adjectives checked	59.16	31.12	72.00	42.42	0.38
Sum of favorable checked	Total number of favorable adjectives checked	22.20	16.16	22.50	14.34	0.02
Sum of unfavorable checked	Total number of unfavorable adjectives checked	7.40	7.83	12.06	10.67	0.54
Communality	An indicator of providing common or similar responses compared to the responses of people in general	4.16	4.83	4.22	4.51	0.01
Achievement	To strive to be outstanding in pursuits of socially recognized significance	4.11	6.78	1.83	5.69	−0.35
Dominance	To seek and maintain a role as leader in groups, or to be influential and controlling in individual relationships	−0.84	5.23	−3.44	5.77	−0.49
Endurance	To persist in any task undertaken	4.31	6.69	1.33	4.70	−0.47
Order	To place special emphasis on neatness, organization, and planning in one's activities	6.31	5.52	3.72	4.44	−0.49
Intraception	To engage in attempts to understand one's behavior or the behavior of others	6.20	4.89	5.39	4.78	−0.17
Nurturance	To engage in behaviors that provide material or emotional benefits to others	5.09	6.22	6.78	4.99	0.28
Affiliation	To seek and maintain numerous personal friendships	8.55	7.35	8.72	5.34	0.03
Exhibition	To behave in such a way as to elicit the immediate attention of others	−1.56	3.86	−2.50	4.03	−0.24
Autonomy	To act independently of others or of social values and expectations	0.16	3.25	0.28	3.49	0.03
Aggression	To engage in behaviors that attack or hurt others	−3.40	3.92	−4.22	4.75	−0.20
Change	To seek novelty of experience and to avoid routine	0.02	2.88	0.78	3.26	0.26
Succorance	To solicit sympathy, affection, or emotional support from others	0.45	3.29	3.00	4.98	0.68
Deference	To seek and maintain subordinate roles in relationships with others	2.15	3.79	2.50	4.08	0.09
Self-Control	To control one's behaviors and emotions	2.93	2.94	4.17	3.65	0.40
Self-Confidence	Poise, self-assurance, and belief in one's ability to achieve one's goals	2.00	5.21	−0.67	5.41	−0.51
Personal Adjustment	The ability to cope with situational and interpersonal demands, and a feeling of efficacy	3.20	4.92	1.22	4.26	−0.41
Ideal Self	Strong sense of personal worth; or harmony between what one is and what one wants to be	2.53	6.61	−2.00	5.22	−0.72
Creative Personality	The desire to do and think differently from the norm, and a talent for originality	0.05	3.12	−2.39	4.06	−0.72
Military Leadership	Steadiness, self-discipline, and good judgment of the kind required in positions of military (or related) leadership	2.91	5.18	2.56	4.25	−0.07
Adult	Attitudes of independence, objectivity, and industriousness associated with the concept of "mature adult"	4.29	6.14	2.17	5.57	−0.35

Note: Thinking, *n* = 55; Feeling, *n* = 18.

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

ACL scale	ACL scale description	Judging		Perceiving		
		M	SD	M	SD	Cohen's d
Sum of number checked	Total number of adjectives checked	59.77	31.15	66.96	39.80	0.21
Sum of favorable checked	Total number of favorable adjectives checked	22.79	16.78	21.35	13.59	−0.09
Sum of unfavorable checked	Total number of unfavorable adjectives checked	6.94	7.21	11.46	10.60	0.53
Communality	An indicator of providing common or similar responses compared to the responses of people in general	4.28	4.79	4.00	4.68	−0.06
Achievement	To strive to be outstanding in pursuits of socially recognized significance	4.23	6.67	2.31	6.30	−0.29
Dominance	To seek and maintain a role as leader in groups, or to be influential and controlling in individual relationships	−1.04	5.22	−2.27	5.86	−0.22
Endurance	To persist in any task undertaken	4.57	6.57	1.77	5.64	−0.45
Order	To place special emphasis on neatness, organization, and planning in one's activities	6.55	5.35	4.08	5.11	−0.47
Intraception	To engage in attempts to understand one's behavior or the behavior of others	6.30	5.06	5.46	4.46	−0.17
Nurturance	To engage in behaviors that provide material or emotional benefits to others	5.57	6.12	5.38	5.76	−0.03
Affiliation	To seek and maintain numerous personal friendships	8.87	7.65	8.08	5.27	−0.12
Exhibition	To behave in such a way as to elicit the immediate attention of others	−1.57	3.50	−2.19	4.57	−0.16
Autonomy	To act independently of others or of social values and expectations	−0.28	2.96	1.04	3.71	0.41
Aggression	To engage in behaviors that attack or hurt others	−3.87	3.67	−3.12	4.88	0.18
Change	To seek novelty of experience and to avoid routine	−0.32	2.98	1.15	2.77	0.51
Succorance	To solicit sympathy, affection, or emotional support from others	0.51	3.49	2.12	4.43	0.42
Deference	To seek and maintain subordinate roles in relationships with others	2.87	3.54	1.08	4.15	−0.48
Self-Control	To control one's behaviors and emotions	3.55	3.00	2.65	3.39	−0.29
Self-Confidence	Poise, self-assurance, and belief in one's ability to achieve one's goals	1.91	5.31	0.31	5.37	−0.30
Personal Adjustment	The ability to cope with situational and interpersonal demands, and a feeling of efficacy	3.57	5.01	1.15	4.09	−0.51
Ideal Self	Strong sense of personal worth; or harmony between what one is and what one wants to be	2.68	6.81	−0.88	5.48	−0.56
Creative Personality	The desire to do and think differently from the norm, and a talent for originality	−0.55	3.35	−0.54	3.86	0.00
Military Leadership	Steadiness, self-discipline, and good judgment of the kind required in positions of military (or related) leadership	3.32	5.45	1.92	3.79	−0.28
Adult	Attitudes of independence, objectivity, and industriousness associated with the concept of "mature adult"	4.94	6.02	1.65	5.58	−0.56

Note: Judging, *n* = 47; Perceiving, *n* = 26.

MBTI® GLOBAL STEP II™ ASSESSMENT RESULTS FOR THE TRADITIONAL CHINESE 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.

Table 17 | Relationships between Global Step II™, Form Q, and European Step II™ facet results: Traditional Chinese sample

	Correlation between continuous scores	
Global Step II™ facet	Global Step II™ and Form Q facet results	Global Step II™ and European Step II™ facet results
E–I facets		
Initiating–Receiving	.96	.95
Expressive–Contained	.98	.90
Gregarious–Intimate	.97	.98
Active–Reflective	.85	.85
Enthusiastic–Quiet	.98	.97
S–N facets		
Concrete–Abstract	.92	.89
Realistic–Imaginative	.99	.99
Practical–Conceptual	.83	.84
Experiential–Theoretical	.89	.96
Traditional–Original	.94	.92
T–F facets		
Logical–Empathetic	.92	.93
Reasonable–Compassionate	.88	.95
Questioning–Accommodating	.41	.64
Critical–Accepting	.74	.73
Tough–Tender	.95	.93
J–P facets		
Systematic–Casual	.91	.96
Planful–Open-Ended	.95	.96
Early Starting–Pressure-Prompted	.91	.90
Scheduled–Spontaneous	.92	.89
Methodical–Emergent	.95	.85

Note: N = 477.

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 Traditional Chinese sample.

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 Traditional Chinese 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® 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 Traditional Chinese sample are presented in table 19.

VALIDITY

Reported here as evidence of the validity of the Traditional Chinese 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 another assessment.

The five facets within each preference pair do not represent the entire conceptual domain of the preference pair. Further, it is not uncommon for individuals to have a facet score on the side opposite that of their preference in a given preference pair. For example, an Extravert may score toward the Intimate pole. This apparent inconsistency is referred to as an out-of-preference score and defined as a facet score from −2 to −5 when a respondent has preferences for I, N, F, or P; or from 2 to 5 when a respondent has preferences for E, S, T, or J. While it is not unusual to have a number of out-of-preference scores, it is relatively rare to have out-of-preference scores in three or more facets within any one preference pair. The percentage of out-of-preference facet scores for each preference pair in the Traditional Chinese sample is shown in table 20.

Table 18 | Intercorrelations of Global Step II™ facets: Traditional Chinese 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	.59	—																		
3. Gregarious–Intimate	.60	.45	—																	
4. Active–Reflective	.70	.61	.53	—																
5. Enthusiastic–Quiet	.52	.41	.59	.51	—															
S–N facets																				
6. Concrete–Abstract	−.21	−.15	−.16	−.19	−.23	—														
7. Realistic–Imaginative	−.16	−.12	−.20	−.20	−.34	.51	—													
8. Practical–Conceptual	−.15	−.11	−.23	−.13	−.36	.50	.61	—												
9. Experiential–Theoretical	−.08	−.05	−.02	−.12	−.01	.27	.20	.15	—											
10. Traditional–Original	−.22	−.12	−.17	−.20	−.31	.48	.43	.55	.21	—										
T–F facets																				
11. Logical–Empathetic	−.05	−.16	−.03	−.13	−.21	.37	.44	.26	−.04	.17	—									
12. Reasonable–Compassionate	.03	−.07	.09	−.04	−.04	.32	.30	.15	.01	.09	.66	—								
13. Questioning–Accommodating	.07	−.02	.08	.02	.00	.07	.14	−.04	−.05	−.17	.38	.39	—							
14. Critical–Accepting	−.11	−.17	−.12	−.15	−.25	.23	.27	.17	−.13	.05	.43	.45	.62	—						
15. Tough–Tender	.10	.00	.06	.07	−.02	.22	.20	.13	−.05	−.02	.48	.55	.56	.55	—					
J–P facets																				
16. Systematic–Casual	−.08	−.14	.02	−.10	−.09	.47	.38	.28	.11	.44	.44	.39	.11	.22	.20	—				
17. Planful–Open-Ended	−.06	−.06	.08	−.10	.00	.34	.22	.23	.12	.35	.26	.23	.04	.10	.06	.55	—			
18. Early Starting–Pressure-Prompted	−.01	−.01	.00	−.10	−.02	.12	.17	.10	.06	.21	.18	.13	.00	.03	.04	.31	.38	—		
19. Scheduled–Spontaneous	−.10	−.09	.04	−.15	.00	.40	.33	.26	.14	.42	.33	.29	.13	.18	.12	.64	.67	.36	—	
20. Methodical–Emergent	.01	−.08	.02	−.04	−.04	.21	.17	.13	−.04	.16	.31	.23	.19	.22	.16	.46	.39	.35	.46	—

Note: N = 477.

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

Global Step II™ facet	Cronbach's alpha	Test-retest correlation
E–I facets		
Initiating–Receiving	.74	.62
Expressive–Contained	.60	.52
Gregarious–Intimate	.56	.61
Active–Reflective	.64	.62
Enthusiastic–Quiet	.65	.52
S–N facets		
Concrete–Abstract	.51	.53
Realistic–Imaginative	.65	.62
Practical–Conceptual	.65	.52
Experiential–Theoretical	.50	.54
Traditional–Original	.62	.51
T–F facets		
Logical–Empathetic	.74	.60
Reasonable–Compassionate	.62	.43
Questioning–Accommodating	.43	.52
Critical–Accepting	.32	.36
Tough–Tender	.63	.34
J–P facets		
Systematic–Casual	.65	.60
Planful–Open-Ended	.63	.53
Early Starting–Pressure-Prompted	.49	.55
Scheduled–Spontaneous	.66	.57
Methodical–Emergent	.46	.46

Note: N = 477; test-retest, n = 89.

Table 20 | Percentage of reported out-of-preference Global Step II™ facet scores: Traditional Chinese sample

Preference pair	Number of out-of-preference facet scores (%)					
	0	1	2	3	4	5
E–I	66	25	8	1	0	0
S–N	60	31	8	1	0	0
T–F	71	23	5	1	0	0
J–P	54	35	9	2	0	0

Note: N = 477.

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: Traditional Chinese sample

Global Step II™ facet	Preference pair			
	E–I	S–N	T–F	J–P
E–I facets				
Initiating–Receiving	.84	−.21	−.03	−.04
Expressive–Contained	.73	−.16	−.14	−.07
Gregarious–Intimate	.74	−.19	.01	.08
Active–Reflective	.81	−.22	−.09	−.10
Enthusiastic–Quiet	.74	−.35	−.17	.00
S–N facets				
Concrete–Abstract	−.24	.77	.39	.42
Realistic–Imaginative	−.28	.78	.41	.33
Practical–Conceptual	−.25	.74	.23	.27
Experiential–Theoretical	−.07	.43	−.03	.12
Traditional–Original	−.25	.72	.12	.44
T–F facets				
Logical–Empathetic	−.17	.39	.87	.37
Reasonable–Compassionate	−.02	.30	.83	.32
Questioning–Accommodating	.00	.04	.56	.10
Critical–Accepting	−.22	.20	.60	.18
Tough–Tender	.04	.18	.73	.14
J–P facets				
Systematic–Casual	−.11	.50	.42	.76
Planful–Open-Ended	−.04	.36	.23	.82
Early Starting–Pressure-Prompted	−.06	.22	.15	.50
Scheduled–Spontaneous	−.09	.45	.31	.90
Methodical–Emergent	−.05	.20	.31	.55

Note: N = 477.

& Majors, 2001, p. 104). The Traditional Chinese 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 Traditional Chinese version, the facets were correlated with scales of one other assessment, the *Adjective Check List* (ACL). A description of the relationship between the MBTI assessment and the ACL follows.

ACL assessment. ACL scales correlated with the Global Step II facets; a selection of these correlations is presented in table 22. The relationships between the MBTI Global Step II assessment and the ACL are

Global Step II™ facet scale	ACL scale												
	Communality	Dominance	Endurance	Order	Nurturance	Affiliation	Exhibition	Change	Deference	Self-Control	Self-Confidence	Personal Adjustment	Creative Personality
E–I facet scales													
Initiating–Receiving	−.34	−.43	−.34	−.30	−.35	−.39	−.37	−.24	−.04	.16	−.43	−.35	−.35
Expressive–Contained	−.19	−.30	−.30	−.28	−.30	−.38	−.29	−.10	−.02	.12	−.31	−.29	−.24
Gregarious–Intimate	−.34	−.32	−.28	−.29	−.39	−.46	−.17	−.34	−.21	.02	−.39	−.32	−.33
Active–Reflective	−.30	−.45	−.36	−.32	−.35	−.41	−.35	−.32	.05	.22	−.43	−.29	−.33
Enthusiastic–Quiet	−.29	−.37	−.32	−.28	−.32	−.44	−.37	−.36	−.01	.11	−.38	−.28	−.29
S–N facet scales													
Concrete–Abstract	−.04	−.05	−.16	−.19	.04	.10	.07	.32	−.12	−.15	−.02	−.14	.13
Realistic–Imaginative	.13	.08	.03	−.01	.17	.15	.07	.27	−.10	−.10	.16	−.01	.17
Practical–Conceptual	.15	.03	−.02	.03	.10	.16	−.04	.28	.00	−.15	.11	−.07	.10
Experiential–Theoretical	−.04	−.02	−.07	−.13	−.01	−.05	.00	.13	−.22	−.15	.01	−.13	.20
Traditional–Original	.12	.10	.07	.06	.14	.20	.10	.34	−.10	−.11	.11	−.02	.17
T–F facet scales													
Logical–Empathetic	.01	−.12	−.17	−.21	.16	.11	−.01	.22	−.08	.07	−.12	−.16	−.19
Reasonable–Compassionate	−.05	−.24	−.15	−.18	.21	.05	−.18	.05	.03	.17	−.24	−.14	−.26
Questioning–Accommodating	−.14	−.24	−.22	−.22	.13	.03	−.08	−.09	.09	.12	−.18	−.13	−.23
Critical–Accepting	.09	−.12	−.06	−.08	.29	.20	−.03	.08	.10	.17	−.08	−.10	−.18
Tough–Tender	.05	−.15	−.13	−.07	.21	.11	−.10	.16	.07	.15	−.13	−.01	−.17
J–P facet scales													
Systematic–Casual	−.06	−.13	−.30	−.31	.06	.04	−.02	.35	−.30	−.13	−.12	−.25	.01
Planful–Open-Ended	−.08	.02	−.18	−.20	−.09	−.04	.04	.14	−.36	−.13	−.02	−.18	.16
Early Starting–Pressure-Prompted	−.06	.02	−.07	−.08	.02	.03	.17	.32	−.35	−.27	.04	.00	.26
Scheduled–Spontaneous	−.12	−.06	−.24	−.29	−.08	−.07	.00	.20	−.23	−.10	−.12	−.36	−.04
Methodical–Emergent	−.01	−.19	−.21	−.21	.07	−.01	−.06	.13	−.14	.02	−.16	−.18	−.02

Note: n = 92.

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

Global Step II™ Facet Distributions

Determining whether a particular score is in-preference, midzone, or out-of-preference provides the basis for recognizing and understanding individual differences among people of the same type. When giving feedback to respondents, for practitioners the most important verification issue is the accuracy with which the scores reflect their placement at either pole or in the midzone. If a respondent disagrees with results on a facet, interpretation will be affected. For example, a respondent may judge a facet score that was reported as midzone to

be actually out-of-preference or in-preference. In such an instance, statements in the report will be incorrect for that facet, so the practitioner must provide appropriate interpretive information that corresponds to the respondent's verified placement.

Table 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 Traditional Chinese 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 Methodical–Emergent at 20.34%, followed by Early Starting–Pressure-Prompted at

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

Global Step II™ facet	In-preference		Midzone		Out-of-preference	
	%	Rank	%	Rank	%	Rank
E–I facets						
Initiating–Receiving	53.88	6	43.40	5	2.73	19
Expressive–Contained	46.75	17	48.22	4	5.03	15
Gregarious–Intimate	56.39	3	30.19	18	13.42	5
Active–Reflective	58.70	1	33.75	16	7.55	12
Enthusiastic–Quiet	49.90	15	35.85	15	14.26	4
S–N facets						
Concrete–Abstract	40.04	19	56.60	1	3.35	17
Realistic–Imaginative	53.46	9	36.90	13	9.64	10
Practical–Conceptual	53.67	7	32.91	17	13.42	5
Experiential–Theoretical	42.77	18	39.83	8	17.40	3
Traditional–Original	51.78	13	41.93	6	6.29	13
T–F facets						
Logical–Empathetic	56.81	2	38.16	12	5.03	15
Reasonable–Compassionate	54.72	5	41.93	6	3.35	17
Questioning–Accommodating	36.69	20	50.94	2	12.37	7
Critical–Accepting	53.67	7	36.06	14	10.27	9
Tough–Tender	55.35	4	38.57	11	6.08	14
J–P facets						
Systematic–Casual	50.10	14	39.41	9	10.48	8
Planful–Open-Ended	52.20	12	39.20	10	8.60	11
Early Starting–Pressure-Prompted	52.62	10	28.30	19	19.08	2
Scheduled–Spontaneous	49.90	15	49.69	3	0.42	20
Methodical–Emergent	52.62	10	27.04	20	20.34	1

Note: N = 477.

19.08%. The Scheduled–Spontaneous facet (0.42%) and the Initiating–Receiving facet (2.73%) appear least likely to elicit out-of-preference responses.

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

CONCLUSION

Initial analyses of the Traditional Chinese 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 those of prior forms of the MBTI assessment (i.e.,

Form M and Form Q, European Step I and Step II). Validity was established in several ways. First, included in this supplement are mean ACL 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 ACL 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 Traditional Chinese translations of the MBTI Global Step I and Step II assessments have adequate reliability and validity and are appropriate for use with individuals in China who read Chinese set with traditional characters.

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

Global Step II™ facet	Total sample (N = 477)		Men (n = 235)		Women (n = 242)		Gender difference
	M	SD	M	SD	M	SD	Cohen's *d*
E−I facets							
Initiating−Receiving	0.27	0.74	0.25	0.72	0.29	0.76	−0.06
Expressive−Contained	0.18	0.71	0.16	0.71	0.20	0.70	−0.06
Gregarious−Intimate	−0.11	0.75	−0.13	0.77	−0.08	0.73	−0.06
Active−Reflective	0.15	0.83	0.09	0.81	0.21	0.85	−0.15
Enthusiastic−Quiet	−0.03	0.80	0.01	0.78	−0.06	0.82	0.08
S−N facets							
Concrete−Abstract	−0.24	0.63	−0.26	0.61	−0.21	0.64	−0.08
Realistic−Imaginative	−0.13	0.79	−0.25	0.80	0.00	0.75	−0.32
Practical−Conceptual	−0.11	0.80	−0.16	0.81	−0.06	0.79	−0.12
Experiential−Theoretical	−0.08	0.68	0.02	0.67	−0.18	0.67	0.29
Traditional−Original	−0.41	0.74	−0.42	0.75	−0.41	0.74	0.00
T−F facets							
Logical−Empathetic	−0.09	0.82	−0.27	0.81	0.09	0.78	−0.45
Reasonable−Compassionate	−0.33	0.71	−0.43	0.66	−0.22	0.74	−0.30
Questioning−Accommodating	0.11	0.67	0.01	0.64	0.21	0.69	−0.30
Critical−Accepting	−0.42	0.65	−0.57	0.60	−0.28	0.66	−0.47
Tough−Tender	−0.17	0.74	−0.34	0.69	−0.01	0.76	−0.45
J−P facets							
Systematic−Casual	−0.22	0.75	−0.26	0.70	−0.18	0.80	−0.11
Planful−Open-Ended	−0.24	0.68	−0.16	0.68	−0.32	0.68	0.23
Early Starting−Pressure-Prompted	0.11	0.71	0.16	0.70	0.06	0.70	0.14
Scheduled−Spontaneous	0.07	0.72	0.12	0.71	0.02	0.73	0.14
Methodical−Emergent	0.14	0.71	0.12	0.68	0.16	0.73	−0.07

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-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.

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.

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