Turkey (Turkish) Technical Brief for the **MBTI® Global Step I™** and **Step II™ Assessments**

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CONTENTS

INTRODUCTION

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 Turkish is read and understood. To that end, it reports on type and preference distributions in a sample of people who completed the global research version (GRV) of the MBTI assessment in Turkish (i.e., the Turkish sample), explores similarities and differences between the Turkish sample and the global sample, and examines the reliability and validity of the Turkish translations of the 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 TURKISH SAMPLE

Following the translation of the MBTI GRV into Turkish, a sample of participants was obtained through the European distributor, OPP Ltd. It is important to note that this Turkish 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 Turkish. The data reported in this technical brief should be used for psychometric information purposes only.

The Turkish sample is composed of 272 individuals who each completed the MBTI GRV in Turkish. 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 sample, 47% are women and 53% are men. Participants' ages range from 20 to 54 years (mean = 32.5; standard deviation = 6.4). All participants in the sample live in Turkey.

Table 1 | **Demographic summary: Turkish sample**

Demographic	Sample %
Age	
Mean age: 32.5 years	
Gender	
Female	47
Male	53
Employment status	
Working full-time	76
Working part-time	1
No response	23
Occupational level	
Employee	38
First-level management / supervisor	4
Middle management	15
Upper middle management	12
Senior executive	4
Top level	<1
Other	3
No response	25
Job type	
HR, training, guidance	18
Sales, customer service	14
Finance	4
IT	3
Science and engineering	3
Other private sector	21
Other	15
No response	22
Country of residence	
Turkey	100

Note: N = 272. Percentages in a given category may not total 100% due to rounding of decimals.

MBTI® Type and Preference Distributions

As shown in table 2, the most frequently occurring type for this sample is ESTJ (39.0%), followed by ISTJ (12.9%). The least common types are INFJ (0.0%) and ENFJ (0.4%).

Table 3 shows the number and percentage of participants 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: Turkish sample**

Sensing		Intuition			
Thinking	**Feeling**		**Thinking**		
ISTJ *n* = 35 12.9%	**ISFJ** *n* = 9 3.3%	**INFJ** *n* = 0 0.0%	**INTJ** *n* = 4 1.5%	Judging	Introversion
ISTP *n* = 13 4.8%	**ISFP** *n* = 3 1.1%	**INFP** *n* = 4 1.5%	**INTP** *n* = 5 1.8%	Perceiving	
ESTP *n* = 17 6.3%	**ESFP** *n* = 9 3.3%	**ENFP** *n* = 7 2.6%	**ENTP** *n* = 12 4.4%		Extraversion
ESTJ *n* = 106 39.0%	**ESFJ** *n* = 18 6.6%	**ENFJ** *n* = 1 0.4%	**ENTJ** *n* = 29 10.7%	Judging	

Note: N = 272.

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

	Turkish sample		Global sample	
Preference	***n***	**%**	***n***	**%**
Extraversion (E)	199	73.2	7,251	43.2
Introversion (I)	73	26.8	9,522	56.8
Sensing (S)	210	77.2	11,321	67.5
Intuition (N)	62	22.8	5,452	32.5
Thinking (T)	221	81.3	9,128	54.4
Feeling (F)	51	18.8	7,645	45.6
Judging (J)	202	74.3	8,021	47.8
Perceiving (P)	70	25.7	8,752	52.2

Note: Turkish sample, *N* = 272; global sample, *N* = 16,773.

Table 4 | **Relationships between MBTI® Global Step I™ and European Step I™ preference pair results: Turkish sample**

	Global Step I™ and European Step I™ preference pair results	
Preference pair	**Correlation between continuous scores**	**Agreement rate (%)**
E–I	.93	91
S–N	.89	72
T–F	.85	89
J–P	.89	87
Overall agreement rate for whole types		49

Note: N = 272.

MBTI® GLOBAL STEP I™ ASSESSMENT RESULTS FOR THE TURKISH 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 European Step I™ Preference Pair Results

Correlations between MBTI Global Step I and European Step I preference pair results for the Turkish sample are shown in table 4. The overall agreement rate for whole types between the Global Step I and European Step I assessments was 49%. The agreement rate is reasonably similar to what was seen when Form M replaced Form G in the United States (Myers, McCaulley, Quenk, & Hammer, 1998). The European Step I assessment is more strongly related to Form G than to Form M, and thus the overall agreement rate is not unexpected.

Global Step I™ Preference Pair Intercorrelations

Intercorrelations of Global Step I preference pair continuous scores in the Turkish sample are shown in table 5 below the diagonal. The strongest correlation is between the T–F and J–P preference pairs. The next strongest is between S–N and J–P. These correlations are generally similar to those found for the global sample, shown in table 5 above the diagonal. The Turkish 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 Turkish sample and the global sample are reported in table 6. The reliabilities of the four preference pairs are good for the Turkish sample and are very 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 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 Turkish 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 the sample. The four-factor structure produced by this analysis shows that the MBTI Global Step I items translated into Turkish are measuring their intended constructs, the four preference pairs.

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

Preference pair	E–I	S–N	T–F	J–P
E–I	—	–.20	–.15	–.15
S–N	–.12	—	.27	.48
T–F	.07	.05	—	.23
J–P	.08	.32	.36	—

Note: Correlations for the Turkish sample (*N* = 272) 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 pair continuous scores: Turkish and global samples**

		Cronbach's alpha			
Sample	*N*	E–I	S–N	T–F	J–P
Turkish	272	.89	.81	.85	.90
Global	16,773	.89	.87	.89	.88

Table 7 | **Factor analysis rotated component matrix for the Turkish 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	.59	–.07	–.12	–.03	**TF1**	.11	.06	.45	.11
EI2	.72	.09	–.02	–.03	**TF2**	.11	.16	.59	–.10
EI3	.62	.08	.16	–.11	**TF3**	.01	.04	.56	–.09
EI4	.66	.04	.11	.13	**TF4**	–.12	.12	.07	.23
EI5	.66	.01	.01	–.13	**TF5**	.03	–.10	.57	–.04
EI6	.56	.11	–.02	.02	**TF6**	.06	.00	.61	–.01
EI7	.43	.11	–.05	.13	**TF7**	.11	.06	.63	–.10
EI8	.61	.02	–.02	–.18	**TF8**	.02	.22	.36	.15
EI9	.37	.08	–.01	–.04	**TF9**	.09	.13	.49	–.12
EI10	.56	.02	.07	–.13	**TF10**	–.15	.11	.46	.06
EI11	.55	–.03	.21	–.11	**TF11**	–.01	.14	.47	–.08
EI12	.25	–.13	.04	.10	**TF12**	–.09	.25	.39	–.05
EI13	.41	.10	.33	–.03	**TF13**	.06	.02	.52	–.12
EI14	.47	.02	.00	–.11	**TF14**	–.06	.20	.56	–.01
EI15	.42	.13	.20	–.26	**TF15**	–.27	–.03	.23	–.11
EI16	.32	–.11	.02	.03	**TF16**	–.04	.10	.37	–.14
EI17	.53	–.03	–.04	–.18	**TF17**	–.27	.02	.37	.01
EI18	.55	.15	–.19	.14	**TF18**	.02	.11	.43	.18
EI19	.44	–.09	–.13	.02	**TF19**	–.04	.17	.71	.05
EI20	.70	.08	.16	–.06	**TF20**	.11	–.05	.54	–.06
EI21	.39	.03	.02	.03	**TF21**	.00	.15	.35	.00
EI22	.61	.08	.21	–.09	**TF22**	–.07	.04	.08	–.04
EI23	.45	–.07	.01	.07	**TF23**	.02	.20	.46	.10
EI24	.66	.14	.10	–.07					
					JP1	–.03	.65	.24	.16
SN1	.11	–.24	–.08	.38	**JP2**	–.12	.53	–.01	.21
SN2	–.02	–.07	–.04	.54	**JP3**	.11	.40	–.07	.21
SN3	–.16	.04	.01	.51	**JP4**	.10	.37	.22	.03
SN4	.08	.05	–.05	.44	**JP5**	.18	.52	.06	.02
SN5	–.07	.16	–.07	.42	**JP6**	.06	.44	.03	.03
SN6	.14	.29	.26	.35	**JP7**	.07	.50	.20	.08
SN7	.12	.06	.06	.25	**JP8**	.06	.63	–.04	.05
SN8	.00	–.01	–.04	.43	**JP9**	–.03	.43	.24	.07
SN9	.07	.23	.03	.45	**JP10**	.03	.49	.20	.31
SN10	.12	–.02	.21	.18	**JP11**	–.09	.59	.09	.02
SN11	–.05	.04	.11	.53	**JP12**	.01	.73	.11	.06
SN12	–.02	–.13	–.08	.53	**JP13**	.01	.40	.26	.10
SN13	–.03	.10	–.10	.29	**JP14**	.04	.65	.19	–.01
SN14	–.15	–.03	–.14	.46	**JP15**	.06	.66	.00	.05
SN15	–.24	.04	–.24	.53	**JP16**	.01	.72	.21	.11
SN16	.16	.13	.30	.43	**JP17**	.12	.61	.25	.01
SN17	–.10	.30	.25	.51	**JP18**	–.06	.64	.07	–.09
SN18	–.10	.04	–.09	.41	**JP19**	.05	.42	.03	.00
SN19	–.02	.14	.03	.51	**JP20**	.00	.53	.21	.25
SN20	–.11	.19	.05	.38	**JP21**	–.02	.48	–.08	.08
SN21	.01	.25	.19	.43					
SN22	.10	–.06	.26	.17					
SN23	–.03	–.06	–.30	.28					
SN24	–.01	.14	–.10	.53					

Note: N = 272.

MBTI® GLOBAL STEP II™ ASSESSMENT RESULTS FOR THE TURKISH 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 European Step II™ Facet Results

The Global Step II assessment replaces the Form Q assessment and the European Step II assessment. Table 8 presents the relationships between Global Step II and European Step II facet results for the Turkish sample. Most correlations are quite high. Note that the two lowest correlations occur on the Critical–Accepting and Questioning–Accommodating facet scales (.72 and .73, respectively). The Critical–Accepting and Questioning–Accommodating facet scales on the Global Step II assessment had several changes from the facet scales of the same name on the prior assessment. The changes to these facet scales account for the two lowest correlations in table 8.

Table 8 | **Relationships between Global Step II™ and European Step II™ facet results: Turkish sample**

Global Step II™ facet	Correlation between Global Step II™ and European Step II™ facet results
E–I facets	
Initiating–Receiving	.97
Expressive–Contained	.94
Gregarious–Intimate	.99
Active–Reflective	.91
Enthusiastic–Quiet	.97
S–N facets	
Concrete–Abstract	.93
Realistic–Imaginative	1.00
Practical–Conceptual	.87
Experiential–Theoretical	.97
Traditional–Original	.97
T–F facets	
Logical–Empathetic	.93
Reasonable–Compassionate	.96
Questioning–Accommodating	.73
Critical–Accepting	.72
Tough–Tender	.95
J–P facets	
Systematic–Casual	.95
Planful–Open-Ended	.98
Early Starting–Pressure-Prompted	.91
Scheduled–Spontaneous	.91
Methodical–Emergent	.86

Note: N = 272.

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 Turkish sample and the global sample. The Turkish sample alphas range from .36 (Critical–Accepting) to .84 (Initiating–Receiving). Overall, this sample's alphas are very similar to those of the global sample.

Validity of Global Step II™ Results

Reported here as evidence of the validity of the Turkish 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 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 out-of-preference scores, it is relatively rare to have three or more facet scores out-of-preference for any one preference pair. The percentage of out-of-preference facet scores for each preference pair in the Turkish sample 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: Turkish 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	.49	—																		
3. Gregarious–Intimate	.66	.47	—																	
4. Active–Reflective	.72	.50	.57	—																
5. Enthusiastic–Quiet	.68	.44	.57	.68	—															
S–N facets																				
6. Concrete–Abstract	–.05	.00	–.18	–.01	–.03	—														
7. Realistic–Imaginative	–.07	.00	–.16	–.09	–.10	.62	—													
8. Practical–Conceptual	–.15	–.03	–.19	–.14	–.17	.46	.51	—												
9. Experiential–Theoretical	.08	.07	–.01	.13	.18	.48	.35	.20	—											
10. Traditional–Original	–.23	.00	–.22	–.16	–.27	.51	.52	.54	.23	—										
T–F facets																				
11. Logical–Empathetic	.12	–.02	.01	.03	.16	.23	.22	–.06	.23	–.10	—									
12. Reasonable–Compassionate	.15	–.06	.02	.08	.18	.07	.06	–.19	.17	–.20	.75	—								
13. Questioning–Accommodating	.14	–.02	.02	.12	.12	–.02	–.01	–.21	.12	–.37	.46	.56	—							
14. Critical–Accepting	–.07	–.20	–.15	–.08	–.06	.13	.08	–.05	.11	–.15	.48	.53	.69	—						
15. Tough–Tender	.09	–.15	–.08	.06	.17	.22	.10	–.10	.24	–.18	.57	.64	.53	.59	—					
J–P facets																				
16. Systematic–Casual	.06	.07	–.09	.05	.09	.42	.43	.10	.28	.31	.39	.31	.20	.23	.32	—				
17. Planful–Open-Ended	.14	.11	.01	.09	.10	.32	.29	.00	.19	.15	.31	.24	.16	.19	.20	.68	—			
18. Early Starting–Pressure-Prompted	.14	.07	.05	.07	.16	.19	.21	–.03	.19	.08	.19	.14	.15	.06	.22	.52	.54	—		
19. Scheduled–Spontaneous	.14	.10	.02	.08	.16	.37	.40	.08	.24	.24	.37	.30	.13	.13	.24	.82	.76	.58	—	
20. Methodical–Emergent	.19	.12	.04	.16	.25	.19	.19	–.03	.12	.05	.24	.18	.19	.15	.23	.64	.59	.55	.69	—

Note: N = 272.

Table 10 | **Internal consistency reliabilities of Global Step II™ facets: Turkish and global samples**

Global Step II™ facet	Cronbach's alpha	
	Turkish sample	Global sample
E–I facets		
Initiating–Receiving	.84	.82
Expressive–Contained	.70	.73
Gregarious–Intimate	.62	.62
Active–Reflective	.62	.64
Enthusiastic–Quiet	.74	.69
S–N facets		
Concrete–Abstract	.63	.74
Realistic–Imaginative	.70	.72
Practical–Conceptual	.62	.66
Experiential–Theoretical	.63	.68
Traditional–Original	.72	.72
T–F facets		
Logical–Empathetic	.72	.80
Reasonable–Compassionate	.70	.76
Questioning–Accommodating	.56	.62
Critical–Accepting	.36	.59
Tough–Tender	.64	.73
J–P facets		
Systematic–Casual	.78	.76
Planful–Open-Ended	.76	.79
Early Starting–Pressure-Prompted	.73	.65
Scheduled–Spontaneous	.79	.80
Methodical–Emergent	.70	.64

Note: Turkish sample, *N* = 272; global sample, *N* = 16,773.

Table 11 | **Percentage of reported out-of-preference Global Step II™ facet scores: Turkish sample**

Preference pair	Number of out-of-preference facet scores (%)					
	0	1	2	3	4	5
E–I	76	22	3	0	0	0
S–N	51	33	14	1	0	0
T–F	82	13	4	1	0	0
J–P	76	18	5	1	0	0

Note: N = 272. Percentages may not total 100% due to rounding of decimals.

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

Global Step II™ facet	Preference pair			
	E–I	S–N	T–F	J–P
E–I facets				
Initiating–Receiving	.89	–.12	.12	.13
Expressive–Contained	.67	.02	–.09	.09
Gregarious–Intimate	.75	–.21	–.01	–.02
Active–Reflective	.84	–.08	.04	.07
Enthusiastic–Quiet	.81	–.12	.15	.15
S–N facets				
Concrete–Abstract	–.05	.82	.17	.36
Realistic–Imaginative	–.09	.82	.15	.37
Practical–Conceptual	–.15	.68	–.14	.02
Experiential–Theoretical	.12	.54	.20	.25
Traditional–Original	–.21	.76	–.19	.18
T–F facets				
Logical–Empathetic	.08	.15	.87	.40
Reasonable–Compassionate	.10	–.02	.90	.33
Questioning–Accommodating	.09	–.10	.62	.19
Critical–Accepting	–.13	.04	.64	.20
Tough–Tender	.05	.07	.77	.29
J–P facets				
Systematic–Casual	.03	.43	.37	.88
Planful–Open-Ended	.09	.26	.26	.85
Early Starting–Pressure-Prompted	.10	.17	.18	.66
Scheduled–Spontaneous	.11	.37	.33	.94
Methodical–Emergent	.17	.14	.24	.73

Note: N = 272.

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

CONCLUSION

Initial analyses of the Turkish translations of the MBTI Global Step I and Step II assessments demonstrate that they each have good internal consistency reliabilities that 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 by showing the percentage of out-of-preference facet scores and correlations between Global Step I preferences and Global Step II facets. While more research should be conducted, all these analyses show that the Turkish translations of the MBTI Global Step I and Step II assessments have adequate reliability and validity and are appropriate for use with individuals in Turkey who read and understand Turkish.

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.