



Technical Brief for the MBTI® FORM M ASSESSMENT

Arabic

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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 a translation of the MBTI Form M assessment developed for areas where Arabic is understood. To that end, it examines the reliability of the Arabic translation of the MBTI Form M assessment, reports on type distribution in a sample of individuals who completed the instrument in Arabic, 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.

ARABIC SAMPLE

Following the translation of the MBTI assessment into Arabic, a sample of participants was obtained for this study. It is important to note that this Arabic sample is not a representative sample; rather, it is a sample of con-

venience. Therefore, no inferences may be drawn about the preferences or type distribution of the population that understands or uses Arabic. The data reported in this technical brief should be used for psychometric information purposes only.

Sample Description

This sample is composed of 215 individuals who each completed the MBTI®—Global Research version of the assessment in Arabic. 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). The sample included 31% women and 69% men. Respondents' ages ranged from 20 to 66 years (mean = 35.3, $SD = 9.5$); 86% were employed full-time or part-time, 11% were students, 1% were retired, and 3% 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, 23% were working in business and financial operations; 14% in legal; 14% in office and administrative support; 12% in community and social services; and the remainder in various fields. Of those who were employed and reported organizational level, 34% were supervisory, 24% management, 17% entry level, 14% nonsupervisory, and 11% executive. All respondents reported their country of origin and residence as one in which Arabic is spoken.

As shown in Table 1, the most frequently occurring type for this sample is ESTJ (54.0%), followed by ESTP (8.8%). Note that this report is based on samples of convenience, collected through the efforts of the local distributor. As such, the sample has some unusual type distributions and should not be interpreted as base rates for type distributions in Arabic-speaking countries. In this sample of convenience, it is possible that the individuals in the organizations selected have type preferences that are affected by their occupation. For example, the sample contains a large number of individuals employed in fields that tend to have a high percentage of ESTJs. As indicated in *MBTI® Type Tables for Occupations*, 13 of 22 occupational samples in the O*NET™ job family Business and Financial Operations had ESTJ as the most frequently occurring type (Schaubhut & Thompson, 2008); 20% of the Arabic sample were employed in occupations in business and financial operations. Also indicated is that two of the three occupation samples in the O*NET job family Legal had ESTJ as the most frequently occurring type

TABLE 1. TYPE DISTRIBUTION IN THE ARABIC SAMPLE

| SENSING | | INTUITION | | |
|--|---|---|--|------------|
| Thinking | Feeling | Feeling | Thinking | |
| ISTJ <i>n</i> = 10 4.7% SSR = 0.40 | ISFJ <i>n</i> = 1 0.5% SSR = 0.03 | INFJ <i>n</i> = 2 0.9% SSR = 0.62 | INTJ <i>n</i> = 2 0.9% SSR = 0.44 | Judging |
| ISTP <i>n</i> = 8 3.7% SSR = 0.69 | ISFP <i>n</i> = 7 3.3% SSR = 0.37 | INFP <i>n</i> = 2 0.9% SSR = 0.21 | INTP <i>n</i> = 1 0.5% SSR = 0.14 | Perceiving |
| ESTP <i>n</i> = 19 8.8% SSR = 2.06 | ESFP <i>n</i> = 9 4.2% SSR = 0.49 | ENFP <i>n</i> = 7 3.3% SSR = 0.40 | ENTP <i>n</i> = 5 2.3% SSR = 0.73 | Perceiving |
| ESTJ <i>n</i> = 116 54.0% SSR = 6.20 | ESFJ <i>n</i> = 5 2.3% SSR = 0.19 | ENFJ <i>n</i> = 6 2.8% SSR = 1.12 | ENTJ <i>n</i> = 15 7.0% SSR = 3.88 | Judging |

Note: *N* = 215.

(Schaubhut & Thompson, 2008); 12% of the Arabic sample were employed in legal-related occupations. The least common types are ISFJ (0.5%) and INTP (0.5%). Self-selection ratios (SSRs) were computed by comparing the percentage of each type in the Arabic sample to that in the U.S. National Representative Sample (Myers, McCaulley, Quenk, & Hammer, 1998). Note that in this sample,

ESTJs are more than six times as prevalent as they are in the U.S. National Representative Sample. On the other hand, ISFJs are much less common in the Arabic sample than in the U.S. sample. Since this Arabic sample is not representative of the general population, no inferences should be made about the population's distribution of type.

TABLE 2. PREFERENCE DISTRIBUTIONS FOR THE ARABIC SAMPLE AND THE U.S. NATIONAL REPRESENTATIVE SAMPLE

| Preference | Arabic Sample (N = 215) | | U.S. National Representative Sample (N = 3,009) | |
|------------------|----------------------------|------|--|------|
| | n | % | n | % |
| Extraversion (E) | 182 | 84.7 | 1,483 | 49.3 |
| Introversion (I) | 33 | 15.3 | 1,526 | 50.7 |
| Sensing (S) | 175 | 81.4 | 2,206 | 73.3 |
| Intuition (N) | 40 | 18.6 | 803 | 26.7 |
| Thinking (T) | 176 | 81.9 | 1,210 | 40.2 |
| Feeling (F) | 39 | 18.1 | 1,799 | 59.8 |
| Judging (J) | 157 | 73.0 | 1,629 | 54.1 |
| Perceiving (P) | 58 | 27.0 | 1,380 | 45.9 |

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

TABLE 3. DICHOTOMY INTERNAL CONSISTENCY RELIABILITIES FOR THE ARABIC SAMPLE AND THE U.S. NATIONAL REPRESENTATIVE SAMPLE

| Dichotomy | Arabic Sample | U.S. National Representative Sample |
|-----------|------------------|-------------------------------------|
| | Cronbach's Alpha | Cronbach's Alpha |
| E-I | .81 | .91 |
| S-N | .74 | .92 |
| T-F | .87 | .91 |
| J-P | .88 | .92 |

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

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 et al., 1998).

RELIABILITY OF THE FORM M PREFERENCES

The internal consistency reliabilities (Cronbach's alphas) for the Arabic sample and the U.S. National Representative Sample are reported in Table 3. The reliabilities of the four dichotomies are good for the Arabic sample and

are generally in line with those reported in the *MBTI® Manual* (Myers et al., 1998). However, the alpha is somewhat lower for the S-N dichotomy. A lower S-N alpha was also reported for some other international samples—Latin/North American Spanish, Traditional Chinese, and Simplified Chinese (Schaubhut, 2008; Schaubhut & Thompson, 2010a; Schaubhut & Thompson, 2010b).

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 Arabic sample are reported in Table 4.

TABLE 4. PREDICTION RATIOS FOR THE ARABIC SAMPLE

| Item Code | ESTJ Prediction Ratio | INFP Prediction Ratio | Item Code | ESTJ Prediction Ratio | INFP Prediction Ratio |
|-----------|--------------------------|--------------------------|-----------|--------------------------|--------------------------|
| EI1 | .87 | .81 | SN16 | .72 | .68 |
| EI2 | .73 | .88 | SN17 | .71 | .61 |
| EI3 | .68 | .77 | SN18 | .59 | .91 |
| EI4 | .76 | .78 | SN19 | .78 | .60 |
| EI5 | .80 | .85 | SN20 | .76 | .95 |
| EI6 | .79 | .73 | SN21 | .60 | .84 |
| EI7 | .68 | .55 | SN22 | .62 | .75 |
| EI8 | .74 | .93 | SN23 | .64 | .54 |
| EI9 | .52 | .69 | SN24 | .89 | .61 |
| EI10 | .57 | .51 | SN25 | .73 | .61 |
| EI11 | .57 | .96 | SN26 | .59 | .44 |
| EI12 | .53 | .88 | TF1 | .67 | .81 |
| EI13 | .52 | .95 | TF2 | .82 | .75 |
| EI14 | .66 | .75 | TF3 | .76 | .86 |
| EI15 | .75 | .89 | TF4 | .82 | .64 |
| EI16 | .61 | .66 | TF5 | .84 | .77 |
| EI17 | .77 | .92 | TF6 | .69 | .68 |
| EI18 | .65 | .77 | TF7 | .71 | .83 |
| EI19 | .69 | .56 | TF8 | .72 | .90 |
| EI20 | .81 | .70 | TF9 | .59 | .75 |
| EI21 | .69 | .78 | TF10 | .64 | .56 |
| SN1 | .65 | .81 | TF11 | .81 | .58 |
| SN2 | .66 | .89 | TF12 | .66 | .90 |
| SN3 | .84 | .61 | TF13 | .76 | .89 |
| SN4 | .69 | .59 | TF14 | .79 | .63 |
| SN5 | .75 | .58 | TF15 | .82 | .82 |
| SN6 | .69 | .64 | TF16 | .61 | .64 |
| SN7 | .71 | .53 | TF17 | .85 | .85 |
| SN8 | .61 | .61 | TF18 | .80 | .94 |
| SN9 | .85 | .74 | TF19 | .80 | .91 |
| SN10 | .49 | .50 | TF20 | .96 | .72 |
| SN11 | .56 | .54 | TF21 | .75 | .81 |
| SN12 | .64 | .79 | TF22 | .69 | .76 |
| SN13 | .90 | .73 | TF23 | .61 | .76 |
| SN14 | .73 | .90 | TF24 | .66 | .78 |
| SN15 | .57 | .55 | | | |

(cont'd)

TABLE 4. PREDICTION RATIOS FOR THE ARABIC SAMPLE *CONT'D*

| Item Code | ESTJ Prediction Ratio | INFP Prediction Ratio | Item Code | ESTJ Prediction Ratio | INFP Prediction Ratio |
|-----------|--------------------------|--------------------------|-----------|--------------------------|--------------------------|
| JP1 | .69 | .80 | JP12 | .64 | .61 |
| JP2 | .69 | .75 | JP13 | .82 | .80 |
| JP3 | .71 | .85 | JP14 | .62 | .91 |
| JP4 | .64 | .81 | JP15 | .72 | .69 |
| JP5 | .68 | .82 | JP16 | .81 | .81 |
| JP6 | .77 | .78 | JP17 | .83 | .81 |
| JP7 | .66 | .91 | JP18 | .82 | .84 |
| JP8 | .70 | .72 | JP19 | .62 | .81 |
| JP9 | .61 | .91 | JP20 | .71 | .77 |
| JP10 | .71 | .84 | JP21 | .62 | .71 |
| JP11 | .61 | .78 | JP22 | .76 | .76 |

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 Arabic sample. The results are presented in Table 5. The shaded cells indicate that factor 1 is T–F, factor 2 is E–I, factor 3 is J–P, and factor 4 is S–N. The four-factor structure produced by this analysis shows that the Arabic MBTI Form M items are measuring their intended constructs, the four dichotomies.

TABLE 5. FACTOR ANALYSIS ROTATED COMPONENT MATRIX FOR THE ARABIC SAMPLE

| Item Code | Factor 1 (T–F) | Factor 2 (E–I) | Factor 3 (J–P) | Factor 4 (S–N) | Item Code | Factor 1 (T–F) | Factor 2 (E–I) | Factor 3 (J–P) | Factor 4 (S–N) |
|-----------|-------------------|-------------------|-------------------|-------------------|-----------|-------------------|-------------------|-------------------|-------------------|
| EI1 | -.07 | .71 | -.08 | .04 | EI12 | -.02 | .43 | -.20 | .00 |
| EI2 | .04 | .58 | -.01 | -.02 | EI13 | -.01 | .30 | -.13 | -.05 |
| EI3 | .03 | .56 | .02 | -.03 | EI14 | -.10 | .57 | .02 | -.05 |
| EI4 | -.09 | .64 | .03 | -.02 | EI15 | .01 | .65 | .04 | .01 |
| EI5 | -.11 | .61 | .02 | .09 | EI16 | .02 | .55 | -.06 | .01 |
| EI6 | -.12 | .69 | .00 | -.01 | EI17 | -.08 | .70 | .00 | .00 |
| EI7 | -.13 | .54 | -.08 | -.03 | EI18 | -.09 | .61 | .09 | .06 |
| EI8 | -.10 | .70 | -.04 | .01 | EI19 | .00 | .64 | -.07 | .08 |
| EI9 | .13 | .51 | -.13 | .01 | EI20 | -.03 | .64 | -.02 | -.07 |
| EI10 | -.12 | .68 | -.10 | .05 | EI21 | .03 | .65 | .04 | -.01 |
| EI11 | -.07 | .65 | -.13 | -.10 | | | | | |

(cont'd)

**TABLE 5. FACTOR ANALYSIS ROTATED COMPONENT MATRIX
FOR THE ARABIC SAMPLE *CONT'D***

| Item Code | Factor 1 (T-F) | Factor 2 (E-I) | Factor 3 (J-P) | Factor 4 (S-N) | Item Code | Factor 1 (T-F) | Factor 2 (E-I) | Factor 3 (J-P) | Factor 4 (S-N) |
|-----------|----------------|----------------|----------------|----------------|-----------|----------------|----------------|----------------|----------------|
| SN1 | .01 | .16 | .01 | .47 | TF11 | .40 | .09 | .02 | -.07 |
| SN2 | .22 | -.11 | .11 | .55 | TF12 | .46 | -.03 | .03 | .08 |
| SN3 | .19 | -.03 | .11 | .60 | TF13 | .73 | -.03 | .07 | .06 |
| SN4 | -.05 | -.07 | .13 | .36 | TF14 | .60 | -.11 | .17 | .12 |
| SN5 | .08 | -.09 | .11 | .45 | TF15 | .64 | -.05 | .03 | .14 |
| SN6 | -.02 | -.03 | .05 | .25 | TF16 | .47 | -.11 | .12 | .10 |
| SN7 | -.12 | -.13 | .17 | .38 | TF17 | .65 | -.19 | .12 | -.04 |
| SN8 | .19 | .01 | .18 | .63 | TF18 | .68 | -.04 | .07 | .06 |
| SN9 | .15 | -.07 | .06 | .64 | TF19 | .55 | .02 | .13 | .08 |
| SN10 | .01 | .07 | -.02 | .41 | TF20 | .71 | -.10 | .04 | .00 |
| SN11 | .02 | .15 | .03 | .50 | TF21 | .51 | .10 | -.02 | .07 |
| SN12 | .05 | .13 | .02 | .49 | TF22 | .62 | .01 | .00 | .07 |
| SN13 | .09 | -.11 | .05 | .67 | TF23 | .44 | .02 | .08 | .12 |
| SN14 | .23 | -.14 | .10 | .57 | TF24 | .37 | -.10 | .07 | .07 |
| SN15 | .00 | -.03 | .06 | .64 | JP1 | -.05 | -.01 | .54 | .07 |
| SN16 | -.01 | -.04 | .04 | .34 | JP2 | -.01 | -.01 | .73 | .10 |
| SN17 | -.08 | .02 | -.14 | .36 | JP3 | .02 | -.11 | .45 | -.07 |
| SN18 | .20 | .12 | .20 | .62 | JP4 | .10 | -.02 | .45 | .19 |
| SN19 | .04 | .01 | .11 | .58 | JP5 | -.01 | .01 | .52 | .11 |
| SN20 | .20 | -.02 | .12 | .68 | JP6 | -.01 | -.08 | .57 | .09 |
| SN21 | .04 | .21 | .08 | .59 | JP7 | .08 | -.04 | .68 | -.03 |
| SN22 | .12 | -.08 | .14 | .52 | JP8 | .00 | -.01 | .60 | .15 |
| SN23 | -.12 | -.21 | .17 | .46 | JP9 | .14 | -.05 | .65 | .21 |
| SN24 | .06 | -.08 | .13 | .60 | JP10 | .16 | -.26 | .45 | .22 |
| SN25 | -.03 | .20 | -.01 | .50 | JP11 | .17 | -.31 | .33 | .23 |
| SN26 | -.30 | -.09 | -.07 | .18 | JP12 | .24 | .03 | .40 | .08 |
| TF1 | .59 | -.10 | .13 | -.03 | JP13 | .15 | -.05 | .65 | .16 |
| TF2 | .66 | -.13 | .04 | .04 | JP14 | .17 | -.06 | .59 | .12 |
| TF3 | .75 | -.09 | .09 | .02 | JP15 | -.01 | .00 | .68 | .08 |
| TF4 | .46 | -.04 | -.09 | .00 | JP16 | .09 | -.12 | .68 | .15 |
| TF5 | .69 | -.12 | .04 | -.06 | JP17 | .09 | .02 | .72 | .11 |
| TF6 | .56 | -.01 | .02 | .08 | JP18 | .15 | -.31 | .51 | .18 |
| TF7 | .44 | -.19 | .09 | -.02 | JP19 | .10 | -.05 | .53 | -.06 |
| TF8 | .58 | .00 | .05 | .12 | JP20 | .02 | .02 | .64 | .15 |
| TF9 | .47 | .00 | .12 | .10 | JP21 | .14 | .01 | .54 | -.05 |
| TF10 | .34 | .03 | .01 | .05 | JP22 | .11 | .02 | .69 | .12 |

CONCLUSION

The analyses reported here with an initial Arabic sample demonstrate that the translation and measurement properties of the MBTI Form M assessment are adequate. However, because this sample is predominantly male and is overrepresented by individuals with a preference for ESTJ, these findings should not be overinterpreted and caution should be used when applying them to other samples. Nevertheless, translations of the MBTI Form M assessment likely can be widely used with individuals who understand Arabic. As the MBTI assessment continues to grow, larger and more diverse samples will become available and the measurement properties of the MBTI Form M assessment will continue to be evaluated. Further research will be necessary to demonstrate adequacy of the MBTI Form M instrument in a more representative sample of the Arabic-speaking population.

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