



Technical Brief for the

MBTI® FORM M and FORM Q ASSESSMENTS

India

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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 its administration outside the United States is growing rapidly, the instrument is continually being evaluated for use in specific regions. This technical brief summarizes the measurement properties of the MBTI Form M and Form Q assessments with an Indian sample. To that end, it examines the reliability of the MBTI Form M and Form Q assessments, reports on type distribution in a sample of Indian participants, and provides comparisons with the US national representative sample (NRS) used in the *MBTI® Manual* (Myers, McCaulley, Quenk, & Hammer, 1998) 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 *preference pairs*:

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

The assessment combines an individual's four preferences—one from each preference pair, 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 an individual possesses. Unlike the MBTI assessment, those instruments usually consider one end of a trait to be more positive and the other to be more negative.

INDIAN SAMPLE

Historically, the MBTI assessment has been administered in India using North American English. A sample

composed of 7,744 Indian respondents who completed the MBTI Form Q assessment in North American English was obtained for this study. It is important to note that this is not a representative sample, but rather a sample of convenience. Therefore, no inferences may be drawn about the preferences or type distribution of the population of India. The data reported in this technical brief should be used for psychometric information purposes only.

The Indian sample includes 20% women and 79% men, 1% not reported. Respondents' ages ranged from 18 to 68 years (mean = 35.2, *SD* = 7.2); 84% were employed full-time or part-time, 5% were students, 1% were currently seeking employment, <1% were retired, and 9% were either not working for income or did not provide their current employment status. For general line of work, 25% reported working in computer and mathematical occupations; 19% in management; 11% in business and financial operations; 9% in architecture and engineering; 7% in sales and related occupations; and the remainder in various fields. For organizational level, 38% reported management, 15% supervisory, 14% nonsupervisory, 9% executive, 4% entry level, and 4% top executive. All respondents reported their country of origin and residence as India. A thorough demographic summary of this sample is presented in Table 1.

Table 2 includes the number and percentage of respondents of each type in the sample. As shown, the most frequently occurring type for this sample is ESTJ (28.3%), followed by ISTJ (23.2%). The least common types are INFP (1.6%) and INFJ (1.7%). 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 India. In this sample of convenience, it is possible that the individuals in the organizations selected have type preferences that are affected by their occupation. Type distributions for women and men in the Indian sample are presented in Tables 3 and 4.

Table 5 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 US national representative sample (NRS; Myers et al., 1998).

TABLE 1. DEMOGRAPHIC SUMMARY OF THE INDIAN SAMPLE

| Demographic | Sample % | Demographic | Sample % |
|-------------------------------|----------|---|----------|
| Age | | General Line of Work | |
| Mean age: 35 yrs | | Computer and mathematical occupations | 25 |
| Gender | | Management | 19 |
| Female | 20 | Business and financial operations | 11 |
| Male | 79 | Architecture and engineering | 9 |
| No response | 1 | Sales and related occupations | 7 |
| Employment Status | | Office and administrative support | 2 |
| Working full-time | 83 | Production | 2 |
| Working part-time | 1 | Installation, maintenance, and repair | 1 |
| Not working for income | <1 | Education, training, and library | 1 |
| Retired | <1 | Life, physical, and social sciences | 1 |
| Enrolled as full-time student | 5 | Healthcare practitioner and technical occupations | <1 |
| Currently seeking employment | 1 | Healthcare support | <1 |
| None of the above | 1 | Legal | <1 |
| No response | 8 | Arts, design, entertainment, sports, and media | <1 |
| Organizational Level | | Transportation and materials moving | <1 |
| Entry level | 4 | Community and social services | <1 |
| Nonsupervisory | 14 | Food preparation and food service | <1 |
| Supervisory | 15 | Construction and extraction | <1 |
| Management | 38 | Other | <1 |
| Executive | 9 | No response | 16 |
| Top executive | 4 | | |
| No response | 16 | | |

Note: N = 7,744.

RELIABILITY OF THE FORM M PREFERENCES

The internal consistency reliabilities (Cronbach’s alphas) for the Indian sample and the US NRS are reported in Table 6. The reliabilities of the four preference pairs are good for the Indian 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

TABLE 2. MBTI® TYPE DISTRIBUTION IN THE INDIAN SAMPLE

| SENSING | | INTUITION | | | |
|-----------------------------------|--------------------------------|--------------------------------|--------------------------------|------------|--------------|
| Thinking | Feeling | Thinking | | | |
| ISTJ n = 1,800 23.2% | ISFJ n = 345 4.5% | INFJ n = 135 1.7% | INTJ n = 377 4.9% | | |
| ISTP n = 393 5.1% | ISFP n = 173 2.2% | INFP n = 126 1.6% | INTP n = 226 2.9% | Perceiving | |
| ESTP n = 439 5.7% | ESFP n = 194 2.5% | ENFP n = 188 2.4% | ENTP n = 241 3.1% | Perceiving | EXTRAVERSION |
| ESTJ n = 2,188 28.3% | ESFJ n = 289 3.7% | ENFJ n = 151 1.9% | ENTJ n = 479 6.2% | Judging | |

Note: N = 7,744.

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

| SENSING | | INTUITION | | | |
|---------------------------------|--------------------------------|-------------------------------|--------------------------------|------------|--------------|
| Thinking | Feeling | Thinking | | | |
| ISTJ n = 292 19.0% | ISFJ n = 109 7.1% | INFJ n = 43 2.8% | INTJ n = 72 4.7% | | |
| ISTP n = 59 3.8% | ISFP n = 41 2.7% | INFP n = 31 2.0% | INTP n = 37 2.4% | Perceiving | |
| ESTP n = 62 4.0% | ESFP n = 53 3.4% | ENFP n = 49 3.2% | ENTP n = 58 3.8% | Perceiving | EXTRAVERSION |
| ESTJ n = 369 24.0% | ESFJ n = 108 7.0% | ENFJ n = 55 3.6% | ENTJ n = 100 6.5% | Judging | |

Note: n = 1,538.

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

| SENSING | | INTUITION | | | |
|--|---------------------------------------|---------------------------------------|---------------------------------------|------------|--------------|
| Thinking | Feeling | Thinking | Feeling | | |
| ISTJ <i>n</i> = 1,500 24.4% | ISFJ <i>n</i> = 235 3.8% | INFJ <i>n</i> = 92 1.5% | INTJ <i>n</i> = 304 4.9% | Judging | INTROVERSION |
| ISTP <i>n</i> = 332 5.4% | ISFP <i>n</i> = 130 2.1% | INFP <i>n</i> = 94 1.5% | INTP <i>n</i> = 186 3.0% | Perceiving | |
| ESTP <i>n</i> = 374 6.1% | ESFP <i>n</i> = 141 2.3% | ENFP <i>n</i> = 133 2.2% | ENTP <i>n</i> = 180 2.9% | Judging | EXTRAVERSION |
| ESTJ <i>n</i> = 1,805 29.3% | ESFJ <i>n</i> = 178 2.9% | ENFJ <i>n</i> = 95 1.5% | ENTJ <i>n</i> = 375 6.1% | Perceiving | |

Note: *n* = 6,154.

varimax rotation was conducted using the item responses from the Indian 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 four-factor structure produced by this analysis shows that the MBTI Form M items in India are measuring their intended constructs, the four preference pairs.

TABLE 5. MBTI® PREFERENCE DISTRIBUTIONS FOR THE INDIAN SAMPLE AND THE US NRS

| Preference | Indian Sample (<i>N</i> = 7,744) | | US NRS (<i>N</i> = 3,009) | |
|------------------|--------------------------------------|------|-------------------------------|------|
| | <i>n</i> | % | <i>n</i> | % |
| Extraversion (E) | 4,169 | 53.8 | 1,483 | 49.3 |
| Introversion (I) | 3,575 | 46.2 | 1,526 | 50.7 |
| Sensing (S) | 5,821 | 75.2 | 2,206 | 73.3 |
| Intuition (N) | 1,923 | 24.8 | 803 | 26.7 |
| Thinking (T) | 6,143 | 79.3 | 1,210 | 40.2 |
| Feeling (F) | 1,601 | 20.7 | 1,799 | 59.8 |
| Judging (J) | 5,764 | 74.4 | 1,629 | 54.1 |
| Perceiving (P) | 1,980 | 25.6 | 1,380 | 45.9 |

Note: Source for the US NRS is the *MBTI® Manual* (Myers et al., 1998).

TABLE 6. MBTI® PREFERENCE PAIR INTERNAL CONSISTENCY RELIABILITIES FOR THE INDIAN SAMPLE AND THE US NRS

| Preference Pair | Cronbach's Alpha | |
|---------------------------|------------------|--------|
| | Indian Sample | US NRS |
| Extraversion–Introversion | .90 | .91 |
| Sensing–Intuition | .84 | .92 |
| Thinking–Feeling | .85 | .91 |
| Judging–Perceiving | .89 | .92 |

Note: Indian sample *N* = 7,744; US NRS *N* = 3,009. Source for the US NRS is the *MBTI® Manual* (Myers et al., 1998).

**TABLE 7. FACTOR ANALYSIS ROTATED COMPONENT MATRIX
FOR THE INDIAN 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) |
|-----------|----------------|----------------|----------------|----------------|-----------|----------------|----------------|----------------|----------------|
| E11 | .72 | .02 | .00 | .00 | SN13 | -.01 | .07 | .05 | .57 |
| E12 | .57 | .04 | .10 | -.05 | SN14 | .56 | .17 | -.08 | .06 |
| E13 | .42 | .04 | .03 | -.05 | SN15 | -.14 | -.03 | -.11 | .46 |
| E14 | .51 | .04 | -.06 | .10 | SN16 | -.09 | .15 | .11 | .42 |
| E15 | .59 | .03 | -.01 | .04 | SN17 | -.02 | -.01 | -.07 | .45 |
| E16 | .56 | .02 | .05 | -.05 | SN18 | .04 | .20 | .18 | .36 |
| E17 | .38 | -.03 | -.04 | -.05 | SN19 | -.08 | -.02 | -.09 | .52 |
| E18 | .71 | .01 | -.01 | .08 | SN20 | .03 | .12 | .17 | .63 |
| E19 | .53 | -.01 | -.10 | -.07 | SN21 | .10 | .05 | .15 | .42 |
| E110 | .68 | -.06 | -.03 | -.04 | SN22 | .03 | .16 | .14 | .33 |
| E111 | .66 | -.09 | .03 | -.10 | SN23 | .00 | .02 | -.04 | .45 |
| E112 | .54 | -.09 | .00 | -.15 | SN24 | -.12 | .03 | -.02 | .63 |
| E113 | .61 | .01 | .04 | .02 | SN25 | .05 | .06 | .09 | .44 |
| E114 | .60 | -.01 | .00 | -.04 | SN26 | -.09 | -.02 | -.23 | .29 |
| E115 | .59 | .06 | .02 | .03 | TF1 | -.04 | .16 | .44 | .06 |
| E116 | .53 | .02 | .04 | .01 | TF2 | -.07 | .10 | .38 | .15 |
| E117 | .69 | .02 | .02 | .01 | TF3 | .01 | .06 | .57 | .07 |
| E118 | .52 | .03 | -.04 | .09 | TF4 | .08 | .06 | .41 | .01 |
| E119 | .53 | -.09 | -.01 | -.06 | TF5 | -.02 | .11 | .58 | .03 |
| E120 | .47 | -.03 | .01 | -.07 | TF6 | .02 | .07 | .53 | .15 |
| E121 | .66 | .04 | .06 | -.03 | TF7 | .00 | .09 | .54 | .04 |
| SN1 | .09 | .02 | .09 | .34 | TF8 | .00 | -.10 | .34 | -.11 |
| SN2 | .02 | .13 | .18 | .53 | TF9 | -.01 | .05 | .46 | -.07 |
| SN3 | .05 | .13 | .12 | .49 | TF10 | -.01 | .05 | .45 | .10 |
| SN4 | .00 | .07 | .02 | .44 | TF11 | .03 | .03 | .40 | .00 |
| SN5 | -.13 | .02 | -.06 | .33 | TF12 | .09 | .11 | .48 | -.10 |
| SN6 | -.09 | .09 | .03 | .22 | TF13 | -.13 | .09 | .28 | .27 |
| SN7 | -.09 | .06 | -.17 | .41 | TF14 | .02 | .08 | .43 | .13 |
| SN8 | .05 | .16 | .13 | .35 | TF15 | -.03 | .08 | .54 | .16 |
| SN9 | -.06 | .14 | .08 | .63 | TF16 | -.04 | .02 | .47 | .00 |
| SN10 | -.03 | .02 | .01 | .39 | TF17 | .00 | .11 | .61 | -.03 |
| SN11 | -.04 | -.03 | .14 | .16 | TF18 | .00 | .12 | .56 | .13 |
| SN12 | .09 | .04 | .11 | .29 | TF19 | .02 | .11 | .59 | -.05 |
| | | | | | TF20 | -.06 | .13 | .48 | .11 |
| | | | | | TF21 | .09 | .08 | .49 | .03 |

(cont'd)

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

| 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) |
|-----------|----------------|----------------|----------------|----------------|-----------|----------------|----------------|----------------|----------------|
| TF22 | -.02 | .13 | .47 | .05 | JP11 | -.02 | .55 | .18 | .04 |
| TF23 | -.05 | .08 | .45 | .09 | JP12 | .02 | .35 | .29 | .13 |
| TF24 | .07 | .10 | .30 | .07 | JP13 | .00 | .57 | .05 | .26 |
| JP1 | .02 | .59 | .05 | .05 | JP14 | -.11 | .47 | .22 | .07 |
| JP2 | .01 | .54 | .04 | .05 | JP15 | -.10 | .56 | .05 | .08 |
| JP3 | -.05 | .63 | .08 | .09 | JP16 | .00 | .66 | .13 | .04 |
| JP4 | .05 | .57 | .06 | .19 | JP17 | .07 | .58 | .10 | .05 |
| JP5 | .05 | .47 | .04 | .06 | JP18 | -.15 | .65 | .11 | .12 |
| JP6 | -.03 | .46 | -.01 | .12 | JP19 | .02 | .45 | .11 | .02 |
| JP7 | .04 | .49 | .05 | .00 | JP20 | .04 | .56 | .05 | .07 |
| JP8 | -.01 | .47 | .08 | .05 | JP21 | .04 | .41 | .16 | -.08 |
| JP9 | -.01 | .61 | .09 | .12 | JP22 | .05 | .64 | .15 | .08 |
| JP10 | -.10 | .59 | .15 | .22 | | | | | |

Note: N = 7,744.

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 preference pairs, 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 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 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 Indian sample and the US NRS. The Indian sample alphas range from .36 (Questioning–Accommodating) to .77 (Initiating–Receiving). Overall, some of this sample's alphas are somewhat lower than those of the US NRS. This

is consistent with the reliabilities that have been found for international samples and translations of the MBTI Form Q (or, for Europe, Step II™) assessment (Quenk, Hammer, & Majors, 2004; Schaubhut, 2008; Schaubhut & Thompson, 2010a, 2010b, 2011a, 2011b, 2012, 2013, 2016a, 2016b, 2017a, 2017b, 2017c, 2017d). 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 India sample demonstrate that the measurement properties of the assessment are adequate. Therefore, the MBTI Forms M and Q can be widely used with individuals who reside in India and read English. As use of the MBTI assessment in India continues to grow, larger and more diverse samples will become available, and the measurement properties of MBTI Forms M and Q in India will continue to be evaluated.

TABLE 8. MBTI® FORM Q FACET INTERNAL CONSISTENCY RELIABILITIES FOR THE INDIAN SAMPLE AND THE US NRS

| Form Q Facets | Cronbach's Alpha | |
|----------------------------------|------------------|--------|
| | Indian Sample | US NRS |
| E-I Facets | | |
| Initiating–Receiving | .77 | .85 |
| Expressive–Contained | .72 | .79 |
| Gregarious–Intimate | .65 | .60 |
| Active–Reflective | .58 | .59 |
| Enthusiastic–Quiet | .72 | .72 |
| S–N Facets | | |
| Concrete–Abstract | .58 | .81 |
| Realistic–Imaginative | .67 | .79 |
| Practical–Conceptual | .50 | .67 |
| Experiential–Theoretical | .62 | .83 |
| Traditional–Original | .65 | .76 |
| T–F Facets | | |
| Logical–Empathetic | .73 | .80 |
| Reasonable–Compassionate | .64 | .77 |
| Questioning–Accommodating | .36 | .57 |
| Critical–Accepting | .37 | .60 |
| Tough–Tender | .71 | .81 |
| J–P Facets | | |
| Systematic–Casual | .75 | .74 |
| Planful–Open-Ended | .72 | .82 |
| Early Starting–Pressure-Prompted | .59 | .70 |
| Scheduled–Spontaneous | .75 | .82 |
| Methodical–Emergent | .53 | .71 |

Note: Indian sample $N = 7,744$; US NRS $N = 3,009$. Source for the US NRS is the *MBTI® Manual* (Myers et al., 1998).

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