

# **Technical Brief for the**

# **MBTI® FORM M and FORM Q ASSESSMENTS**

Korean

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### INTRODUCTION

The *Myers-Briggs Type Indicator*<sup>®</sup> (MBTI<sup>®</sup>) instrument is one of the most commonly used personality assessments in the world. Because administration of the instrument outside the United States is growing rapidly, new translations are continually being developed for use in specific regions. This document summarizes the initial measurement properties of a translation of the MBTI Form M and Form Q assessments developed for use in Korea. To that end, it examines the reliability of the Korean translation of the MBTI Form M and Form Q assessments, reports on type distribution in a Korean sample, and provides comparisons with the U.S. National Representative Sample to examine similarities and differences between the groups.

## THE MBTI® ASSESSMENT

The MBTI assessment uses a typology composed of four pairs of opposite preferences, called *dichotomies*:

- Extraversion (E) or Introversion (I)—where you focus your attention and get energy
- Sensing (S) or Intuition (N)—how you take in information
- Thinking (T) or Feeling (F)—how you make decisions
- Judging (J) or Perceiving (P)—how you deal with the outer world

The MBTI assessment combines an individual's four preferences—one preference from each dichotomy, denoted by its letter—to yield one of the 16 possible personality types (e.g., ESTJ, INFP, etc.). Each type is equally valuable, and an individual inherently belongs to 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 characteristic people possess. Unlike the MBTI assessment, those instruments usually consider one "end" of a trait to be more positive and the other to be more negative.

## **KOREAN SAMPLE**

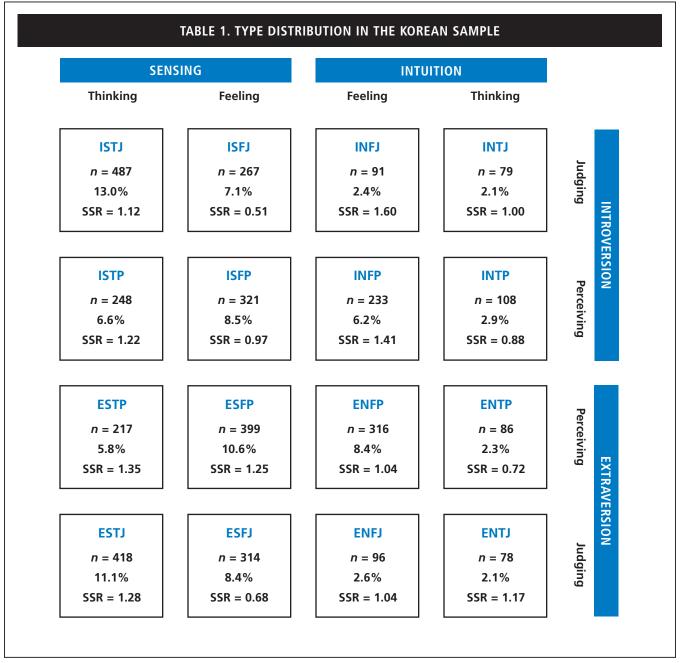
Following the translation of the MBTI assessment into Korean, a sample of participants was obtained for this study. The participants in this sample completed the MBTI®—Global Research version of the assessment, which contains all the items in the U.S. version of Form M and Form Q as well as all the items in the pan-European Step I and Step II assessments. It is important to note that this Korean sample is not a representative sample; rather, it is a sample of convenience. Therefore, no inferences may be drawn about the preferences or type distribution of the Korean population. The data reported in this document should be used for psychometric information purposes only.

#### **Sample Description**

This sample is composed of 3,758 individuals who each completed the MBTI<sup>®</sup>—Global Research version of the assessment in Korean. This version of the assessment includes 230 MBTI items and contains the current commercial versions of the MBTI assessment (the Form M, Form Q, and European Step I and Step II assessments). Limited demographic information was available for this sample. The sample included 55% women and 45% men. Respondents' ages ranged from 18 to 78 years (mean = 34.0, *SD* = 11.9). They reported their highest level of education completed as follows: 44% bachelor's degree, 30% some college—no degree, 11% master's degree, 10% high school diploma, 2% some high school, 2% doctorate (e.g., PhD, EdD).

As shown in Table 1, the most frequently occurring types for this sample are ISTJ (13.0%) and ESTJ (11.1%). The least common types are INTJ and ENTJ (2.1% each). Selfselection ratios (SSR) were computed by comparing the percentage of each type in the Korean sample to that in the U.S. National Representative Sample (Myers, Mc-Caulley, Quenk, & Hammer, 1998). In this sample, INFJs are more than one and a half times more prevalent than we would expect based on their representation in the U.S. population. On the other hand, ISFJs are less common in this Korean sample than in the U.S. sample. Since this Korean sample is not representative of the population, no inferences should be made about the population's distribution of type.

Table 2 shows the number and percentage of respondents for each preference. Also included for reference are the number and percentage of respondents for each preference in the U.S. National Representative Sample (Myers, McCaulley, Quenk, & Hammer 1998).



Note: N = 3,758.

# RELIABILITY OF THE FORM M PREFERENCES

The internal consistency reliabilities (Cronbach's alphas) for the Korean sample and the U.S. National Representative Sample are reported in Table 3. The reliabilities of the four dichotomies are good for the Korean sample, and are very similar to those reported in the *MBTI*<sup>®</sup> *Manual* (Myers et al., 1998).

# **PREDICTION RATIOS**

Prediction ratios measure the likelihood that a person choosing a certain response will in fact have that preference (Myers et al., 1998). Prediction ratios for the Korean sample are reported in Table 4. While some ratios are lower than desirable, they are generally in line with prediction ratios for other international samples (Schaubhut & Thompson, 2010a; Schaubhut & Thompson, 2010b; Schaubhut & Thompson, 2011).

	Korean Sample ( <i>N</i> = 3,758)		U.S. National Representative Sample ( <i>N</i> = 3,009)		
Preference	n	%	n	%	
Extraversion (E)	1,924	51.2	1,483	49.3	
Introversion (I)	1,834	48.8	1,526	50.7	
Sensing (S)	2,671	71.1	2,206	73.3	
Intuition (N)	1,087	28.9	803	26.7	
Thinking (T)	1,721	45.8	1,210	40.2	
Feeling (F)	2,037	54.2	1,799	59.8	
Judging (J)	1,830	48.7	1,629	54.1	
Perceiving (P)	1,928	51.3	1,380	45.9	

#### TABLE 2. MBTI<sup>®</sup> PREFERENCE DISTRIBUTIONS FOR THE KOREAN SAMPLE AND THE U.S. NATIONAL REPRESENTATIVE SAMPLE

Note: Source for the U.S. National Representative Sample is Myers, McCaulley, Quenk, and Hammer (1998).

#### TABLE 3. MBTI® DICHOTOMY INTERNAL CONSISTENCY RELIABILITIES FOR THE KOREAN SAMPLE AND THE U.S. NATIONAL REPRESENTATIVE SAMPLE

Korean Sample	U.S. National Representative Sample	
Cronbach's Alpha	Cronbach's Alpha	
.91	.91	
.88	.92	
.90	.91	
.91	.92	
	Cronbach's Alpha .91 .88 .90	Cronbach's AlphaCronbach's Alpha.91.91.88.92.90.91

Note: Source for the U.S. National Representative Sample is Myers, McCaulley, Quenk, and Hammer (1998).

## FACTOR ANALYSIS

Several studies have conducted confirmatory factor analyses of the MBTI assessment to assess the validity of 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 Korean sample. The results are presented in Table 5. The shaded cells show that factor 1 is S–N, factor 2 is J–P, factor 3 is E–I, and factor 4 is T–F. The four-factor structure produced by this analysis shows that the Korean MBTI Form M items are measuring their intended constructs, the four dichotomies.

# RELIABILITY OF THE FORM Q FACETS

The MBTI Form Q assessment includes the 93 items that make up the MBTI Form M assessment (measuring the four dichotomies: E–I, S–N, T–F, and J–P) plus another 51 items that are used only to measure the Form Q facets. For each of the four dichotomies there are five facets (see Table 6), yielding a total of 20 facets. These facets help describe some of the ways in which each preference can be different for each individual to create a richer and more detailed description of an individual's behavior. The remaining analyses focus on the evaluation of the Form Q facets.

## TABLE 4. PREDICTION RATIOS FOR THE KOREAN SAMPLE

Item Code	ESTJ Prediction Ratio	INFP Prediction Ratio	Item Code	ESTJ Prediction Ratio	INFP Prediction Ratio
EI1	.73	.95	SN17	.73	.58
EI2	.83	.75	SN18	.73	.85
EI3	.73	.73	SN19	.74	.68
EI4	.73	.71	SN20	.84	.80
EI5	.75	.75	SN21	.61	.75
EI6	.84	.79	SN22	.81	.64
EI7	.75	.65	SN23	.84	.63
EI8	.78	.75	SN24	.87	.80
EI9	.75	.87	SN25	.73	.60
EI10	.74	.83	SN26	.69	.60
EI11	.77	.87	TF1	.72	.72
EI12	.80	.87	TF2	.67	.71
EI13	.67	.75	TF3	.85	.73
EI14	.81	.69	TF4	.78	.61
EI15	.68	.75	TF5	.83	.77
EI16	.67	.76	TF6	.71	.69
EI17	.75	.91	TF7	.72	.84
EI18	.75	.63	TF8	.80	.68
EI19	.81	.73	TF9	.88	.65
EI20	.70	.73	TF10	.64	.70
EI21	.48	.75	TF11	.70	.73
SN1	.76	.76	TF12	.80	.70
SN2	.59	.64	TF13	.65	.62
SN3	.85	.72	TF14	.83	.77
SN4	.61	.59	TF15	.79	.86
SN5	.75	.69	TF16	.68	.79
SN6	.71	.67	TF17	.81	.83
SN7	.66	.61	TF18	.72	.82
SN8	.71	.84	TF19	.72	.75
SN9	.89	.73	TF20	.79	.69
SN10	.73	.86	TF21	.81	.63
SN11	.60	.79	TF22	.73	.67
SN12	.69	.75	TF23	.61	.80
SN13	.90	.70	TF24	.64	.67
SN14	.88	.77	JP1	.69	.81
SN15	.74	.64	JP2	.68	.79
SN16	.71	.62	JP3	.76	.79

Item Code	ESTJ Prediction Ratio	INFP Prediction Ratio	Item Code	ESTJ Prediction Ratio	INFP Prediction Ratio
JP4	.66	.80	JP14	.74	.74
JP5	.57	.69	JP15	.72	.82
JP6	.65	.83	JP16	.89	.72
JP7	.80	.82	JP17	.78	.72
JP8	.70	.86	JP18	.77	.75
JP9	.67	.95	JP19	.63	.83
JP10	.71	.72	JP20	.72	.88
JP11	.84	.75	JP21	.73	.76
JP12	.63	.74	JP22	.87	.77
JP13	.87	.78			

Internal consistency reliabilities for each facet are reported in Table 6 for the Korean sample and the U.S. National Representative Sample. The Korean sample alphas range from .33 (Questioning–Accommodating) to .81 (Tough– Tender). Overall, about half of this sample's alphas are slightly lower than those of the U.S. National Representative Sample. This is consistent with the reliabilities that have been found for other translations of the MBTI Form Q (or Step II for Europe) assessment (Quenk, Hammer, & Majors, 2004; Schaubhut, 2008). Reliabilities for nine other translations can be found in the *MBTI*<sup>®</sup> *Step II*<sup>TM</sup> *Manual*, European edition (Quenk et al., 2004). Items comprising facet scales with lower alphas, such as Practical–Conceptual and Questioning–Accommodating, were evaluated for potential translation problems. Since none was apparent, from a reliability perspective these facet scales may not work as well in this culture.

TABLE 5. FACTOR ANALYSIS ROTATED COMPONENT MATRIX FOR THE KOREAN SAMPLE									
ltem Code	Factor 1 (S–N)	Factor 2 (J–P)	Factor 3 (E–I)	Factor 4 (T–F)	ltem Code	Factor 1 (S–N)	Factor 2 (J–P)	Factor 3 (E–I)	Factor 4 (T–F)
EI1	.72	02	.01	02	EI12	.75	03	03	07
EI2	.64	.00	02	02	EI13	.48	09	09	06
EI3	.56	.03	.04	07	EI14	.58	04	05	01
EI4	.53	04	08	.07	EI15	.52	.01	07	.09
EI5	.59	02	09	.08	EI16	.51	.02	10	.08
EI6	.68	.01	.01	02	EI17	.70	01	06	.07
EI7	.48	05	02	02	EI18	.44	06	09	.06
EI8	.60	07	03	02	EI19	.61	.00	.06	05
EI9	.72	05	.03	06	EI20	.49	.02	.01	08
EI10	.67	.01	.04	08	EI21	.61	.03	.02	.02
EI11	.73	05	01	06					

(cont'd)

TABLE 5. FACTOR ANALYSIS ROTATED COMPONENT MATRIX FOR THE KOREAN SAMPLE <i>CONT'D</i>									
ltem Code	Factor 1 (S–N)	Factor 2 (J–P)	Factor 3 (E–I)	Factor 4 (T–F)	ltem Code	Factor 1 (S–N)	Factor 2 (J–P)	Factor 3 (E–I)	Factor 4 (T-F)
SN1	.14	08	08	.26	TF11	.06	.01	.56	.00
SN2	.03	.12	.15	.53	TF12	.03	.10	.61	04
SN3	.02	.09	.11	.61	TF13	31	.13	.21	.33
SN4	.08	01	06	.23	TF14	08	.08	.67	.08
SN5	.00	.11	.06	.47	TF15	03	.15	.68	.06
SN6	05	.17	.08	.38	TF16	02	.07	.55	.11
SN7	12	.02	19	.38	TF17	07	.17	.67	.08
SN8	.08	.22	.26	.52	TF18	01	.15	.56	.32
SN9	14	.08	.03	.70	TF19	.04	.07	.58	09
SN10	.08	.17	.18	.59	TF20	02	.08	.58	.03
SN11	.17	01	04	.44	TF21	.10	.00	.55	02
SN12	.15	.18	.14	.45	TF22	08	.12	.46	.08
SN13	14	.07	.05	.66	TF23	01	.06	.41	02
SN14	.01	.14	.19	.64	TF24	02	.05	.38	.01
SN15	10	.03	04	.45	JP1	04	.56	.05	.11
SN16	23	.16	.32	.29	JP2	05	.54	.07	.05
SN17	10	13	12	.40	JP3	.02	.63	.06	.05
SN18	.07	.26	.23	.55	JP4	05	.48	.03	.30
SN19	10	.04	08	.55	JP5	.16	.31	.02	.03
<b>SN20</b>	.02	.17	.19	.64	JP6	09	.55	.01	.13
SN21	.17	03	05	.39	JP7	07	.71	.09	.00
SN22	09	.18	.17	.46	JP8	.01	.63	.06	.07
SN23	16	.11	07	.52	JP9	.00	.64	.13	.17
SN24	07	.14	.07	.70	JP10	23	.43	.22	.20
SN25	.03	.00	.05	.31	JP11	08	.66	.13	.13
SN26	18	04	23	.39	JP12	.01	.41	.22	.08
TF1	11	.18	.49	.06	JP13	07	.64	.21	.19
TF2	14	.17	.40	.08	JP14	.06	.54	.18	.21
TF3	09	.14	.62	.04	JP15	.00	.60	.10	.08
TF4	.10	.01	.50	04	JP16	03	.65	.15	.03
TF5	13	.18	.62	.06	JP17	.03	.60	.07	02
TF6	05	.00	.46	.20	JP18	.18	.55	.09	.15
TF7	04	.15	.63	03	JP19	.01	.54	.04	07
TF8	06	.05	.59	.00	JP20	01	.67	.05	.10
TF9	07	.02	.64	13	JP21	02	.61	.08	07
TF10	02	.01	.42	.07	JP22	07	.69	.10	.07

#### TABLE 6. MBTI® FORM Q FACET INTERNAL CONSISTENCY RELIABILITIES FOR THE KOREAN SAMPLE AND THE U.S. NATIONAL REPRESENTATIVE SAMPLE

	Korean Sample	U.S. National Representative Sample	
Form Q Facets	Cronbach's Alpha	Cronbach's Alpha	
E–I Facets			
Initiating–Receiving	.80	.85	
Expressive–Contained	.76	.79	
Gregarious-Intimate	.78	.60	
Active-Reflective	.69	.59	
Enthusiastic–Quiet	.74	.72	
S–N Facets			
Concrete–Abstract	.75	.81	
Realistic-Imaginative	.73	.79	
Practical–Conceptual	.46	.67	
Experiential–Theoretical	.64	.83	
Traditional–Original	.77	.76	
T–F Facets			
Logical–Empathetic	.80	.80	
Reasonable-Compassionate	.77	.77	
Questioning–Accommodating	.33	.57	
Critical–Accepting	.50	.60	
Tough–Tender	.81	.81	
J–P Facets			
Systematic–Casual	.77	.74	
Planful–Open-Ended	.77	.82	
Early Starting–Pressure-Promp	ted .68	.70	
Scheduled–Spontaneous	.77	.82	
Methodical–Emergent	.60	.71	

Note: Source for the U.S. National Representative Sample is Myers, McCaulley, Quenk, and Hammer (1998).

# CONCLUSION

The sample and analyses reported here demonstrate that the translation and measurement properties of the assessment are adequate. Therefore, translations of the MBTI Form M and Form Q assessments can be widely used with Korean speakers. As the MBTI assessment continues to grow, larger and more diverse samples will become available and the measurement properties of the MBTI Form M and Form Q assessments will continue to be evaluated.

# REFERENCES

- Harvey, R. J., Murry, W. D., & Stamoulis, D. (1995). Unresolved issues in the dimensionality of the Myers-Briggs Type Indicator<sup>®</sup>. *Educational and Psychological Measurement*, *55*, 535–544.
- Johnson, D. A., & Saunders, D. R. (1990). Confirmatory factor analysis of the Myers-Briggs Type Indicator<sup>®</sup> Expanded Analysis Report. *Educational and Psychological Measurement*, 50, 561–571.
- 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. Mountain View, CA: CPP, Inc.

- Quenk, N. L., Hammer, A. L., & Majors, M. S. (2004). *MBTI*<sup>®</sup> *Step II*<sup>™</sup> *manual*, European edition. Mountain View, CA: CPP, Inc.
- Schaubhut, N. A. (2008). Technical brief for the MBTI<sup>®</sup> Form M and Form Q assessments—Latin and North American Spanish. Mountain View, CA: CPP, Inc.
- Schaubhut, N. A., & Thompson, R. C. (2010a). Technical brief for the MBTI<sup>®</sup> Form M and Form Q assessments—Simplified Chinese. Mountain View, CA: CPP, Inc.
- Schaubhut, N. A., & Thompson, R. C. (2010b). Technical brief for the MBTI<sup>®</sup> Form M and Form Q assessments—Traditional Chinese. Mountain View, CA: CPP, Inc.
- Schaubhut, N. A., & Thompson, R. C. (2011). Technical brief for the MBTI<sup>®</sup> Form M assessment—Bahasa Indonesia. Mountain View, CA: CPP, Inc.