Technical Brief for the

MBTI® FORM M and FORM Q ASSESSMENTS

Australia

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INTRODUCTION

The *Myers-Briggs Type Indicator*® (MBTI®) 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 technical brief summarizes the measurement properties of the MBTI Form M and Form Q assessments with an Australia sample. To that end, it examines the reliability of the the MBTI Form M and Form Q assessments, reports on type distribution in a sample of Australian participants, and provides comparisons with the U.S. National Representative Sample (NRS) 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.

AUSTRALIA SAMPLE

Historically, the MBTI assessment has been administered in Australia using North American English. This project followed that approach, administering the Form M and Form Q assessments as part of a larger research version of the assessment in North American English. The sample was obtained using a market research firm in Australia, and was targeted to represent the population of Australia based on several key demographic items, discussed next.

Sample Description

This sample is composed of 510 individuals who each completed the global research version of the MBTI assessment, which 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), in North American English. The sample includes 50% women and 50% men. Respondents' ages ranged from 15 to 84 years (mean = 44.4, *SD* = 16.4); 66% were employed full-time or part-time, 7% were students, 17% were retired, and 9% were either not working for income or did not provide their current employment status. Of those who were employed and reported their general line of work, 8% were working in sales and related occupations; 7% in office and administrative support; 6% in education, training, and library occupations; 5% in business and financial operations; and the remainder in various fields. Of those who were employed and reported organizational level, 46% were nonsupervisory, 19% supervisory, 17% management, 8% entry level, 5% top executive, and 4% executive. All respondents reported their country of residence as Australia. A demographic summary of this sample is presented in Table 1.

TABLE 1. DEMOGRAPHIC SUMMARY OF THE AUSTRALIA SAMPLE

Demographic	Target %	Actual %
Age		
15–24 years	10	14
25–54 year	42	56
55–64 years	11	14
65+ years	13	16
Mean age	37 yrs	44 yrs
Gender		
Female	50	50
Male	50	50
Highest Education Level Attained		
Secondary school (did not complete year 12)	6	10
Secondary school (completed year 12)	47	20
Diploma/certificate (non-university or TAFE*)	23	24
Bachelor's degree	21	25
Postgraduate degree (e.g., master's, PhD, professional degree)	3	7
No response	—	13
Employment Status		
Working full-time	48	51
Working part-time	17	15
Not working for income	5	6
Retired	10	17
Enrolled as full-time student	7	7
None of the above	13	3

Demographic	Target %	Actual %
Organizational Level		
Entry level	—	8
Nonsupervisory	—	46
Supervisory	—	19
Management	—	17
Executive	—	4
Top executive	—	5
General Line of Work		
Business and financial operations	—	5
Computer and mathematical	—	4
Healthcare practitioner and technical	—	6
Installation, maintenance, and repair	—	3
Office and administrative support	—	7
Sales and related occupations	—	8
Transportation and materials moving	—	4
Other	—	19
No response	—	38
Country of Birth		
Australia	76	71
New Zealand	2	1
United Kingdom	6	5
Other	16	10
No response	—	13

Note: N = 510.

TABLE 2. MBTI® TYPE DISTRIBUTION IN THE AUSTRALIA SAMPLE

	SENSING		INTUITION			
	Thinking	Feeling	Feeling	Thinking		
Judging	ISTJ *n* = 83 16.3% SSR = 1.40	ISFJ *n* = 44 8.6% SSR = 0.63	INFJ *n* = 15 2.9% SSR = 1.96	INTJ *n* = 19 3.7% SSR = 1.77		INTROVERSION
Perceiving	ISTP *n* = 53 10.4% SSR = 1.92	ISFP *n* = 33 6.5% SSR = 0.74	INFP *n* = 39 7.6% SSR = 1.74	INTP *n* = 28 5.5% SSR = 1.66		
Perceiving	ESTP *n* = 19 3.7% SSR = 0.87	ESFP *n* = 22 4.3% SSR = 0.51	ENFP *n* = 36 7.1% SSR = 0.87	ENTP *n* = 22 4.3% SSR = 1.35		EXTRAVERSION
Judging	ESTJ *n* = 45 8.8% SSR = 1.01	ESFJ *n* = 27 5.3% SSR = 0.43	ENFJ *n* = 17 3.3% SSR = 1.33	ENTJ *n* = 8 1.6% SSR = 0.87		

Note: *N* = 510.

Table 2 includes the number and percentage of respondents of each type in the sample. As shown, the most frequently occurring type for the sample is ISTJ (16.3%), followed by ISTP (10.4%). The least common types are ENTJ (1.6%) and INFJ (2.9%). Self-selection ratios (SSRs) were computed by comparing the percentage of each type in the Australia sample to that in the U.S. National Representative Sample (Myers,

TABLE 3. MBTI® TYPE DISTRIBUTION IN THE AUSTRALIA SAMPLE: WOMEN

SENSING		INTUITION			
Thinking	Feeling	Feeling	Thinking		
ISTJ *n* = 35 13.7%	**ISFJ** *n* = 32 12.5%	**INFJ** *n* = 11 4.3%	**INTJ** *n* = 8 3.1%	Judging	INTROVERSION
ISTP *n* = 12 4.7%	**ISFP** *n* = 19 7.5%	**INFP** *n* = 28 11.0%	**INTP** *n* = 14 5.5%	Perceiving	
ESTP *n* = 5 2.0%	**ESFP** *n* = 11 4.3%	**ENFP** *n* = 23 9.0%	**ENTP** *n* = 8 3.1%	Perceiving	EXTRAVERSION
ESTJ *n* = 17 6.7%	**ESFJ** *n* = 18 7.1%	**ENFJ** *n* = 11 4.3%	**ENTJ** *n* = 3 1.2%	Judging	

Note: *n* = 255.

McCaulley, Quenk, & Hammer, 1998). In this sample, INFJs are nearly two times more prevalent than in the U.S. population, whereas ESJFs are less common in the Australia sample than in the U.S. sample. Type distributions for women and men in the Australia sample are presented in Tables 3 and 4.

TABLE 4. MBTI® TYPE DISTRIBUTION IN THE AUSTRALIA SAMPLE: MEN

SENSING		INTUITION			
Thinking	Feeling	Feeling	Thinking		
ISTJ *n* = 48 18.8%	**ISFJ** *n* = 12 4.7%	**INFJ** *n* = 4 1.6%	**INTJ** *n* = 11 4.3%	Judging	INTROVERSION
ISTP *n* = 41 16.1%	**ISFP** *n* = 14 5.5%	**INFP** *n* = 11 4.3%	**INTP** *n* = 14 5.5%	Perceiving	
ESTP *n* = 14 5.5%	**ESFP** *n* = 11 4.3%	**ENFP** *n* = 13 5.1%	**ENTP** *n* = 14 5.5%	Perceiving	EXTRAVERSION
ESTJ *n* = 28 11.0%	**ESFJ** *n* = 9 3.5%	**ENFJ** *n* = 6 2.4%	**ENTJ** *n* = 5 2.0%	Judging	

Note: *n* = 255.

Table 5 shows the number and percentage of respondents for each preference for the Australia sample as a whole, and separately for each gender. Also included for reference are the number and percentage of respondents for each preference in the U.S. National Representative Sample (Myers et al., 1998).

TABLE 5. MBTI® PREFERENCE DISTRIBUTIONS FOR THE AUSTRALIA SAMPLE AND THE U.S. NATIONAL REPRESENTATIVE SAMPLE (NRS)

	Australia Sample (N = 510)		U.S. NRS (N = 3,009)		Australia Sample: Women (n = 255)		Australia Sample: Men (n = 255)	
Preference	*n*	%	*n*	%	*n*	%	*n*	%
Extraversion (E)	196	38.4	1,483	49.3	96	37.6	100	39.2
Introversion (I)	314	61.6	1,526	50.7	159	62.4	155	60.8
Sensing (S)	326	63.9	2,206	73.3	149	58.4	177	69.4
Intuition (N)	184	36.1	803	26.7	106	41.6	78	30.6
Thinking (T)	277	54.3	1,210	40.2	102	40.0	175	68.6
Feeling (F)	233	45.7	1,799	59.8	153	60.0	80	31.4
Judging (J)	258	50.6	1,629	54.1	135	52.9	123	48.2
Perceiving (P)	252	49.4	1,380	45.9	120	47.1	132	51.8

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

RELIABILITY OF THE FORM M PREFERENCES

The internal consistency reliabilities (Cronbach's alphas) for the Australia sample and the U.S. National Representative Sample (NRS) are reported in Table 6. The reliabilities of the four dichotomies are good for the Australia sample and are very similar to those reported in the *MBTI® Manual* (Myers et al., 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 Australia sample. The results are presented in Table 7. The shaded cells indicate that factor 1 is S–N, factor 2 is T–F, factor 3 is E–I, and factor 4 is J–P. The four-factor structure produced by this analysis shows that the Australia MBTI Form M items are measuring their intended constructs, the four dichotomies.

TABLE 6. MBTI® DICHOTOMY INTERNAL CONSISTENCY RELIABILITIES FOR THE AUSTRALIA SAMPLE AND THE U.S. NRS

	Cronbach's Alpha	
Dichotomy	**Australia Sample**	**U.S. NRS**
Extraversion–Introversion	.91	.91
Sensing–Intuition	.90	.92
Thinking–Feeling	.90	.91
Judging–Perceiving	.91	.92

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

TABLE 7. FACTOR ANALYSIS ROTATED COMPONENT MATRIX FOR THE AUSTRALIA SAMPLE

Item Code	Factor 1 (S–N)	Factor 2 (T–F)	Factor 3 (E–I)	Factor 4 (J–P)	Item Code	Factor 1 (S–N)	Factor 2 (T–F)	Factor 3 (E–I)	Factor 4 (J–P)
EI1	–.03	–.06	.77	–.06	SN16	.54	.15	–.03	.16
EI2	–.07	.01	.57	–.02	SN17	.55	.15	.06	–.04
EI3	–.09	.04	.56	.03	SN18	.58	.09	.00	.12
EI4	.00	–.18	.51	–.05	SN19	.54	.05	.00	.06
EI5	.07	.00	.50	.05	SN20	.61	.05	–.05	.21
EI6	–.10	–.02	.65	.03	SN21	.33	–.21	–.03	.03
EI7	–.06	–.04	.51	–.04	SN22	.63	.24	–.10	.11
EI8	–.06	–.07	.62	–.02	SN23	.53	.08	–.03	.11
EI9	–.13	.00	.59	–.04	SN24	.53	.13	–.16	.20
EI10	–.08	–.09	.60	–.08	SN25	.53	.05	–.09	.09
EI11	–.12	.00	.68	–.08	SN26	.55	.10	–.14	.02
EI12	–.16	.06	.54	–.11	TF1	.02	.40	–.13	.07
EI13	–.04	–.06	.44	.00	TF2	.10	.43	–.04	–.01
EI14	–.08	–.06	.51	–.07	TF3	.08	.56	–.05	.12
EI15	.02	–.02	.61	–.05	TF4	.08	.46	.09	–.06
EI16	–.01	–.10	.50	–.06	TF5	.15	.56	–.05	.06
EI17	–.14	–.03	.57	.01	TF6	.21	.53	–.01	.11
EI18	–.10	.00	.68	.06	TF7	–.01	.59	–.06	.06
EI19	–.02	–.05	.76	–.03	TF8	.03	.48	–.11	.00
EI20	.12	–.17	.53	.05	TF9	.04	.54	–.03	–.03
EI21	–.09	.04	.68	.00	TF10	.09	.43	–.03	.03
SN1	.39	.00	–.02	.08	TF11	.03	.52	.09	.04
SN2	.46	–.04	–.03	.11	TF12	.04	.61	.03	–.02
SN3	.58	.20	–.08	.12	TF13	.26	.53	–.08	.08
SN4	.43	–.07	–.12	.15	TF14	.11	.55	–.15	–.07
SN5	.48	.01	–.08	.09	TF15	.19	.66	–.04	.01
SN6	.35	.05	–.06	.00	TF16	–.01	.56	.00	.02
SN7	.62	.18	–.05	.18	TF17	.02	.66	–.07	.10
SN8	.40	–.13	–.02	.19	TF18	.18	.56	–.01	.20
SN9	.63	.24	–.06	.11	TF19	–.01	.66	–.08	.09
SN10	.56	.07	–.01	.09	TF20	.00	.44	–.01	.13
SN11	.44	.08	–.03	.04	TF21	.12	.56	–.06	.11
SN12	.55	–.02	.01	.07	TF22	.04	.57	–.10	.05
SN13	.52	.16	–.14	.13	TF23	.03	.64	.00	.02
SN14	.56	.17	–.08	.06	TF24	.00	.33	.02	.11
SN15	.50	.14	–.04	–.07					

(cont'd)

TABLE 7. FACTOR ANALYSIS ROTATED COMPONENT MATRIX FOR THE AUSTRALIA SAMPLE *(CONT'D)*

Item Code	Factor 1 (S–N)	Factor 2 (T–F)	Factor 3 (E–I)	Factor 4 (J–P)	Item Code	Factor 1 (S–N)	Factor 2 (T–F)	Factor 3 (E–I)	Factor 4 (J–P)
JP1	.17	.08	–.05	.61	JP12	.14	.13	–.18	.44
JP2	.04	.08	.01	.63	JP13	.26	–.01	–.06	.64
JP3	.15	.10	–.06	.69	JP14	.25	.29	–.05	.44
JP4	.27	.02	.07	.53	JP15	.14	.12	.00	.64
JP5	.03	–.08	.06	.49	JP16	.16	.13	–.08	.59
JP6	.19	–.09	–.06	.35	JP17	.09	.07	.01	.68
JP7	.05	.02	–.07	.57	JP18	.15	.03	–.19	.59
JP8	–.03	.00	.04	.56	JP19	.20	–.05	.01	.61
JP9	.18	.12	–.08	.66	JP20	–.12	.11	–.05	.42
JP10	.33	.26	–.15	.52	JP21	.18	.08	.08	.61
JP11	.13	.33	–.04	.51	JP22	–.03	.02	.08	.42

Note: N = 510.

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 8), 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.

Internal consistency reliabilities for each facet are reported in Table 8 for the Australia sample and the U.S. National Representative Sample. The Australia sample alphas range from .31 (Questioning–Accommodating) to .85 (Initiating–Receiving). Overall, some 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 international samples and translations of the MBTI Form Q (or Step II™ for Europe) assessment (Quenk, Hammer, & Majors, 2004; Schaubhut, 2008; Schaubhut & Thompson, 2010a; Schaubhut & Thompson, 2010b). Reliabilities for nine other translations can be found in the *MBTI® Step II™ Manual,* European edition (Quenk et al., 2004).

CONCLUSION

The analyses reported here with an initial Australia sample demonstrate that the translation and measurement properties of the assessment are adequate. Therefore, the MBTI Forms M and Q can be widely used with individuals who reside in Australia. As the MBTI assessment continues to grow, larger and more diverse samples will become available and the measurement properties of the MBTI Forms M and Q will continue to be evaluated.

TABLE 8. MBTI® FORM Q FACET INTERNAL CONSISTENCY RELIABILITIES FOR THE AUSTRALIA SAMPLE AND THE U.S. NRS

Form Q Facets	Cronbach's Alpha: Australia Sample	Cronbach's Alpha: U.S. NRS
E–I Facets		
Initiating–Receiving	.85	.85
Expressive–Contained	.77	.79
Gregarious–Intimate	.62	.60
Active–Reflective	.66	.59
Enthusiastic–Quiet	.73	.72
S–N Facets		
Concrete–Abstract	.74	.81
Realistic–Imaginative	.75	.79
Practical–Conceptual	.52	.67
Experiential–Theoretical	.73	.83
Traditional–Origina	.69	.76
T–F Facets		
Logical–Empathetic	.75	.80
Reasonable–Compassionate	.73	.77
Questioning–Accommodating	.31	.57
Critical–Accepting	.52	.60
Tough–Tender	.79	.81
J–P Facets		
Systematic–Casual	.79	.74
Planful–Open-Ended	.83	.82
Early Starting–Pressure-Prompted	.59	.70
Scheduled–Spontaneous	.81	.82
Methodical–Emergent	.62	.71

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

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