

Thailand (Thai) Technical Brief for the MBTI® Global Step I™ and Step II™ Assessments

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The Myers-Briggs Type Indicator® (MBTI®) assessment is one of the most commonly used personality instruments in the world. Because administration of the assessment outside the United States is growing rapidly, new translations are continually being developed for use in specific regions. This technical brief summarizes the measurement properties of translations of the MBTI Global Step I™ and Step II™ assessments developed for areas where Thai is read and understood. To that end, it reports on type and preference distributions in a sample of people in Thailand who completed the global research version (GRV) of the MBTI assessment in Thai (i.e., the Thai sample) and explores similarities and differences between the Thai sample and the global sample. Additionally, this technical brief examines the reliability and validity of the Thai translations of the MBTI Global Step I and Step II assessments. For more information on the global sample and construction and translation of the global assessments, see chapter 7 of the MBTI® Manual for the Global Step I[™] and Step II[™] Assessments (Myers, McCaulley, Quenk, & Hammer, 2018).

THE MBTI® MODEL

The MBTI assessment measures a typology composed of four pairs of opposite preferences, or preference pairs:

- Extraversion (E) or Introversion (I)—how individuals direct and receive energy
- Sensing (S) or Intuition (N)—how individuals take in information
- Thinking (T) or Feeling (F)—how individuals decide and come to conclusions
- Judging (J) or Perceiving (P)—how individuals approach the outside world

The MBTI assessment combines an individual's four preferences—one preference from each preference pair, denoted by its letter—to yield one of 16 possible personality types (e.g., ESTJ, INFP). Each type is equally valuable, and an individual inherently sorts into one of the 16 types. This model differentiates the MBTI assessment from most other personality instruments, which typically assess personality traits. Trait-based instruments measure how much of a certain trait a person possesses. Unlike the MBTI assessment, those instruments usually consider one end of a scale to signify positive characteristics and the other to signify negative characteristics.

DESCRIPTION OF THE THAI SAMPLE

Following the translation of the MBTI GRV into Thai, a sample of participants was obtained through the Thai distributor, Potentia. It is important to note that this Thai sample is not representative; rather, it is a sample of convenience. Therefore, no inferences should be drawn about the preferences or type distribution of the population that reads and understands Thai. The data reported in this technical brief should be used for psychometric information purposes only.

The Thai sample is composed of 407 individuals who each completed the MBTI GRV in Thai. The MBTI GRV comprises 230 MBTI items, including items from the commercial forms of the MBTI assessment—Form M and Form Q, and European Step I™ and Step II™ assessments that were current at the time the GRV was developed. The Global Step I and Step II assessments contain a subset of the 230 items used on the GRV form.

Table 1 provides demographic data. Of the Thai sample, 48% are women and 52% are men. Respondents' ages range from 18 to 50 years (mean = 28.3; standard deviation = 7.0). All of the respondents in the sample live in Thailand.

Table 1 | Demographic summary: Thai sample

Demographic	Sample %
Age	
Mean age: 28.3 years	_
Gender	
Female	48
Male	52
Employment status	
Working full-time	66
Working part-time	10
Student	15
Retired	<1
Not working for income	2
None of the above/no response	7
Occupational level	
Entry level	29
Nonsupervisory	25
Supervisor	7
Management	5
Executive	1
No response/not applicable	32
Job type	
Business and financial operations	17
Computer and mathematical	15
Sales and related	8
Education, training, and library	6
Architecture and engineering	6
Office and administrative support	6
Legal	2
Life, physical, and social sciences	1
Community and social services	1
Transportation and materials moving	1
Personal care and service	1
Other	26
No response/not applicable	10
Country of residence	
Thailand	100

Note: N = 407. Percentages may not total 100% due to the rounding of decimals.

MBTI° Type and Preference Distributions

Table 2 is the MBTI type table for the Thai sample. As shown in the table, the most frequently occurring types for this sample are ESTJ (22.4%) and ISTJ (13.8%). The least common types are INFJ (0.5%) and ENFJ (0.7%).

Table 3 shows the number and percentage of participants in the Thai sample with each preference. Also included for reference are the number and percentage of participants in the global sample who have each preference.

Table 2 | Reported MBTI° type distribution: Thai sample

Se	nsing	Intu	ition		
Thinking	Fee	ling	Thinking		
ISTJ n = 56 13.8%	ISFJ n = 22 5.4%	INFJ n = 2 0.5%	INTJ n = 9 2.2%	Judging	Introversion
ISTP n = 37 9.1%	ISFP n = 29 7.1%	INFP n = 9 2.2%	INTP n = 9 2.2%	Perce	ersion
ESTP n = 48 11.8%	ESFP n = 40 9.8%	ENFP n = 7 1.7%	ENTP n = 14 3.4%	Perceiving	Extra
ESTJ <i>n</i> = 91 22.4%	ESFJ n = 22 5.4%	ENFJ <i>n</i> = 3 0.7%	ENTJ <i>n</i> = 9 2.2%	Judging	Extraversion

Note: N = 407. Percentages may not total 100% due to the rounding of decimals.

Table 3 | Reported MBTI® preference distributions: Thai and global samples

	Th sam		Glol sam	
Preference	n	%	n	%
Extraversion (E)	234	57.5	7,251	43.2
Introversion (I)	173	42.5	9,522	56.8
Sensing (S)	345	84.8	11,321	67.5
Intuition (N)	62	15.2	5,452	32.5
Thinking (T)	273	67.1	9,128	54.4
Feeling (F)	134	32.9	7,645	45.6
Judging (J)	214	52.6	8,021	47.8
Perceiving (P)	193	47.4	8,752	52.2

Note: Thai sample, N = 407; global sample, N = 16,773.

MBTI° GLOBAL STEP I" ASSESSMENT RESULTS FOR THE THAI SAMPLE

The Global Step I assessment contains 92 items used to help determine individuals' personality type. It replaces the Form M assessment and the European Step I assessment and was the outcome of the GRV research.

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 Thai sample are shown in table 4. The agreement rate is high (90% or above) for each preference pair between the Global Step I and Form M scale. The overall agreement rate for whole types between the Global Step I and Form M assessments is 71%, higher than the 60% agreement rate between Form G and Form M reported in the 1998 MBTI® Manual (Myers, McCaulley, Quenk, & Hammer).

Table 4 | Relationships between MBTI Global Step I[™] and Form M preference pair results: Thai sample

E-I S-N T-F J-P	Global Step I" ai preference pa	
Preference pair	Correlation between continuous scores	Agreement rate (%)
E-I	.94	90
S-N	.91	90
T-F	.97	93
J-P	.95	90
Overall agreement	rate for whole types	71

Note: N = 407

Global Step I[™] Preference Pair Intercorrelations

Intercorrelations of Global Step I preference pair continuous scores in the Thai sample are shown in table 5 below the diagonal. The highest correlation is between the T-F and J-P preference pairs. The next highest is between S-N and J-P, and the third highest correlation is between E-I and J-P. These correlations are similar to those found for the global sample, shown in table 5 above the diagonal. For the global sample, the highest correlation is between S-N and J-P, and the second highest correlation is between S-N and T-F. The Thai 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

Reliability refers to consistency of measurement. A measure is said to be reliable when it produces a consistent, though not necessarily identical, result. 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). The internal consistency reliabilities for the Thai sample and the global sample are reported in table 6. The reliabilities of the four preference pairs are adequate for the Thai sample and are generally similar to those reported in the MBTI® Manual for the Global Step I™ and Step II[™] Assessments (Myers et al., 2018).

Validity of Global Step I[™] Results: **Factor Analysis**

An instrument is said to be valid when it measures what it has been designed to measure (Ghiselli, Campbell, & Zedeck 1981; Murphy & Davidshofer, 2005). In several studies, confirmatory factor analyses of the MBTI assessment have been conducted to assess the validity of

Table 5 | Intercorrelations of Global Step I™ preference pair continuous scores: Thai and global samples

Preference pair	E-I	S-N	T-F	J-P
E-I	_	20	15	15
S-N	.08	_	.27	.48
T-F	.06	.17	_	.23
J-P	.24	.30	.33	_

Note: Correlations for the Thai sample (N = 407) are below the diagonal; those for the global sample (N = 16,773) are above the diagonal.

Table 6 | Internal consistency reliabilities of Global Step I™ preference pairs: Thai and global samples

		С	ronbac	h's alph	a
Sample	N	E-I	S-N	T-F	J-P
Thai	407	.84	.59	.65	.77
Global	16,773	.89	.87	.89	.88

the factors of the MBTI assessment. They have indicated that a four-factor model, such as the one theorized and developed by Myers, is the most appropriate and offers the best fit (Harvey, Murry, & Stamoulis, 1995; Johnson & Saunders, 1990). A principal components exploratory factor analysis with varimax rotation was conducted using the item responses from the Thai sample. The results are presented in table 7. The shaded cells indicate that factor 1 is E-I, factor 2 is J-P, factor 3 is T-F, and factor 4 is S-N. The first factor is the one that accounts for the most variance in this sample. The four-factor structure produced by this analysis shows that the MBTI Global Step I items translated into Thai are measuring their intended constructs, the four preference pairs.

Table 7 | Factor analysis rotated component matrix for the Thai sample

Item code	Factor 1 E-I	Factor 2 J-P	Factor 3 T-F	Factor 4 S-N	Item code	Factor 1 E-I	Factor 2 J-P	Factor 3 T-F	Factor 4 S-N
EI1	.61	.02	.08	14	TF1	.08	.30	.18	.18
EI2	.39	.03	.03	.08	TF2	.10	.40	.29	.04
EI3	.37	19	.15	14	TF3	.00	38	.01	.14
EI4	.34	14	.19	07	TF4	02	28	.32	.13
EI5	.61	15	.10	.01	TF5	13	12	.37	.06
EI6	.39	.35	08	05	TF6	.06	16	.05	.48
EI7	.42	.26	09	.10	TF7	11	07	.02	.24
EI8	.29	.00	.25	04	TF8	11	26	.25	01
EI9	.41	.11	.02	.04	TF9	.03	.13	.47	.12
EI10	.30	32	.10	07	TF10	.00	03	.00	.30
EI11	.32	25	.11	06	TF11	22	46	02	.01
EI12	.57	.07	03	.02	TF12	.03	.16	.46	.01
EI13	.56	.11	.15	22	TF13	.00	.27	.24	.34
EI14	.45	.03	.33	.00	TF14	06	27	.03	.04
EI15	.43	41	.02	19	TF15	05	28	14	.21
EI16	.25	07	.29	08	TF16	.12	.09	.44	.13
EI17	.29	26	.14	12	TF17	.10	.39	.10	.33
EI18	.38	02	.14	14	TF18	.07	.05	.07	.51
EI19	.62	.07	.02	02	TF19	.00	21	.34	.03
EI20	.42	.14	.03	.14	TF20	05	14	04	.34
EI21	.62	.01	.13	01	TF21	.01	06	.24	.54
EI22	.46	01	08	.18	TF22	.01	03	.07	.51
EI23	.46	.08	04	.31	TF23	.07	.05	.30	.07
EI24	.52	.36	02	01					
					JP1	.15	.01	.29	05
SN1	09	.17	.03	.14	JP2	.02	.07	.52	.07
SN2	01	.10	05	04	JP3	.05	.54	.20	.21
SN3	.15	.01	.17	.09	JP4	.12	.04	.49	.06
SN4	.19	21	.07	04	JP5	.08	.06	.50	05
SN5	06	.00	.04	.34	JP6	.20	.23	.27	.01
SN6	.05	.04	.14	01	JP7	.06	.36	.22	.16
SN7	.11	47	.01	01	JP8	.06	.24	.20	18
SN8	.00	32	.02	.14	JP9	.11	17	.23	04
SN9	.05	07	.24	.14	JP10	.11	.17	.50	01
SN10	04	.07	03	.24	JP11	06	.39	.05	.04
SN11	.00	.14	26	.16	JP12	.16	.07	.43	12
SN12	05	.12	11	.19	JP13	.07	.35	.29	.10
SN13	01	43	.06	.03	JP14	01	.17	.52	07
SN14	04	11	.19	.04	JP15	03	.20	03	.32
SN15	.00	07	.28	.18	JP16	.08	.30	.25	.26
SN16	01	.17	.29	02	JP17	.06	.35	.15	.21
SN17	.30	.19	.12	.17	JP18	.16	.11	.32	.34
SN18	.08	.35	.18	.13	JP19	.08	.35	.32	.36
SN19	02	.37	08	.26	JP20	.10	.25	.21	.28
SN20	.09	.16	.12	.48	JP21	06	14	.24	07
SN21	.02	06	12	.23					
SN22	.08	.31	.03	.26					
SN23	03	.10	04	.30					
SN24	.10	.40	.28	12					

Note: N = 407.

MBTI® GLOBAL STEP II® ASSESSMENT RESULTS FOR THE THAI SAMPLE

The Global Step II assessment includes the 92 items that make up the Global Step I assessment (measuring the four preference pairs, E-I, S-N, T-F, and J-P) plus another 51 items that are used only to measure the Step II facets. For each of the four preference pairs there are five facets (see table 8), yielding a total of 20 facets. These facets help describe some of the ways in which each preference can be expressed differently and thus create a richer and more detailed description of an individual's personality. The remaining analyses in this brief focus on the evaluation of the Step II facets.

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

The Global Step II assessment replaces the Form Q assessment and the European Step II assessment. Table 8 presents the relationships between MBTI Global Step II and Form Q facet results for the Thai sample. All of the correlations are quite high, except for the correlation on the Questioning-Accommodating facet scale, which was changed when the Global Step II assessment was developed.

Global Step II[™] Facet Intercorrelations

Intercorrelations of Global Step II facets are presented in table 9. Facets within each preference pair correlate more highly with other facets of the same preference pair than with facets of different preference pairs.

Reliability of Global Step II™ Results

Internal consistency reliabilities for each facet are reported in table 10 for the Thai sample and the global sample. The Thai sample alphas range from .24 (Practical-Conceptual) to .67 (Initiating-Receiving). Overall, this sample's alphas are considerably lower than those of the global sample, and results should be interpreted with caution.

Validity of Global Step II™ Results

Reported here as evidence of the validity of the Thai 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 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

Table 8 | Relationships between Global Step II[™] and Form Q facet results: Thai sample

	Correlation between Global Step II* and Form Q
Global Step II [™] facet	facet results
E-I facets	
Initiating-Receiving	.96
Expressive-Contained	.98
Gregarious-Intimate	.97
Active-Reflective	.84
Enthusiastic-Quiet	.98
S-N facets	
Concrete-Abstract	.91
Realistic-Imaginative	.99
Practical-Conceptual	.73
Experiential-Theoretical	.92
Traditional-Original	.92
T-F facets	
Logical-Empathetic	.86
Reasonable-Compassionate	.87
Questioning-Accommodating	.41
Critical-Accepting	.71
Tough-Tender	.96
J-P facets	
Systematic-Casual	.89
Planful-Open-Ended	.95
Early Starting-Pressure-Prompted	.91
Scheduled-Spontaneous	.92
Methodical-Emergent	.94

Note: N = 407.

pole of the Gregarious-Intimate facet. This apparent inconsistency is referred to as an out-of-preference score and defined as a facet score from -2 to -5 when a respondent has a preference for I, N, F, or P; or from 2 to 5 when a respondent has a preference for E, S, T, or J. While it is not unusual to have a number of outof-preference scores, it is relatively rare to have three or more facet scores out-of-preference for any one preference pair. The percentage in the Thai sample of out-of-preference facet scores for each preference pair is shown in table 11.

Correlations between facets and preference pairs are presented in table 12. 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

Table 9 | Intercorrelations of Global Step II" facets: Thai sample

Global Step II" facet	1. 2.		3.	4.	5.	9	7.	ω̈	6	10.	11	12.	13.	14.	15.	16.	17.	18.	19.	20.
E-I facets																				
1. Initiating-Receiving	I																			
2. Expressive–Contained	- 69:	1																		
3. Gregarious-Intimate	.56 .53	83	ı																	
4. Active-Reflective	.51 .52		.56	ı																
5. Enthusiastic-Quiet	.51 .51		. 50	.47	I															
S-N facets																				
6. Concrete–Abstract	90. 80.		01	. 01	.12	I														
7. Realistic–Imaginative	.11		02	. 70.–	.08	.35	I													
8. Practical–Conceptual	.02 .02		. 90.–	.02 –.	13	.05	.15	I												
9. Experiential–Theoretical	00. 00.		10	10	. 90.	.23	.15	.03	ı											
10. Traditional–Original	.21 .26		.16	.18	.19	.21	.20	- 70.	03	ı										
T–F facets																				
11. Logical-Empathetic	.10 .07		.10	.00	.14	.15	14 -	03	00.	.04	I									
12. Reasonable–Compassionate	0305		01	02		.03 –	02	.040	- 60.–	07	.34	ı								
13. Questioning-Accommodating	0103		02	04	05	02	.01	02	.040	12	.13	.18	I							
14. Critical-Accepting	05		.– 60.–	. 80	12	- 60	03	- 00.	- 80.–	13	.05	.32	.23	I						
15. Tough-Tender	0105		02	04	. 70.–	.03	.15	.04	01	.01	.25	.35	.20	.27	ı					
J–P facets																				
16. Systematic – Casual	.11		.07	.12	.19	.25	.24	.04	.01	.25	.39	.20	.01	09	11	1				
17. Planful—Open-Ended	.14		.16	.14	.22	.17	111	03	.05	.19	.31	.15	.05	90	.03	.48	I			
18. Early Starting-Pressure-Prompted	.03		.04	. 70.–	.23	.22	.21	12	.15	.10	.20	.04	00.	09	10	.34	.43	I		
19. Scheduled–Spontaneous	.15		.14	. 50	.23	.22	.24	07	.13	.12	.35	.07	.02	07	.02	4.	.53	.51	I	
20. Methodical–Emergent	.19 –.14		10	. 60	27	18	13 -	07	111	07	28	08	02	90	01	40	58	40	49	ı
Note: N = 407.																				

Table 10 | Internal consistency reliabilities of Global Step II[™] facets: Thai and global samples

	Cronbac	h's alpha
Global Step II" facet	Thai sample	Global sample
E-l facets		
Initiating-Receiving	.67	.82
Expressive-Contained	.52	.73
Gregarious-Intimate	.53	.62
Active-Reflective	.48	.64
Enthusiastic-Quiet	.66	.69
S-N facets		
Concrete-Abstract	.42	.74
Realistic-Imaginative	.48	.72
Practical-Conceptual	.24	.66
Experiential-Theoretical	.39	.68
Traditional-Original	.31	.72
T–F facets		
Logical-Empathetic	.55	.80
Reasonable-Compassionate	.50	.76
Questioning-Accommodating	.44	.62
Critical-Accepting	.39	.59
Tough-Tender	.52	.73
J-P facets		
Systematic-Casual	.57	.76
Planful-Open-Ended	.63	.79
Early Starting-Pressure-Prompted	.59	.65
Scheduled-Spontaneous	.65	.80
Methodical–Emergent	.50	.64

Note: Thai sample, N = 407; global sample, N = 16,773.

for the theoretical hierarchical structure of the Step II facets in relation to the Step I scales" (Quenk, Hammer, & Majors, 2001, p. 104). The Thai 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). For the Global Step II assessment in Thai, the lowest correlation between a facet and its corresponding preference pair is between Experiential-Theoretical and S-N.

Table 11 | Percentage of reported out-ofpreference Global Step II[™] facet scores: Thai sample

D (Numl	per of ou	t-of-pref	erence fa	cet score	s (%)
Preference pair	0	1	2	3	4	5
E-I	71	22	6	1	0	0
S-N	59	31	10	1	0	0
T-F	67	26	6	<1	<1	0
J-P	70	20	8	2	0	0

Note: N = 407. Percentages may not total 100% due to the rounding of decimals.

Table 12 | Correlations between Global Step II* facets and preference pairs: Thai sample

		Prefere	ence pair	
Global Step II [™] facet	E-I	S-N	T-F	J-P
E-I facets				
Initiating-Receiving	.82	.15	.08	.19
Expressive-Contained	.78	.15	.03	.21
Gregarious-Intimate	.76	03	.08	.18
Active-Reflective	.73	03	01	.05
Enthusiastic-Quiet	.73	.14	.10	.31
S-N facets				
Concrete-Abstract	.06	.73	.18	.27
Realistic-Imaginative	.01	.68	.17	.23
Practical-Conceptual	.02	.51	.01	.02
Experiential-Theoretical	03	.42	.00	.15
Traditional-Original	.24	.53	.01	.23
T–F facets				
Logical-Empathetic	.14	.20	.75	.48
Reasonable – Compassionate	.05	.09	.80	.26
Questioning – Accommodating	.06	.14	.60	.21
Critical-Accepting	10	.06	.55	.02
Tough-Tender	08	.09	.60	03
J-P facets				
Systematic-Casual	.18	.34	.35	.77
Planful-Open-Ended	.23	.21	.27	.83
Early Starting – Pressure-Prompted	.11	.26	.19	.70
Scheduled-Spontaneous	.21	.29	.28	.89
Methodical-Emergent	19	.18	.24	.71

Note: N = 407.

CONCLUSION

Initial analyses of the Thai translations of the MBTI Global Step I and Step II assessments indicate that most scales demonstrate reasonable internal consistency reliabilities. Validity was established by showing the percentage of out-of-preference facet scores and correlations between Global Step I preference pairs and Global Step II facets. While more research should be conducted, these analyses show that the Thai translation of the MBTI Global Step I assessment has adequate reliability and validity and is appropriate for use with individuals in Thailand who read and understand Thai. However, a number of Step II facet scales must be interpreted with caution until further data are collected.

REFERENCES

- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16(3), 297-334.
- Ghiselli, E. E., Campbell, J. P., & Zedeck, S. (1981). Measurement theory for the behavioral sciences. San Francisco: W. H. Freeman.
- Harvey, R. J., Murry, W. D., & Stamoulis, D. (1995). Unresolved issues in the dimensionality of the Myers-Briggs Type Indicator®. Educational and Psychological Measurement, 55, 535-544.
- Johnson, D. A., & Saunders, D. R. (1990). Confirmatory factor analysis of the Myers-Briggs Type Indicator® Expanded Analysis Report. Educational and Psychological Measurement, 50, 561-571.
- Murphy, K. R., & Davidshofer, C. O. (2005). Psychological testing (6th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Myers, I. B., McCaulley, M. H., Quenk, N. L., & Hammer, A. L. (1998). MBTI® manual: A guide to the development and use of the Myers-Briggs Type Indicator® instrument (3rd ed.). Sunnyvale, CA: The Myers-Briggs Company.
- Myers, I. B., McCaulley, M. H., Quenk, N. L., & Hammer, A. L. (2018). MBTI® manual for the Global Step I™ and Step II™ assessments (4th ed.). Sunnyvale, CA: The Myers-Briggs Company.
- Quenk, N. L., Hammer, A. L., & Majors, M. S. (2001). MBTI® Step II[™] manual. Sunnyvale, CA: The Myers-Briggs Company.
- Quenk, N. L., Hammer, A. L., & Majors, M. S. (2004). MBTI® Step II[™] manual, European edition. Sunnyvale, CA: The Myers-Briggs Company.