

# Hogan 2023 Global Norm

**June 2023**

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## Executive Summary

This report outlines the development and appropriate use of Hogan's 2023 Global Norm. The Global Norm includes data from 48 translations and adaptations of the Hogan Personality Inventory (HPI), Hogan Development Survey (HDS), and Motives, Values, Preferences Inventory (MVPI).

This document includes three main sections and an appendix. In the first section, we describe Hogan's approach to norm building. The Global Norm is a multi-language norm comprised of data from every available HPI, HDS, and MVPI translation. In the second section, we outline the development of the Global Norm. This section presents information describing the initial sample, the process we used to create the final normative sample, and the composition of the final normative sample. In the third section, we provide demographic information for the Global HPI, HDS, and MVPI normative samples according to gender, age, job category, industry, and assessment purpose. Finally, we present between-scale correlations for the HPI, HDS, and MVPI in the appendix.

## 1. Hogan's Approach to Norms

**1.1 Overview.** If someone received a raw score of 10 on a personality scale measuring Adjustment, what would this score mean? Without a basis for comparison, the score means little. Norms provide a context for interpreting scores because they allow us to compare a person's scores with those of a relevant group (Nunnally & Bernstein, 1994).

**1.2 Types of Norms.** Hogan publishes two types of norms: single-language and multi-language norms. Single-language norms represent a cross-section of a specific relevant workforce. Multi-language norms represent data combined from multiple languages and geographic areas.

### *Single-language Norms*

When Hogan first creates a new translation, we often lack sufficient data to build norms specifically designed to represent a region's workforce. Consequently, we rely on data from convenience samples and developmental projects to build itinerant norms. We require data from at least 500 people across multiple organizations to build itinerant norms. In keeping with the recommendations outlined by the *Standards for Educational and Psychological Testing* (American Educational Research Association, 2014), we report all available demographic information, including age, gender, job category, industry, and assessment purpose. Although itinerant norms are not as representative as stratified norms, they are useful until we have sufficient data to build a stratified single-language norm.

Hogan builds stratified single-language norms when data are available from at least 2,000 people across multiple organizations. This larger sample is essential because we must select specific types of people to represent the relevant workforce as closely as possible. When building stratified norms, we may lack data for certain industries despite their prevalence in the workforce (e.g., agricultural workers). Therefore, our stratified single-language norms do not always include all segments of the workforce. However, they do include those in which the assessments and norms are most likely to be used.

When building stratified single-language norms, Hogan uses multiple stratification variables or characteristics to organize the data. We build norms that match the target workforce as closely as possible. Although relevant stratification variables may change from norm to norm, job category is often the first level of classification or the first stratum. For example, if the Argentinian workforce contains 14% salespeople, a perfectly stratified Argentinian normative sample would also contain 14% salespeople. Race/Ethnicity is sometimes used as the second stratum. Some countries have less workforce racial/ethnic diversity, fewer concerns over racial/ethnic group differences, or legislation with fewer requirements than those in the US Civil Rights Act of 1964 (see Myers et al., 2008, for review). In such cases, stratification by race/ethnicity may be unnecessary or impossible. Finally, we use age, gender, and assessment purpose as third-level strata. Hogan strives for equal representation of age groups, genders, and assessment purposes.

### *Multi-language Norms*

Hogan builds multi-language norms by combining data from different languages into a single dataset. These norms appeal to multinational organizations that are attracted by the simplicity of using one norm for all applications or that need to compare groups of applicants who assess in multiple languages. Our most used multi-language norm is our Global Norm. The development process for multi-language norms is similar to the development process for single-language norms, but we treat language, instead of job category, as the first stratum.

## 2. Development of the 2023 Global Norm

The development of the 2023 Global Norm began with a sample of people who took the HPI using one of 48 translations or English adaptations and hailed from one of 190 countries or territories. We collected HPI data between September 2018 and May 2022.

To create our initial sample, we included data from people who took the HPI using a 4-point rating scale (Strongly Disagree, Disagree, Agree, and Strongly Agree). We removed anyone who didn't answer every item on the HPI or who used the same response for each question. We further deleted any test cases used for quality assurance or demonstration purposes. The resulting initial sample included data from 1,395,147 people.

The development of the Global Norm sample involved two further stages. In the first stage, we built 36 stratified single-language norms and two itinerant single-language norms from the larger initial sample. We stratified most norms using four characteristics: job category, assessment purpose, age group, and gender. In addition, we used race/ethnicity for three norms: Australian, New Zealand, and US. We do not use or provide race/ethnicity information for the Global Norm because race/ethnicity classification systems differ widely across countries and some countries do not allow us to collect such data. Due to these restrictions, the Global Norm may appear to underrepresent or overrepresent some racial/ethnic groups.

In the second stage, we combined everyone from the 38 single-language norms and examined the distribution of job categories, assessment purposes, age groups, and genders. We classified job category using a modified version of the Hogan job family classification system (see Hogan Assessment Systems, 2020), which divides jobs into eight categories: managers and executives, professionals, technicians and specialists, operations and trades, sales, customer support, administrative and clerical, and service and support. We attempted to match job category percentages in our sample to those in the global workforce using data (International Labour Organization, 2022) from the roughly 50 countries and territories where HPI languages are spoken and where Hogan has partnerships. We also included data from people in military occupations and from students in our itinerant single-language norms. We classified people using one of three assessment purposes: candidate selection, employee development, or Other (e.g., research purposes). We classified people into two age groups: under 40 and 40 and older. We classified people into one of two genders: men and women. Although we do sometimes include a non-binary option for test-taker gender, we did not have sufficient data to stratify gender using a three-category system. All demographic variables are voluntary. We code missing data as Not Reported.

After combining the 110,742 people across all norms, we then added 48,698 people to the Global Norm sample to better achieve the desired representation of groups across the four stratification variables. We limited the number of people in the final Global Norm sample for any single HPI translation or adaptation to 7,000 people to help prevent one language or small set of languages from dominating the sample. The resulting sample included 159,440 people.

We note this process was used to create the HPI norms. We created the Global HDS and MVPI norms from everyone in the Global HPI norm sample who also took the HDS and MVPI. We present HPI language and home country or territory for the Global HPI norm sample in Tables 2.1 and 2.2.

**Table 2.1. Global Norm Sample Distribution by HPI Assessment Language**

| Language                             | Sample Size | Sample Percentage |
|--------------------------------------|-------------|-------------------|
| Albanian                             | 131         | 0.1               |
| Arabic                               | 2,446       | 1.5               |
| Bulgarian                            | 1,242       | 0.8               |
| Chinese (Simplified)                 | 6,995       | 4.4               |
| Chinese (Traditional)                | 1,951       | 1.2               |
| Croatian                             | 1,373       | 0.9               |
| Czech                                | 2,409       | 1.5               |
| Danish                               | 5,307       | 3.3               |
| Dutch                                | 2,303       | 1.4               |
| English (Australian and New Zealand) | 6,999       | 4.4               |
| English (Greek)                      | 597         | 0.4               |
| English (Indian)                     | 6,996       | 4.4               |
| English (Kenyan)                     | 2,714       | 1.7               |
| English (Middle Eastern)             | 6,544       | 4.1               |
| English (South African)              | 3,161       | 2.0               |
| English (UK)                         | 6,057       | 3.8               |
| English (US)                         | 7,000       | 4.4               |
| Estonian                             | 513         | 0.3               |
| Finnish                              | 1,527       | 1.0               |
| French (Canadian)                    | 4,120       | 2.6               |
| French (Parisian)                    | 6,561       | 4.1               |
| German                               | 6,777       | 4.3               |
| Greek                                | 1,979       | 1.2               |
| Hungarian                            | 2,219       | 1.4               |
| Icelandic                            | 1,479       | 0.9               |
| Indonesian                           | 1,716       | 1.1               |
| Italian                              | 6,999       | 4.4               |
| Japanese                             | 2,891       | 1.8               |
| Korean                               | 3,605       | 2.3               |
| Lithuanian                           | 182         | 0.1               |
| Macedonian                           | 196         | 0.1               |
| Malay                                | 124         | 0.1               |
| Montenegrin                          | 306         | 0.2               |
| Norwegian                            | 1,579       | 1.0               |
| Polish                               | 2,211       | 1.4               |
| Portuguese (Brazilian)               | 6,031       | 3.8               |
| Portuguese (European)                | 2,101       | 1.3               |
| Romanian                             | 2,870       | 1.8               |
| Russian                              | 6,987       | 4.4               |
| Serbian                              | 2,275       | 1.4               |
| Slovak                               | 1,760       | 1.1               |
| Slovene                              | 435         | 0.3               |
| Spanish (Castilian)                  | 7,000       | 4.4               |
| Spanish (Latin American)             | 7,000       | 4.4               |

Note. Percentages may not sum to 100 due to rounding.



**Table 2.1. Global Norm Sample by HPI Assessment Language**

| Language   | Sample Size | Sample Percentage |
|------------|-------------|-------------------|
| Swedish    | 4,078       | 2.6               |
| Thai       | 2,083       | 1.3               |
| Turkish    | 7,000       | 4.4               |
| Vietnamese | 611         | 0.4               |

Note. Percentages may not sum to 100 due to rounding.

**Table 2.2. Global Norm Sample by Home Country or Territory**

| Language                 | Sample Size | Sample Percentage |
|--------------------------|-------------|-------------------|
| Afghanistan              | 13          | 0.01              |
| Albania                  | 152         | 0.10              |
| Algeria                  | 87          | 0.05              |
| Andorra                  | 3           | 0.00              |
| Angola                   | 23          | 0.01              |
| Antigua and Barbuda      | 3           | 0.00              |
| Argentina                | 1,236       | 0.78              |
| Armenia                  | 14          | 0.01              |
| Australia                | 2,658       | 1.67              |
| Austria                  | 589         | 0.37              |
| Azerbaijan               | 62          | 0.04              |
| Bahamas, The             | 1           | 0.00              |
| Bahrain                  | 14          | 0.01              |
| Bangladesh               | 31          | 0.02              |
| Barbados                 | 4           | 0.00              |
| Belarus                  | 42          | 0.03              |
| Belgium                  | 908         | 0.57              |
| Belize                   | 1           | 0.00              |
| Benin                    | 32          | 0.02              |
| Bhutan                   | 3           | 0.00              |
| Bolivia                  | 82          | 0.05              |
| Bosnia and Herzegovina   | 232         | 0.15              |
| Botswana                 | 11          | 0.01              |
| Brazil                   | 6,434       | 4.04              |
| Brunei                   | 67          | 0.04              |
| Bulgaria                 | 832         | 0.52              |
| Burkina Faso             | 32          | 0.02              |
| Burundi                  | 6           | 0.00              |
| Cambodia                 | 13          | 0.01              |
| Cameroon                 | 41          | 0.03              |
| Canada                   | 4,004       | 2.51              |
| Cape Verde (Cabo Verde)  | 7           | 0.00              |
| Central African Republic | 14          | 0.01              |
| Chad                     | 2           | 0.00              |
| Chile                    | 4,037       | 2.53              |
| Colombia                 | 782         | 0.49              |

Note. Percentages may not sum to 100 due to rounding.

**Table 2.2. Global Norm Sample by Home Country or Territory**

| Language                          | Sample Size | Sample Percentage |
|-----------------------------------|-------------|-------------------|
| Comoros                           | 5           | 0.00              |
| Congo, Democratic Republic of the | 22          | 0.01              |
| Congo, Republic of the            | 7           | 0.00              |
| Costa Rica                        | 78          | 0.05              |
| Croatia                           | 996         | 0.62              |
| Cuba                              | 15          | 0.01              |
| Cyprus                            | 50          | 0.03              |
| Czech Republic                    | 1,761       | 1.10              |
| Denmark                           | 4,604       | 2.89              |
| Djibouti                          | 3           | 0.00              |
| Dominica                          | 1           | 0.00              |
| Dominican Republic                | 49          | 0.03              |
| East Timor (Timor-Leste)          | 2           | 0.00              |
| Ecuador                           | 94          | 0.06              |
| Egypt                             | 293         | 0.18              |
| El Salvador                       | 24          | 0.02              |
| Equatorial Guinea                 | 1           | 0.00              |
| Eritrea                           | 3           | 0.00              |
| Estonia                           | 376         | 0.24              |
| Eswatini (formerly Swaziland)     | 6           | 0.00              |
| Ethiopia                          | 9           | 0.01              |
| Fiji                              | 19          | 0.01              |
| Finland                           | 807         | 0.51              |
| France                            | 4,171       | 2.62              |
| Gabon                             | 7           | 0.00              |
| Gambia                            | 2           | 0.00              |
| Georgia                           | 20          | 0.01              |
| Germany                           | 4,435       | 2.78              |
| Ghana                             | 33          | 0.02              |
| Greater China - Hong Kong SAR     | 351         | 0.22              |
| Greater China - Macau SAR         | 2           | 0.00              |
| Greater China - Mainland China    | 4,861       | 3.05              |
| Greater China - Taiwan            | 994         | 0.62              |
| Greece                            | 1,403       | 0.88              |
| Grenada                           | 2           | 0.00              |
| Guatemala                         | 47          | 0.03              |
| Guinea                            | 8           | 0.01              |
| Guyana                            | 5           | 0.00              |
| Haiti                             | 22          | 0.01              |
| Honduras                          | 16          | 0.01              |
| Hungary                           | 1,500       | 0.94              |
| Iceland                           | 983         | 0.62              |
| India                             | 6,412       | 4.02              |
| Indonesia                         | 1,514       | 0.95              |

Note. Percentages may not sum to 100 due rounding.

**Table 2.2. Global Norm Sample by Home Country or Territory**

| Language                    | Sample Size | Sample Percentage |
|-----------------------------|-------------|-------------------|
| Iran                        | 60          | 0.04              |
| Iraq                        | 30          | 0.02              |
| Ireland                     | 434         | 0.27              |
| Israel                      | 38          | 0.02              |
| Italy                       | 6,117       | 3.84              |
| Ivory Coast (Côte d'Ivoire) | 67          | 0.04              |
| Jamaica                     | 7           | 0.00              |
| Japan                       | 2,639       | 1.66              |
| Jordan                      | 103         | 0.06              |
| Kazakhstan                  | 138         | 0.09              |
| Kenya                       | 1,849       | 1.16              |
| Kiribati                    | 1           | 0.00              |
| Kosovo                      | 12          | 0.01              |
| Kuwait                      | 33          | 0.02              |
| Kyrgyzstan                  | 15          | 0.01              |
| Laos                        | 15          | 0.01              |
| Latvia                      | 40          | 0.03              |
| Lebanon                     | 116         | 0.07              |
| Lesotho                     | 2           | 0.00              |
| Liberia                     | 3           | 0.00              |
| Libya                       | 4           | 0.00              |
| Liechtenstein               | 1           | 0.00              |
| Lithuania                   | 99          | 0.06              |
| Luxembourg                  | 34          | 0.02              |
| Madagascar                  | 16          | 0.01              |
| Malawi                      | 6           | 0.00              |
| Malaysia                    | 386         | 0.24              |
| Maldives                    | 2           | 0.00              |
| Mali                        | 13          | 0.01              |
| Malta                       | 17          | 0.01              |
| Mauritania                  | 3           | 0.00              |
| Mauritius                   | 14          | 0.01              |
| Mexico                      | 4,139       | 2.60              |
| Moldova                     | 58          | 0.04              |
| Monaco                      | 12          | 0.01              |
| Mongolia                    | 2           | 0.00              |
| Montenegro                  | 425         | 0.27              |
| Morocco                     | 122         | 0.08              |
| Mozambique                  | 13          | 0.01              |
| Myanmar                     | 19          | 0.01              |
| Namibia                     | 9           | 0.01              |
| Nepal                       | 30          | 0.02              |
| Netherlands                 | 1,584       | 0.99              |
| New Zealand                 | 2,000       | 1.25              |

Note. Percentages may not sum to 100 due rounding.

**Table 2.2. Global Norm Sample by Home Country or Territory**

| Language                             | Sample Size | Sample Percentage |
|--------------------------------------|-------------|-------------------|
| Nicaragua                            | 11          | 0.01              |
| Niger                                | 21          | 0.01              |
| Nigeria                              | 114         | 0.07              |
| North Korea                          | 5           | 0.00              |
| North Macedonia (formerly Macedonia) | 171         | 0.11              |
| Norway                               | 1,114       | 0.70              |
| Oman                                 | 828         | 0.52              |
| Pakistan                             | 127         | 0.08              |
| Palau                                | 1           | 0.00              |
| Palestine                            | 23          | 0.01              |
| Panama                               | 45          | 0.03              |
| Papua New Guinea                     | 15          | 0.01              |
| Paraguay                             | 81          | 0.05              |
| Peru                                 | 764         | 0.48              |
| Philippines                          | 255         | 0.16              |
| Poland                               | 1,791       | 1.12              |
| Portugal                             | 683         | 0.43              |
| Qatar                                | 17          | 0.01              |
| Romania                              | 2,478       | 1.55              |
| Russia                               | 4,189       | 2.63              |
| Rwanda                               | 28          | 0.02              |
| Saint Kitts and Nevis                | 4           | 0.00              |
| Samoa                                | 2           | 0.00              |
| San Marino                           | 1           | 0.00              |
| Saudi Arabia                         | 1,025       | 0.64              |
| Senegal                              | 33          | 0.02              |
| Serbia                               | 1,351       | 0.85              |
| Sierra Leone                         | 3           | 0.00              |
| Singapore                            | 260         | 0.16              |
| Slovakia                             | 1,162       | 0.73              |
| Slovenia                             | 259         | 0.16              |
| Solomon Islands                      | 1           | 0.00              |
| Somalia                              | 8           | 0.01              |
| South Africa                         | 2,658       | 1.67              |
| South Korea                          | 3,160       | 1.98              |
| South Sudan                          | 7           | 0.00              |
| Spain                                | 853         | 0.53              |
| Sri Lanka                            | 57          | 0.04              |
| Sudan                                | 30          | 0.02              |
| Suriname                             | 6           | 0.00              |
| Sweden                               | 3,496       | 2.19              |
| Switzerland                          | 783         | 0.49              |
| Syria                                | 44          | 0.03              |
| Tajikistan                           | 6           | 0.00              |

Note. Percentages may not sum to 100 due rounding.

**Table 2.2. Global Norm Sample by Home Country or Territory**

| Language             | Sample Size | Sample Percentage |
|----------------------|-------------|-------------------|
| Tanzania             | 28          | 0.02              |
| Thailand             | 1,940       | 1.22              |
| Togo                 | 19          | 0.01              |
| Tonga                | 4           | 0.00              |
| Trinidad and Tobago  | 13          | 0.01              |
| Tunisia              | 107         | 0.07              |
| Turkey (Türkiye)     | 5,988       | 3.76              |
| Turkmenistan         | 7           | 0.00              |
| Tuvalu               | 4           | 0.00              |
| Uganda               | 120         | 0.08              |
| Ukraine              | 442         | 0.28              |
| United Arab Emirates | 401         | 0.25              |
| United Kingdom       | 4,107       | 2.58              |
| United States        | 6,059       | 3.80              |
| Uruguay              | 42          | 0.03              |
| Uzbekistan           | 12          | 0.01              |
| Vanuatu              | 3           | 0.00              |
| Venezuela            | 179         | 0.11              |
| Vietnam              | 433         | 0.27              |
| Yemen                | 14          | 0.01              |
| Zambia               | 17          | 0.01              |
| Zimbabwe             | 42          | 0.03              |
| Not Reported         | 32,277      | 20.24             |

Note. Percentages may not sum to 100 due rounding.

### 3. Hogan 2023 Global Norm

#### 3.1. HPI Norms

Table 3.1 displays the characteristics of people in the Global normative sample with available and complete HPI Form 1 or Form 3 data. Tables 3.2 and 3.3 present normative results for primary and occupational scales, respectively, for HPI Forms 1 and 3. Table 3.4 displays the characteristics of people in the Global normative sample with available and complete HPI Form 5 data. We note HPI Form 5 data could either be obtained by completing HPI Form 5 or HPI Form 3 and an extension set of Form 5–specific items. Tables 3.5 and 3.6 present normative results for primary and occupational scales, respectively, for HPI Form 5.

**Table 3.1. Global HPI Normative Sample – Forms 1 and 3 (N = 153,223)**

| Variable                                  | Sample Size | Sample Percentage | Workforce Percentage |
|---|-------------|-------------------|----------------------|
| <b>Job Category</b>                       |             |                   |                      |
| Managers and executives                   | 22,062      | 14.4              | 5.8                  |
| Professionals                             | 21,562      | 14.1              | 17.2                 |
| Technicians and specialists               | 18,442      | 12.0              | 10.6                 |
| Operations and trades                     | 13,679      | 8.9               | 35.4                 |
| Sales                                     | 17,361      | 11.3              | 9.0                  |
| Customer support                          | 3,424       | 2.2               | 1.9                  |
| Administrative and clerical               | 12,482      | 8.1               | 6.3                  |
| Service and support                       | 7,893       | 5.2               | 13.7                 |
| Military                                  | 374         | 0.2               | 0.3                  |
| Student                                   | 1,244       | 0.8               |                      |
| Not reported                              | 34,700      | 22.6              |                      |
| <b>Assessment Purpose</b>                 |             |                   |                      |
| Selection                                 | 59,411      | 38.8              |                      |
| Development                               | 51,147      | 33.4              |                      |
| Other                                     | 13,971      | 9.1               |                      |
| Not reported                              | 28,694      | 18.7              |                      |
| <b>Age Group</b>                          |             |                   |                      |
| Under 40                                  | 69,059      | 45.1              |                      |
| 40 and older                              | 60,705      | 39.6              |                      |
| Not reported                              | 23,459      | 15.3              |                      |
| <b>Gender</b>                             |             |                   |                      |
| Men                                       | 71,780      | 46.8              |                      |
| Women                                     | 65,540      | 42.8              |                      |
| Not reported                              | 15,903      | 10.4              |                      |
| <b>Industry</b>                           |             |                   |                      |
| Advertising and marketing                 | 2,519       | 1.6               |                      |
| Banking and financial services            | 13,319      | 8.7               |                      |
| Business support services                 | 5,131       | 3.3               |                      |
| Construction                              | 4,261       | 2.8               |                      |
| Education                                 | 2,501       | 1.6               |                      |
| Energy, utilities, and telecommunications | 8,274       | 5.4               |                      |
| Entertainment and media                   | 788         | 0.5               |                      |
| Food and beverage                         | 5,030       | 3.3               |                      |
| Government                                | 2,600       | 1.7               |                      |
| Healthcare                                | 4,725       | 3.1               |                      |
| Industrial metals and mining              | 6,742       | 4.4               |                      |
| Information technology                    | 8,014       | 5.2               |                      |
| Law enforcement                           | 602         | 0.4               |                      |
| Leisure and hospitality                   | 975         | 0.6               |                      |

Note. Percentage may not sum to 100 due to rounding.

**Table 3.1. Global HPI Normative Sample – Forms 1 and 3 (N = 153,223)**

| Variable              | Sample Size | Sample Percentage | Workforce Percentage |
|-----------------------|-------------|-------------------|----------------------|
| <b>Industry</b>       |             |                   |                      |
| Manufacturing         | 12,384      | 8.1               |                      |
| Pharmaceuticals       | 4,523       | 3.0               |                      |
| Retail sales          | 5,202       | 3.4               |                      |
| Sports and recreation | 408         | 0.3               |                      |
| Transportation        | 3,954       | 2.6               |                      |
| Other                 | 21,210      | 13.8              |                      |
| Not reported          | 40,061      | 26.1              |                      |

Note. Percentage may not sum to 100 due to rounding.

**Table 3.2. Global HPI Forms 1 and 3 Norms (N = 153,223) – Primary Scales**

| Raw Score | ADJ Norm | AMB Norm | SOC Norm | INP Norm | PRU Norm | INQ Norm | LRN Norm |
|-----------|----------|----------|----------|----------|----------|----------|----------|
| 14        |          |          |          |          |          |          | 0        |
| 15        |          |          |          |          |          |          | 0        |
| 16        |          |          |          |          |          |          | 0        |
| 17        |          |          |          |          |          |          | 0        |
| 18        |          |          |          |          |          |          | 0        |
| 19        |          |          |          |          |          |          | 0        |
| 20        |          |          |          |          |          |          | 0        |
| 21        |          |          |          |          |          |          | 0        |
| 22        |          |          |          | 0        |          |          | 0        |
| 23        |          |          |          | 0        |          |          | 0        |
| 24        |          |          | 0        | 0        |          |          | 0        |
| 25        |          |          | 0        | 0        |          | 0        | 1        |
| 26        |          |          | 0        | 0        |          | 0        | 1        |
| 27        |          |          | 0        | 0        |          | 0        | 1        |
| 28        |          |          | 0        | 0        |          | 0        | 2        |
| 29        |          | 0        | 0        | 0        |          | 0        | 3        |
| 30        |          | 0        | 0        | 0        |          | 0        | 4        |
| 31        |          | 0        | 0        | 0        | 0        | 0        | 5        |
| 32        |          | 0        | 0        | 0        | 0        | 0        | 8        |
| 33        |          | 0        | 0        | 0        | 0        | 0        | 11       |
| 34        |          | 0        | 0        | 0        | 0        | 0        | 14       |
| 35        |          | 0        | 0        | 0        | 0        | 0        | 19       |
| 36        |          | 0        | 0        | 0        | 0        | 0        | 24       |
| 37        | 0        | 0        | 0        | 0        | 0        | 0        | 29       |
| 38        | 0        | 0        | 0        | 0        | 0        | 0        | 36       |
| 39        | 0        | 0        | 0        | 0        | 0        | 0        | 43       |
| 40        | 0        | 0        | 0        | 0        | 0        | 0        | 50       |
| 41        | 0        | 0        | 1        | 0        | 0        | 0        | 57       |
| 42        | 0        | 0        | 1        | 0        | 0        | 0        | 64       |
| 43        | 0        | 0        | 1        | 0        | 0        | 0        | 70       |

Note. ADJ – Adjustment; AMB – Ambition; SOC – Sociability; INP – Interpersonal Sensitivity; PRU – Prudence; INQ – Inquisitive; LRN – Learning Approach.

**Table 3.2. Global HPI Forms 1 and 3 Norms (N = 153,223) – Primary Scales**

| Raw Score | ADJ Norm | AMB Norm | SOC Norm | INP Norm | PRU Norm | INQ Norm | LRN Norm |
|-----------|----------|----------|----------|----------|----------|----------|----------|
| 44        | 0        | 0        | 1        | 0        | 0        | 0        | 75       |
| 45        | 0        | 0        | 2        | 0        | 0        | 0        | 80       |
| 46        | 0        | 0        | 2        | 0        | 0        | 1        | 84       |
| 47        | 0        | 0        | 3        | 0        | 0        | 1        | 88       |
| 48        | 0        | 0        | 3        | 0        | 0        | 1        | 91       |
| 49        | 0        | 0        | 4        | 0        | 0        | 1        | 93       |
| 50        | 0        | 0        | 5        | 0        | 0        | 2        | 95       |
| 51        | 0        | 0        | 7        | 0        | 0        | 2        | 97       |
| 52        | 0        | 0        | 8        | 0        | 0        | 3        | 98       |
| 53        | 0        | 0        | 10       | 1        | 0        | 3        | 99       |
| 54        | 0        | 0        | 13       | 1        | 0        | 4        | 99       |
| 55        | 0        | 0        | 16       | 1        | 0        | 5        | 100      |
| 56        | 0        | 0        | 19       | 2        | 0        | 6        | 100      |
| 57        | 0        | 0        | 23       | 2        | 0        | 8        |          |
| 58        | 0        | 0        | 27       | 3        | 0        | 10       |          |
| 59        | 0        | 0        | 31       | 4        | 0        | 12       |          |
| 60        | 0        | 0        | 36       | 6        | 0        | 14       |          |
| 61        | 0        | 1        | 41       | 9        | 0        | 17       |          |
| 62        | 0        | 1        | 46       | 12       | 0        | 20       |          |
| 63        | 0        | 1        | 52       | 16       | 0        | 24       |          |
| 64        | 0        | 1        | 57       | 22       | 0        | 28       |          |
| 65        | 0        | 1        | 62       | 28       | 0        | 32       |          |
| 66        | 0        | 2        | 67       | 34       | 0        | 36       |          |
| 67        | 0        | 2        | 72       | 40       | 0        | 41       |          |
| 68        | 0        | 3        | 76       | 46       | 0        | 46       |          |
| 69        | 0        | 3        | 80       | 52       | 0        | 51       |          |
| 70        | 0        | 4        | 83       | 57       | 1        | 55       |          |
| 71        | 0        | 4        | 86       | 63       | 1        | 60       |          |
| 72        | 0        | 5        | 88       | 68       | 1        | 65       |          |
| 73        | 0        | 6        | 90       | 72       | 2        | 69       |          |
| 74        | 0        | 8        | 92       | 77       | 2        | 73       |          |
| 75        | 0        | 9        | 93       | 81       | 3        | 76       |          |
| 76        | 1        | 11       | 95       | 84       | 4        | 79       |          |
| 77        | 1        | 12       | 96       | 88       | 5        | 82       |          |
| 78        | 1        | 15       | 97       | 90       | 7        | 85       |          |
| 79        | 1        | 17       | 97       | 93       | 9        | 87       |          |
| 80        | 1        | 20       | 98       | 95       | 11       | 89       |          |
| 81        | 1        | 23       | 98       | 97       | 14       | 91       |          |
| 82        | 2        | 26       | 99       | 98       | 17       | 92       |          |
| 83        | 2        | 30       | 99       | 99       | 21       | 94       |          |
| 84        | 2        | 34       | 99       | 99       | 26       | 95       |          |
| 85        | 3        | 38       | 99       | 100      | 31       | 96       |          |

Note. ADJ – Adjustment; AMB – Ambition; SOC – Sociability; INP – Interpersonal Sensitivity; PRU – Prudence; INQ – Inquisitive; LRN – Learning Approach.



**Table 3.2. Global HPI Forms 1 and 3 Norms (N = 153,223) – Primary Scales**

| Raw Score | ADJ Norm | AMB Norm | SOC Norm | INP Norm | PRU Norm | INQ Norm | LRN Norm |
|-----------|----------|----------|----------|----------|----------|----------|----------|
| 86        | 3        | 42       | 100      | 100      | 36       | 96       |          |
| 87        | 4        | 47       | 100      | 100      | 41       | 97       |          |
| 88        | 4        | 51       | 100      | 100      | 47       | 98       |          |
| 89        | 5        | 55       | 100      |          | 53       | 98       |          |
| 90        | 6        | 59       | 100      |          | 58       | 99       |          |
| 91        | 7        | 63       | 100      |          | 63       | 99       |          |
| 92        | 8        | 66       | 100      |          | 68       | 99       |          |
| 93        | 10       | 70       | 100      |          | 72       | 99       |          |
| 94        | 11       | 73       | 100      |          | 76       | 100      |          |
| 95        | 13       | 76       | 100      |          | 80       | 100      |          |
| 96        | 15       | 79       | 100      |          | 83       | 100      |          |
| 97        | 17       | 81       |          |          | 86       | 100      |          |
| 98        | 19       | 84       |          |          | 88       | 100      |          |
| 99        | 21       | 86       |          |          | 91       | 100      |          |
| 100       | 24       | 88       |          |          | 92       | 100      |          |
| 101       | 27       | 90       |          |          | 94       |          |          |
| 102       | 30       | 92       |          |          | 95       |          |          |
| 103       | 33       | 93       |          |          | 96       |          |          |
| 104       | 37       | 95       |          |          | 97       |          |          |
| 105       | 40       | 96       |          |          | 97       |          |          |
| 106       | 44       | 97       |          |          | 98       |          |          |
| 107       | 48       | 98       |          |          | 98       |          |          |
| 108       | 51       | 98       |          |          | 99       |          |          |
| 109       | 55       | 99       |          |          | 99       |          |          |
| 110       | 59       | 99       |          |          | 99       |          |          |
| 111       | 62       | 99       |          |          | 99       |          |          |
| 112       | 65       | 100      |          |          | 100      |          |          |
| 113       | 68       | 100      |          |          | 100      |          |          |
| 114       | 71       | 100      |          |          | 100      |          |          |
| 115       | 74       | 100      |          |          | 100      |          |          |
| 116       | 77       | 100      |          |          | 100      |          |          |
| 117       | 79       |          |          |          | 100      |          |          |
| 118       | 81       |          |          |          | 100      |          |          |
| 119       | 83       |          |          |          | 100      |          |          |
| 120       | 85       |          |          |          | 100      |          |          |
| 121       | 87       |          |          |          | 100      |          |          |
| 122       | 88       |          |          |          | 100      |          |          |
| 123       | 90       |          |          |          | 100      |          |          |
| 124       | 91       |          |          |          | 100      |          |          |
| 125       | 92       |          |          |          |          |          |          |
| 126       | 93       |          |          |          |          |          |          |

Note. ADJ – Adjustment; AMB – Ambition; SOC – Sociability; INP – Interpersonal Sensitivity; PRU – Prudence; INQ – Inquisitive; LRN – Learning Approach.

**Table 3.2. Global HPI Forms 1 and 3 Norms (N = 153,223) – Primary Scales**

| Raw Score | ADJ Norm | AMB Norm | SOC Norm | INP Norm | PRU Norm | INQ Norm | LRN Norm |
|-----------|----------|----------|----------|----------|----------|----------|----------|
| 127       | 94       |          |          |          |          |          |          |
| 128       | 95       |          |          |          |          |          |          |
| 129       | 96       |          |          |          |          |          |          |
| 130       | 96       |          |          |          |          |          |          |
| 131       | 97       |          |          |          |          |          |          |
| 132       | 97       |          |          |          |          |          |          |
| 133       | 98       |          |          |          |          |          |          |
| 134       | 98       |          |          |          |          |          |          |
| 135       | 99       |          |          |          |          |          |          |
| 136       | 99       |          |          |          |          |          |          |
| 137       | 99       |          |          |          |          |          |          |
| 138       | 99       |          |          |          |          |          |          |
| 139       | 99       |          |          |          |          |          |          |
| 140       | 100      |          |          |          |          |          |          |
| 141       | 100      |          |          |          |          |          |          |
| 142       | 100      |          |          |          |          |          |          |
| 143       | 100      |          |          |          |          |          |          |
| 144       | 100      |          |          |          |          |          |          |
| 145       | 100      |          |          |          |          |          |          |
| 146       | 100      |          |          |          |          |          |          |
| 147       | 100      |          |          |          |          |          |          |
| 148       | 100      |          |          |          |          |          |          |

Note. ADJ – Adjustment; AMB – Ambition; SOC – Sociability; INP – Interpersonal Sensitivity; PRU – Prudence; INQ – Inquisitive; LRN – Learning Approach.

**Table 3.3. Global HPI Forms 1 and 3 Norms (N = 153,223) – Occupational Scales**

| Raw Score | VAL Norm | SERV Norm | ST Norm | REL Norm | CLR Norm | SALE Norm | MNGR Norm |
|-----------|----------|-----------|---------|----------|----------|-----------|-----------|
| 14        | 0        | 0         |         |          |          |           |           |
| 15        | 0        | 0         |         |          |          |           |           |
| 16        | 0        | 0         |         |          |          |           |           |
| 17        | 0        | 0         |         |          |          |           |           |
| 18        | 0        | 0         |         | 0        |          |           |           |
| 19        | 0        | 0         |         | 0        |          |           |           |
| 20        | 0        | 0         |         | 0        |          |           |           |
| 21        | 0        | 0         |         | 0        |          |           |           |
| 22        | 0        | 0         |         | 0        |          |           |           |
| 23        | 0        | 0         |         | 0        |          |           |           |
| 24        | 0        | 0         |         | 0        | 0        |           |           |
| 25        | 0        | 0         | 0       | 0        | 0        |           |           |
| 26        | 0        | 0         | 0       | 0        | 0        |           |           |
| 27        | 0        | 0         | 0       | 0        | 0        |           |           |
| 28        | 0        | 0         | 0       | 0        | 0        |           |           |
| 29        | 0        | 0         | 0       | 0        | 0        |           |           |
| 30        | 0        | 0         | 0       | 0        | 0        |           |           |
| 31        | 0        | 0         | 0       | 0        | 0        |           |           |
| 32        | 0        | 1         | 0       | 0        | 0        |           |           |
| 33        | 0        | 1         | 0       | 0        | 0        |           |           |
| 34        | 0        | 2         | 0       | 0        | 0        |           |           |
| 35        | 0        | 4         | 0       | 1        | 0        |           |           |
| 36        | 0        | 7         | 0       | 1        | 0        |           |           |
| 37        | 0        | 10        | 0       | 1        | 0        |           | 0         |
| 38        | 1        | 15        | 0       | 2        | 0        |           | 0         |
| 39        | 1        | 22        | 0       | 2        | 0        |           | 0         |
| 40        | 3        | 31        | 0       | 3        | 0        |           | 0         |
| 41        | 6        | 41        | 0       | 4        | 0        |           | 0         |
| 42        | 11       | 51        | 0       | 6        | 0        |           | 0         |
| 43        | 16       | 61        | 0       | 8        | 0        |           | 0         |
| 44        | 22       | 69        | 0       | 10       | 0        |           | 0         |
| 45        | 30       | 76        | 0       | 13       | 0        |           | 0         |
| 46        | 38       | 82        | 0       | 17       | 0        |           | 0         |
| 47        | 47       | 87        | 0       | 21       | 0        |           | 0         |
| 48        | 56       | 91        | 0       | 26       | 0        |           | 0         |
| 49        | 65       | 94        | 0       | 32       | 0        |           | 0         |
| 50        | 74       | 96        | 0       | 39       | 0        |           | 0         |
| 51        | 82       | 97        | 1       | 45       | 0        |           | 0         |
| 52        | 88       | 98        | 1       | 53       | 0        |           | 0         |
| 53        | 94       | 99        | 1       | 59       | 0        |           | 0         |
| 54        | 97       | 100       | 1       | 66       | 0        |           | 0         |

Note. VAL – Validity; SERV – Service Orientation; ST – Stress Tolerance; REL – Reliability; CLR – Clerical, SALE – Sales; MNGR – Manager.

**Table 3.3. Global HPI Forms 1 and 3 Norms (N = 153,223) – Occupational Scales**

| Raw Score | VAL Norm | SERV Norm | ST Norm | REL Norm | CLR Norm | SALE Norm | MNGR Norm |
|-----------|----------|-----------|---------|----------|----------|-----------|-----------|
| 55        | 99       | 100       | 2       | 72       | 0        |           | 0         |
| 56        | 100      | 100       | 2       | 77       | 0        |           | 0         |
| 57        |          |           | 3       | 82       | 1        |           | 0         |
| 58        |          |           | 3       | 86       | 1        |           | 0         |
| 59        |          |           | 4       | 90       | 2        |           | 0         |
| 60        |          |           | 5       | 92       | 2        |           | 0         |
| 61        |          |           | 7       | 94       | 4        |           | 0         |
| 62        |          |           | 8       | 96       | 5        |           | 0         |
| 63        |          |           | 10      | 97       | 8        |           | 0         |
| 64        |          |           | 12      | 98       | 11       |           | 0         |
| 65        |          |           | 15      | 99       | 15       |           | 0         |
| 66        |          |           | 18      | 99       | 20       |           | 0         |
| 67        |          |           | 22      | 100      | 25       | 0         | 0         |
| 68        |          |           | 26      | 100      | 32       | 0         | 0         |
| 69        |          |           | 30      | 100      | 39       | 0         | 0         |
| 70        |          |           | 35      | 100      | 46       | 0         | 0         |
| 71        |          |           | 40      | 100      | 53       | 0         | 0         |
| 72        |          |           | 46      | 100      | 60       | 0         | 0         |
| 73        |          |           | 52      |          | 66       | 0         | 0         |
| 74        |          |           | 57      |          | 71       | 0         | 0         |
| 75        |          |           | 62      |          | 76       | 0         | 0         |
| 76        |          |           | 67      |          | 81       | 0         | 0         |
| 77        |          |           | 71      |          | 85       | 0         | 0         |
| 78        |          |           | 75      |          | 88       | 0         | 0         |
| 79        |          |           | 79      |          | 91       | 0         | 0         |
| 80        |          |           | 82      |          | 93       | 0         | 0         |
| 81        |          |           | 84      |          | 95       | 0         | 0         |
| 82        |          |           | 87      |          | 96       | 0         | 0         |
| 83        |          |           | 89      |          | 97       | 0         | 0         |
| 84        |          |           | 91      |          | 98       | 0         | 0         |
| 85        |          |           | 93      |          | 99       | 0         | 0         |
| 86        |          |           | 94      |          | 99       | 0         | 0         |
| 87        |          |           | 95      |          | 99       | 0         | 1         |
| 88        |          |           | 96      |          | 100      | 0         | 1         |
| 89        |          |           | 97      |          | 100      | 0         | 1         |
| 90        |          |           | 98      |          | 100      | 0         | 1         |
| 91        |          |           | 98      |          | 100      | 0         | 1         |
| 92        |          |           | 99      |          | 100      | 0         | 2         |
| 93        |          |           | 99      |          | 100      | 0         | 2         |
| 94        |          |           | 100     |          | 100      | 0         | 3         |
| 95        |          |           | 100     |          | 100      | 0         | 3         |

Note. VAL – Validity; SERV – Service Orientation; ST – Stress Tolerance; REL – Reliability; CLR – Clerical, SALE – Sales; MNGR – Manager.

**Table 3.3. Global HPI Forms 1 and 3 Norms (N = 153,223) – Occupational Scales**

| Raw Score | VAL Norm | SERV Norm | ST Norm | REL Norm | CLR Norm | SALE Norm | MNGR Norm |
|-----------|----------|-----------|---------|----------|----------|-----------|-----------|
| 96        |          |           | 100     |          | 100      | 0         | 4         |
| 97        |          |           | 100     |          |          | 0         | 5         |
| 98        |          |           | 100     |          |          | 0         | 6         |
| 99        |          |           | 100     |          |          | 0         | 8         |
| 100       |          |           | 100     |          |          | 0         | 10        |
| 101       |          |           |         |          |          | 0         | 11        |
| 102       |          |           |         |          |          | 0         | 14        |
| 103       |          |           |         |          |          | 0         | 16        |
| 104       |          |           |         |          |          | 0         | 19        |
| 105       |          |           |         |          |          | 0         | 23        |
| 106       |          |           |         |          |          | 0         | 26        |
| 107       |          |           |         |          |          | 0         | 30        |
| 108       |          |           |         |          |          | 0         | 34        |
| 109       |          |           |         |          |          | 0         | 38        |
| 110       |          |           |         |          |          | 0         | 41        |
| 111       |          |           |         |          |          | 0         | 45        |
| 112       |          |           |         |          |          | 0         | 49        |
| 113       |          |           |         |          |          | 0         | 53        |
| 114       |          |           |         |          |          | 0         | 57        |
| 115       |          |           |         |          |          | 0         | 61        |
| 116       |          |           |         |          |          | 0         | 65        |
| 117       |          |           |         |          |          | 0         | 68        |
| 118       |          |           |         |          |          | 0         | 71        |
| 119       |          |           |         |          |          | 0         | 75        |
| 120       |          |           |         |          |          | 0         | 78        |
| 121       |          |           |         |          |          | 0         | 80        |
| 122       |          |           |         |          |          | 0         | 83        |
| 123       |          |           |         |          |          | 0         | 85        |
| 124       |          |           |         |          |          | 0         | 87        |
| 125       |          |           |         |          |          | 0         | 89        |
| 126       |          |           |         |          |          | 0         | 91        |
| 127       |          |           |         |          |          | 0         | 93        |
| 128       |          |           |         |          |          | 0         | 94        |
| 129       |          |           |         |          |          | 0         | 95        |
| 130       |          |           |         |          |          | 0         | 96        |
| 131       |          |           |         |          |          | 0         | 97        |
| 132       |          |           |         |          |          | 0         | 98        |
| 133       |          |           |         |          |          | 0         | 98        |
| 134       |          |           |         |          |          | 0         | 99        |
| 135       |          |           |         |          |          | 0         | 99        |
| 136       |          |           |         |          |          | 0         | 99        |

Note. VAL – Validity; SERV – Service Orientation; ST – Stress Tolerance; REL – Reliability; CLR – Clerical, SALE – Sales; MNGR – Manager.

**Table 3.3. Global HPI Forms 1 and 3 Norms (N = 153,223) – Occupational Scales**

| Raw Score | VAL Norm | SERV Norm | ST Norm | REL Norm | CLR Norm | SALE Norm | MNGR Norm |
|-----------|----------|-----------|---------|----------|----------|-----------|-----------|
| 137       |          |           |         |          |          | 0         | 99        |
| 138       |          |           |         |          |          | 1         | 100       |
| 139       |          |           |         |          |          | 1         | 100       |
| 140       |          |           |         |          |          | 1         | 100       |
| 141       |          |           |         |          |          | 1         | 100       |
| 142       |          |           |         |          |          | 1         | 100       |
| 143       |          |           |         |          |          | 1         | 100       |
| 144       |          |           |         |          |          | 1         | 100       |
| 145       |          |           |         |          |          | 1         | 100       |
| 146       |          |           |         |          |          | 2         | 100       |
| 147       |          |           |         |          |          | 2         | 100       |
| 148       |          |           |         |          |          | 2         | 100       |
| 149       |          |           |         |          |          | 2         |           |
| 150       |          |           |         |          |          | 3         |           |
| 151       |          |           |         |          |          | 3         |           |
| 152       |          |           |         |          |          | 3         |           |
| 153       |          |           |         |          |          | 4         |           |
| 154       |          |           |         |          |          | 4         |           |
| 155       |          |           |         |          |          | 5         |           |
| 156       |          |           |         |          |          | 5         |           |
| 157       |          |           |         |          |          | 6         |           |
| 158       |          |           |         |          |          | 7         |           |
| 159       |          |           |         |          |          | 8         |           |
| 160       |          |           |         |          |          | 9         |           |
| 161       |          |           |         |          |          | 10        |           |
| 162       |          |           |         |          |          | 11        |           |
| 163       |          |           |         |          |          | 12        |           |
| 164       |          |           |         |          |          | 13        |           |
| 165       |          |           |         |          |          | 14        |           |
| 166       |          |           |         |          |          | 16        |           |
| 167       |          |           |         |          |          | 18        |           |
| 168       |          |           |         |          |          | 19        |           |
| 169       |          |           |         |          |          | 21        |           |
| 170       |          |           |         |          |          | 23        |           |
| 171       |          |           |         |          |          | 25        |           |
| 172       |          |           |         |          |          | 27        |           |
| 173       |          |           |         |          |          | 29        |           |
| 174       |          |           |         |          |          | 32        |           |
| 175       |          |           |         |          |          | 34        |           |
| 176       |          |           |         |          |          | 37        |           |
| 177       |          |           |         |          |          | 39        |           |

Note. VAL – Validity; SERV – Service Orientation; ST – Stress Tolerance; REL – Reliability; CLR – Clerical, SALE – Sales; MNGR – Manager.

**Table 3.3. Global HPI Forms 1 and 3 Norms (N = 153,223) – Occupational Scales**

| Raw Score | SALE Norm | Raw Score | SALE Norm | Raw Score | SALE Norm |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 178       | 42        | 219       | 98        | 260       | 100       |
| 179       | 44        | 220       | 99        | 261       | 100       |
| 180       | 47        | 221       | 99        | 262       | 100       |
| 181       | 49        | 222       | 99        | 263       | 100       |
| 182       | 52        | 223       | 99        | 264       | 100       |
| 183       | 54        | 224       | 99        | 265       | 100       |
| 184       | 57        | 225       | 99        | 266       | 100       |
| 185       | 59        | 226       | 99        | 267       | 100       |
| 186       | 62        | 227       | 99        | 268       | 100       |
| 187       | 64        | 228       | 100       |           |           |
| 188       | 66        | 229       | 100       |           |           |
| 189       | 68        | 230       | 100       |           |           |
| 190       | 70        | 231       | 100       |           |           |
| 191       | 72        | 232       | 100       |           |           |
| 192       | 74        | 233       | 100       |           |           |
| 193       | 76        | 234       | 100       |           |           |
| 194       | 78        | 235       | 100       |           |           |
| 195       | 80        | 236       | 100       |           |           |
| 196       | 81        | 237       | 100       |           |           |
| 197       | 83        | 238       | 100       |           |           |
| 198       | 84        | 239       | 100       |           |           |
| 199       | 85        | 240       | 100       |           |           |
| 200       | 86        | 241       | 100       |           |           |
| 201       | 88        | 242       | 100       |           |           |
| 202       | 89        | 243       | 100       |           |           |
| 203       | 90        | 244       | 100       |           |           |
| 204       | 91        | 245       | 100       |           |           |
| 205       | 91        | 246       | 100       |           |           |
| 206       | 92        | 247       | 100       |           |           |
| 207       | 93        | 248       | 100       |           |           |
| 208       | 94        | 249       | 100       |           |           |
| 209       | 94        | 250       | 100       |           |           |
| 210       | 95        | 251       | 100       |           |           |
| 211       | 95        | 252       | 100       |           |           |
| 212       | 96        | 253       | 100       |           |           |
| 213       | 96        | 254       | 100       |           |           |
| 214       | 97        | 255       | 100       |           |           |
| 215       | 97        | 256       | 100       |           |           |
| 216       | 97        | 257       | 100       |           |           |
| 217       | 98        | 258       | 100       |           |           |
| 218       | 98        | 259       | 100       |           |           |

Note. VAL – Validity; SERV – Service Orientation; ST – Stress Tolerance; REL – Reliability; CLR – Clerical, SALE – Sales; MNGR – Manager.

Table 3.4. Global HPI Normative Sample – Form 5 (N = 40,708)

| Variable                                  | Sample Size | Sample Percentage | Workforce Percentage |
|---|-------------|-------------------|----------------------|
| <b>Job Category</b>                       |             |                   |                      |
| Managers and executives                   | 7,502       | 18.4              | 5.8                  |
| Professionals                             | 5,552       | 13.6              | 17.2                 |
| Technicians and specialists               | 4,429       | 10.9              | 10.6                 |
| Operations and trades                     | 2,756       | 6.8               | 35.4                 |
| Sales                                     | 4,075       | 10.0              | 9.0                  |
| Customer support                          | 886         | 2.2               | 1.9                  |
| Administrative and clerical               | 2,480       | 6.1               | 6.3                  |
| Service and support                       | 1,709       | 4.2               | 13.7                 |
| Military                                  | 48          | 0.1               | 0.3                  |
| Student                                   | 395         | 1.0               |                      |
| Not reported                              | 10,876      | 26.7              |                      |
| <b>Assessment Purpose</b>                 |             |                   |                      |
| Selection                                 | 15,103      | 37.1              |                      |
| Development                               | 12,297      | 30.2              |                      |
| Other                                     | 3,495       | 8.6               |                      |
| Not reported                              | 9,813       | 24.1              |                      |
| <b>Age Group</b>                          |             |                   |                      |
| Under 40                                  | 17,514      | 43.0              |                      |
| 40 and older                              | 14,909      | 36.6              |                      |
| Not reported                              | 8,285       | 20.4              |                      |
| <b>Gender</b>                             |             |                   |                      |
| Men                                       | 18,471      | 45.4              |                      |
| Women                                     | 15,165      | 37.3              |                      |
| Not reported                              | 7,072       | 17.4              |                      |
| <b>Industry</b>                           |             |                   |                      |
| Advertising and marketing                 | 597         | 1.5               |                      |
| Banking and financial services            | 3,377       | 8.3               |                      |
| Business support services                 | 1,166       | 2.9               |                      |
| Construction                              | 1,029       | 2.5               |                      |
| Education                                 | 537         | 1.3               |                      |
| Energy, utilities, and telecommunications | 2,263       | 5.6               |                      |
| Entertainment and media                   | 239         | 0.6               |                      |
| Food and beverage                         | 1,279       | 3.1               |                      |
| Government                                | 416         | 1.0               |                      |
| Healthcare                                | 1,324       | 3.3               |                      |
| Industrial metals and mining              | 1,921       | 4.7               |                      |
| Information technology                    | 1,946       | 4.8               |                      |
| Law enforcement                           | 106         | 0.3               |                      |
| Leisure and hospitality                   | 198         | 0.5               |                      |

Note. Percentage may not sum to 100 due to rounding.



**Table 3.4. Global HPI Normative Sample – Form 5 (N = 40,708)**

| Variable              | Sample Size | Sample Percentage | Workforce Percentage |
|-----------------------|-------------|-------------------|----------------------|
| <b>Industry</b>       |             |                   |                      |
| Manufacturing         | 3,106       | 7.6               |                      |
| Pharmaceuticals       | 1,320       | 3.2               |                      |
| Retail sales          | 1,042       | 2.6               |                      |
| Sports and recreation | 95          | 0.2               |                      |
| Transportation        | 782         | 1.9               |                      |
| Other                 | 5,162       | 12.7              |                      |
| Not reported          | 12,803      | 31.5              |                      |

Note. Percentage may not sum to 100 due to rounding.

**Table 3.5. Global HPI Form 5 Norms (N = 40,708) – Primary Scales**

| Raw Score | ADJ Norm | AMB Norm | SOC Norm | INP Norm | PRU Norm | INQ Norm | LRN Norm |
|-----------|----------|----------|----------|----------|----------|----------|----------|
| 14        |          |          |          |          |          |          | 0        |
| 15        |          |          |          |          |          |          | 0        |
| 16        |          |          |          |          |          |          | 0        |
| 17        |          |          |          |          |          |          | 0        |
| 18        |          |          |          |          |          |          | 0        |
| 19        |          |          |          |          |          |          | 0        |
| 20        |          |          |          |          |          |          | 0        |
| 21        |          |          |          |          |          |          | 0        |
| 22        |          |          |          | 0        |          |          | 0        |
| 23        |          |          |          | 0        |          |          | 0        |
| 24        |          |          | 0        | 0        |          |          | 0        |
| 25        |          |          | 0        | 0        |          | 0        | 1        |
| 26        |          |          | 0        | 0        |          | 0        | 1        |
| 27        |          |          | 0        | 0        |          | 0        | 1        |
| 28        |          |          | 0        | 0        |          | 0        | 2        |
| 29        |          | 0        | 0        | 0        |          | 0        | 3        |
| 30        |          | 0        | 0        | 0        |          | 0        | 4        |
| 31        |          | 0        | 0        | 0        | 0        | 0        | 5        |
| 32        |          | 0        | 0        | 0        | 0        | 0        | 8        |
| 33        |          | 0        | 0        | 0        | 0        | 0        | 11       |
| 34        |          | 0        | 0        | 0        | 0        | 0        | 14       |
| 35        |          | 0        | 0        | 0        | 0        | 0        | 19       |
| 36        |          | 0        | 0        | 0        | 0        | 0        | 24       |
| 37        | 0        | 0        | 0        | 0        | 0        | 0        | 29       |
| 38        | 0        | 0        | 0        | 0        | 0        | 0        | 36       |
| 39        | 0        | 0        | 0        | 0        | 0        | 0        | 43       |
| 40        | 0        | 0        | 0        | 0        | 0        | 0        | 50       |
| 41        | 0        | 0        | 1        | 0        | 0        | 0        | 57       |
| 42        | 0        | 0        | 1        | 0        | 0        | 0        | 64       |
| 43        | 0        | 0        | 1        | 0        | 0        | 0        | 70       |

Note. ADJ – Adjustment; AMB – Ambition; SOC – Sociability; INP – Interpersonal Sensitivity; PRU – Prudence; INQ – Inquisitive; LRN – Learning Approach.

**Table 3.5. Global HPI Form 5 Norms (N = 40,708) – Primary Scales**

| Raw Score | ADJ Norm | AMB Norm | SOC Norm | INP Norm | PRU Norm | INQ Norm | LRN Norm |
|-----------|----------|----------|----------|----------|----------|----------|----------|
| 44        | 0        | 0        | 1        | 0        | 0        | 0        | 75       |
| 45        | 0        | 0        | 2        | 0        | 0        | 0        | 80       |
| 46        | 0        | 0        | 2        | 0        | 0        | 1        | 84       |
| 47        | 0        | 0        | 3        | 0        | 0        | 1        | 88       |
| 48        | 0        | 0        | 3        | 0        | 0        | 1        | 91       |
| 49        | 0        | 0        | 4        | 0        | 0        | 1        | 93       |
| 50        | 0        | 0        | 5        | 0        | 0        | 2        | 95       |
| 51        | 0        | 0        | 7        | 1        | 0        | 2        | 97       |
| 52        | 0        | 0        | 8        | 1        | 0        | 3        | 98       |
| 53        | 0        | 0        | 10       | 1        | 0        | 3        | 99       |
| 54        | 0        | 0        | 13       | 2        | 0        | 4        | 99       |
| 55        | 0        | 0        | 16       | 3        | 0        | 5        | 100      |
| 56        | 0        | 0        | 19       | 4        | 0        | 6        | 100      |
| 57        | 0        | 1        | 23       | 6        | 0        | 8        |          |
| 58        | 0        | 1        | 27       | 9        | 0        | 10       |          |
| 59        | 0        | 1        | 31       | 13       | 0        | 12       |          |
| 60        | 0        | 1        | 36       | 17       | 0        | 14       |          |
| 61        | 0        | 1        | 41       | 23       | 0        | 17       |          |
| 62        | 0        | 2        | 46       | 31       | 0        | 20       |          |
| 63        | 0        | 2        | 52       | 38       | 0        | 24       |          |
| 64        | 0        | 3        | 57       | 46       | 0        | 28       |          |
| 65        | 0        | 3        | 62       | 53       | 0        | 32       |          |
| 66        | 0        | 4        | 67       | 60       | 0        | 36       |          |
| 67        | 0        | 5        | 72       | 66       | 0        | 41       |          |
| 68        | 0        | 5        | 76       | 72       | 0        | 46       |          |
| 69        | 0        | 7        | 80       | 77       | 0        | 51       |          |
| 70        | 0        | 8        | 83       | 81       | 1        | 55       |          |
| 71        | 0        | 9        | 86       | 85       | 1        | 60       |          |
| 72        | 0        | 11       | 88       | 88       | 1        | 65       |          |
| 73        | 0        | 13       | 90       | 90       | 2        | 69       |          |
| 74        | 0        | 15       | 92       | 93       | 2        | 73       |          |
| 75        | 0        | 18       | 93       | 94       | 3        | 76       |          |
| 76        | 1        | 20       | 95       | 96       | 4        | 79       |          |
| 77        | 1        | 24       | 96       | 97       | 5        | 82       |          |
| 78        | 1        | 27       | 97       | 98       | 7        | 85       |          |
| 79        | 1        | 31       | 97       | 99       | 9        | 87       |          |
| 80        | 1        | 35       | 98       | 99       | 11       | 89       |          |
| 81        | 1        | 39       | 98       | 99       | 14       | 91       |          |
| 82        | 2        | 44       | 99       | 100      | 17       | 92       |          |
| 83        | 2        | 48       | 99       | 100      | 21       | 94       |          |
| 84        | 2        | 53       | 99       | 100      | 26       | 95       |          |
| 85        | 3        | 57       | 99       | 100      | 31       | 96       |          |

Note. ADJ – Adjustment; AMB – Ambition; SOC – Sociability; INP – Interpersonal Sensitivity; PRU – Prudence; INQ – Inquisitive; LRN – Learning Approach.

**Table 3.5. Global HPI Form 5 Norms (N = 40,708) – Primary Scales**

| Raw Score | ADJ Norm | AMB Norm | SOC Norm | INP Norm | PRU Norm | INQ Norm | LRN Norm |
|-----------|----------|----------|----------|----------|----------|----------|----------|
| 86        | 3        | 61       | 100      | 100      | 36       | 96       |          |
| 87        | 4        | 65       | 100      | 100      | 41       | 97       |          |
| 88        | 4        | 69       | 100      | 100      | 47       | 98       |          |
| 89        | 5        | 72       | 100      |          | 53       | 98       |          |
| 90        | 6        | 75       | 100      |          | 58       | 99       |          |
| 91        | 7        | 78       | 100      |          | 63       | 99       |          |
| 92        | 8        | 80       | 100      |          | 68       | 99       |          |
| 93        | 10       | 82       | 100      |          | 72       | 99       |          |
| 94        | 11       | 85       | 100      |          | 76       | 100      |          |
| 95        | 13       | 87       | 100      |          | 80       | 100      |          |
| 96        | 15       | 88       | 100      |          | 83       | 100      |          |
| 97        | 17       | 90       |          |          | 86       | 100      |          |
| 98        | 19       | 91       |          |          | 88       | 100      |          |
| 99        | 21       | 93       |          |          | 91       | 100      |          |
| 100       | 24       | 94       |          |          | 92       | 100      |          |
| 101       | 27       | 95       |          |          | 94       |          |          |
| 102       | 30       | 96       |          |          | 95       |          |          |
| 103       | 33       | 96       |          |          | 96       |          |          |
| 104       | 37       | 97       |          |          | 97       |          |          |
| 105       | 40       | 98       |          |          | 97       |          |          |
| 106       | 44       | 98       |          |          | 98       |          |          |
| 107       | 48       | 99       |          |          | 98       |          |          |
| 108       | 51       | 99       |          |          | 99       |          |          |
| 109       | 55       | 99       |          |          | 99       |          |          |
| 110       | 59       | 99       |          |          | 99       |          |          |
| 111       | 62       | 100      |          |          | 99       |          |          |
| 112       | 65       | 100      |          |          | 100      |          |          |
| 113       | 68       | 100      |          |          | 100      |          |          |
| 114       | 71       | 100      |          |          | 100      |          |          |
| 115       | 74       | 100      |          |          | 100      |          |          |
| 116       | 77       | 100      |          |          | 100      |          |          |
| 117       | 79       |          |          |          | 100      |          |          |
| 118       | 81       |          |          |          | 100      |          |          |
| 119       | 83       |          |          |          | 100      |          |          |
| 120       | 85       |          |          |          | 100      |          |          |
| 121       | 87       |          |          |          | 100      |          |          |
| 122       | 88       |          |          |          | 100      |          |          |
| 123       | 90       |          |          |          | 100      |          |          |
| 124       | 91       |          |          |          | 100      |          |          |
| 125       | 92       |          |          |          |          |          |          |
| 126       | 93       |          |          |          |          |          |          |

Note. ADJ – Adjustment; AMB – Ambition; SOC – Sociability; INP – Interpersonal Sensitivity; PRU – Prudence; INQ – Inquisitive; LRN – Learning Approach.

**Table 3.5. Global HPI Form 5 Norms (N = 40,708) – Primary Scales**

| <b>Raw Score</b> | <b>ADJ Norm</b> | <b>AMB Norm</b> | <b>SOC Norm</b> | <b>INP Norm</b> | <b>PRU Norm</b> | <b>INQ Norm</b> | <b>LRN Norm</b> |
|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 127              | 94              |                 |                 |                 |                 |                 |                 |
| 128              | 95              |                 |                 |                 |                 |                 |                 |
| 129              | 96              |                 |                 |                 |                 |                 |                 |
| 130              | 96              |                 |                 |                 |                 |                 |                 |
| 131              | 97              |                 |                 |                 |                 |                 |                 |
| 132              | 97              |                 |                 |                 |                 |                 |                 |
| 133              | 98              |                 |                 |                 |                 |                 |                 |
| 134              | 98              |                 |                 |                 |                 |                 |                 |
| 135              | 99              |                 |                 |                 |                 |                 |                 |
| 136              | 99              |                 |                 |                 |                 |                 |                 |
| 137              | 99              |                 |                 |                 |                 |                 |                 |
| 138              | 99              |                 |                 |                 |                 |                 |                 |
| 139              | 99              |                 |                 |                 |                 |                 |                 |
| 140              | 100             |                 |                 |                 |                 |                 |                 |
| 141              | 100             |                 |                 |                 |                 |                 |                 |
| 142              | 100             |                 |                 |                 |                 |                 |                 |
| 143              | 100             |                 |                 |                 |                 |                 |                 |
| 144              | 100             |                 |                 |                 |                 |                 |                 |
| 145              | 100             |                 |                 |                 |                 |                 |                 |
| 146              | 100             |                 |                 |                 |                 |                 |                 |
| 147              | 100             |                 |                 |                 |                 |                 |                 |
| 148              | 100             |                 |                 |                 |                 |                 |                 |

Note. ADJ – Adjustment; AMB – Ambition; SOC – Sociability; INP – Interpersonal Sensitivity; PRU – Prudence; INQ – Inquisitive; LRN – Learning Approach.

**Table 3.6. Global HPI Form 5 Norms (N = 40,708) – Occupational Scales**

| Raw Score | VAL Norm | SERV Norm | ST Norm | REL Norm | CLR Norm | SALE Norm | MNGR Norm |
|-----------|----------|-----------|---------|----------|----------|-----------|-----------|
| 14        | 0        | 0         |         |          |          |           |           |
| 15        | 0        | 0         |         |          |          |           |           |
| 16        | 0        | 0         |         |          |          |           |           |
| 17        | 0        | 0         |         |          |          |           |           |
| 18        | 0        | 0         |         | 0        |          |           |           |
| 19        | 0        | 0         |         | 0        |          |           |           |
| 20        | 0        | 0         |         | 0        |          |           |           |
| 21        | 0        | 0         |         | 0        |          |           |           |
| 22        | 0        | 0         |         | 0        |          |           |           |
| 23        | 0        | 0         |         | 0        |          |           |           |
| 24        | 0        | 0         |         | 0        | 0        |           |           |
| 25        | 0        | 0         | 0       | 0        | 0        |           |           |
| 26        | 0        | 0         | 0       | 0        | 0        |           |           |
| 27        | 0        | 0         | 0       | 0        | 0        |           |           |
| 28        | 0        | 0         | 0       | 0        | 0        |           |           |
| 29        | 0        | 0         | 0       | 0        | 0        |           |           |
| 30        | 0        | 0         | 0       | 0        | 0        |           |           |
| 31        | 0        | 1         | 0       | 0        | 0        |           |           |
| 32        | 0        | 1         | 0       | 0        | 0        |           |           |
| 33        | 0        | 2         | 0       | 0        | 0        |           |           |
| 34        | 0        | 3         | 0       | 0        | 0        |           |           |
| 35        | 0        | 5         | 0       | 1        | 0        |           |           |
| 36        | 0        | 7         | 0       | 1        | 0        |           |           |
| 37        | 0        | 12        | 0       | 1        | 0        |           | 0         |
| 38        | 1        | 18        | 0       | 2        | 0        |           | 0         |
| 39        | 1        | 25        | 0       | 3        | 0        |           | 0         |
| 40        | 3        | 35        | 0       | 4        | 0        |           | 0         |
| 41        | 6        | 45        | 0       | 5        | 0        |           | 0         |
| 42        | 11       | 55        | 0       | 7        | 0        |           | 0         |
| 43        | 16       | 65        | 0       | 10       | 0        |           | 0         |
| 44        | 22       | 73        | 0       | 13       | 0        |           | 0         |
| 45        | 30       | 79        | 0       | 16       | 0        |           | 0         |
| 46        | 38       | 85        | 0       | 21       | 0        |           | 0         |
| 47        | 47       | 89        | 0       | 26       | 0        |           | 0         |
| 48        | 56       | 92        | 0       | 32       | 0        |           | 0         |
| 49        | 65       | 95        | 0       | 38       | 0        |           | 0         |
| 50        | 74       | 97        | 1       | 45       | 0        |           | 0         |
| 51        | 82       | 98        | 1       | 52       | 0        |           | 0         |
| 52        | 88       | 99        | 1       | 59       | 0        |           | 0         |
| 53        | 94       | 99        | 1       | 66       | 0        |           | 0         |
| 54        | 97       | 100       | 1       | 72       | 0        |           | 0         |

Note. VAL – Validity; SERV – Service Orientation; ST – Stress Tolerance; REL – Reliability; CLR – Clerical, SALE – Sales; MNGR – Manager.

**Table 3.6. Global HPI Form 5 Norms (N = 40,708) – Occupational Scales**

| Raw Score | VAL Norm | SERV Norm | ST Norm | REL Norm | CLR Norm | SALE Norm | MNGR Norm |
|-----------|----------|-----------|---------|----------|----------|-----------|-----------|
| 55        | 99       | 100       | 2       | 77       | 1        |           | 0         |
| 56        | 100      | 100       | 2       | 82       | 1        |           | 0         |
| 57        |          |           | 3       | 86       | 1        |           | 0         |
| 58        |          |           | 4       | 89       | 2        |           | 0         |
| 59        |          |           | 5       | 92       | 3        |           | 0         |
| 60        |          |           | 6       | 94       | 5        |           | 0         |
| 61        |          |           | 7       | 96       | 7        |           | 0         |
| 62        |          |           | 9       | 97       | 10       |           | 0         |
| 63        |          |           | 11      | 98       | 14       |           | 0         |
| 64        |          |           | 13      | 99       | 18       |           | 0         |
| 65        |          |           | 16      | 99       | 24       |           | 0         |
| 66        |          |           | 19      | 99       | 30       |           | 0         |
| 67        |          |           | 23      | 100      | 38       | 0         | 0         |
| 68        |          |           | 27      | 100      | 45       | 0         | 0         |
| 69        |          |           | 32      | 100      | 52       | 0         | 0         |
| 70        |          |           | 37      | 100      | 59       | 0         | 0         |
| 71        |          |           | 42      | 100      | 66       | 0         | 0         |
| 72        |          |           | 48      | 100      | 72       | 0         | 0         |
| 73        |          |           | 53      |          | 77       | 0         | 0         |
| 74        |          |           | 59      |          | 81       | 0         | 0         |
| 75        |          |           | 64      |          | 85       | 0         | 0         |
| 76        |          |           | 68      |          | 88       | 0         | 0         |
| 77        |          |           | 72      |          | 91       | 0         | 0         |
| 78        |          |           | 76      |          | 93       | 0         | 0         |
| 79        |          |           | 79      |          | 95       | 0         | 0         |
| 80        |          |           | 82      |          | 96       | 0         | 0         |
| 81        |          |           | 85      |          | 97       | 0         | 0         |
| 82        |          |           | 87      |          | 98       | 0         | 0         |
| 83        |          |           | 89      |          | 99       | 0         | 0         |
| 84        |          |           | 91      |          | 99       | 0         | 0         |
| 85        |          |           | 92      |          | 99       | 0         | 1         |
| 86        |          |           | 94      |          | 99       | 0         | 1         |
| 87        |          |           | 95      |          | 100      | 0         | 1         |
| 88        |          |           | 96      |          | 100      | 0         | 1         |
| 89        |          |           | 97      |          | 100      | 0         | 2         |
| 90        |          |           | 98      |          | 100      | 0         | 2         |
| 91        |          |           | 98      |          | 100      | 0         | 3         |
| 92        |          |           | 99      |          | 100      | 0         | 3         |
| 93        |          |           | 99      |          | 100      | 0         | 4         |
| 94        |          |           | 99      |          | 100      | 0         | 5         |
| 95        |          |           | 100     |          | 100      | 0         | 6         |

Note. VAL – Validity; SERV – Service Orientation; ST – Stress Tolerance; REL – Reliability; CLR – Clerical, SALE – Sales; MNGR – Manager.

**Table 3.6. Global HPI Form 5 Norms (N = 40,708) – Occupational Scales**

| Raw Score | VAL Norm | SERV Norm | ST Norm | REL Norm | CLR Norm | SALE Norm | MNGR Norm |
|-----------|----------|-----------|---------|----------|----------|-----------|-----------|
| 96        |          |           | 100     |          | 100      | 0         | 8         |
| 97        |          |           | 100     |          |          | 0         | 10        |
| 98        |          |           | 100     |          |          | 0         | 12        |
| 99        |          |           | 100     |          |          | 0         | 14        |
| 100       |          |           | 100     |          |          | 0         | 17        |
| 101       |          |           |         |          |          | 0         | 20        |
| 102       |          |           |         |          |          | 0         | 23        |
| 103       |          |           |         |          |          | 0         | 27        |
| 104       |          |           |         |          |          | 0         | 31        |
| 105       |          |           |         |          |          | 0         | 35        |
| 106       |          |           |         |          |          | 0         | 39        |
| 107       |          |           |         |          |          | 0         | 44        |
| 108       |          |           |         |          |          | 0         | 48        |
| 109       |          |           |         |          |          | 0         | 52        |
| 110       |          |           |         |          |          | 0         | 56        |
| 111       |          |           |         |          |          | 0         | 60        |
| 112       |          |           |         |          |          | 0         | 64        |
| 113       |          |           |         |          |          | 0         | 67        |
| 114       |          |           |         |          |          | 0         | 70        |
| 115       |          |           |         |          |          | 0         | 74        |
| 116       |          |           |         |          |          | 0         | 76        |
| 117       |          |           |         |          |          | 0         | 79        |
| 118       |          |           |         |          |          | 0         | 82        |
| 119       |          |           |         |          |          | 0         | 84        |
| 120       |          |           |         |          |          | 0         | 86        |
| 121       |          |           |         |          |          | 0         | 88        |
| 122       |          |           |         |          |          | 0         | 89        |
| 123       |          |           |         |          |          | 0         | 91        |
| 124       |          |           |         |          |          | 0         | 92        |
| 125       |          |           |         |          |          | 0         | 94        |
| 126       |          |           |         |          |          | 0         | 95        |
| 127       |          |           |         |          |          | 0         | 95        |
| 128       |          |           |         |          |          | 0         | 96        |
| 129       |          |           |         |          |          | 0         | 97        |
| 130       |          |           |         |          |          | 0         | 97        |
| 131       |          |           |         |          |          | 0         | 98        |
| 132       |          |           |         |          |          | 0         | 98        |
| 133       |          |           |         |          |          | 0         | 99        |
| 134       |          |           |         |          |          | 0         | 99        |
| 135       |          |           |         |          |          | 0         | 99        |
| 136       |          |           |         |          |          | 0         | 99        |

Note. VAL – Validity; SERV – Service Orientation; ST – Stress Tolerance; REL – Reliability; CLR – Clerical, SALE – Sales; MNGR – Manager.

**Table 3.6. Global HPI Form 5 Norms (N = 40,708) – Occupational Scales**

| Raw Score | VAL Norm | SERV Norm | ST Norm | REL Norm | CLR Norm | SALE Norm | MNGR Norm |
|-----------|----------|-----------|---------|----------|----------|-----------|-----------|
| 137       |          |           |         |          |          | 0         | 100       |
| 138       |          |           |         |          |          | 1         | 100       |
| 139       |          |           |         |          |          | 1         | 100       |
| 140       |          |           |         |          |          | 1         | 100       |
| 141       |          |           |         |          |          | 1         | 100       |
| 142       |          |           |         |          |          | 1         | 100       |
| 143       |          |           |         |          |          | 1         | 100       |
| 144       |          |           |         |          |          | 1         | 100       |
| 145       |          |           |         |          |          | 1         | 100       |
| 146       |          |           |         |          |          | 2         | 100       |
| 147       |          |           |         |          |          | 2         | 100       |
| 148       |          |           |         |          |          | 2         | 100       |
| 149       |          |           |         |          |          | 2         |           |
| 150       |          |           |         |          |          | 3         |           |
| 151       |          |           |         |          |          | 3         |           |
| 152       |          |           |         |          |          | 3         |           |
| 153       |          |           |         |          |          | 4         |           |
| 154       |          |           |         |          |          | 4         |           |
| 155       |          |           |         |          |          | 5         |           |
| 156       |          |           |         |          |          | 6         |           |
| 157       |          |           |         |          |          | 6         |           |
| 158       |          |           |         |          |          | 7         |           |
| 159       |          |           |         |          |          | 8         |           |
| 160       |          |           |         |          |          | 9         |           |
| 161       |          |           |         |          |          | 10        |           |
| 162       |          |           |         |          |          | 11        |           |
| 163       |          |           |         |          |          | 12        |           |
| 164       |          |           |         |          |          | 14        |           |
| 165       |          |           |         |          |          | 15        |           |
| 166       |          |           |         |          |          | 17        |           |
| 167       |          |           |         |          |          | 19        |           |
| 168       |          |           |         |          |          | 20        |           |
| 169       |          |           |         |          |          | 22        |           |
| 170       |          |           |         |          |          | 24        |           |
| 171       |          |           |         |          |          | 26        |           |
| 172       |          |           |         |          |          | 28        |           |
| 173       |          |           |         |          |          | 31        |           |
| 174       |          |           |         |          |          | 33        |           |
| 175       |          |           |         |          |          | 35        |           |
| 176       |          |           |         |          |          | 38        |           |
| 177       |          |           |         |          |          | 40        |           |

Note. VAL – Validity; SERV – Service Orientation; ST – Stress Tolerance; REL – Reliability; CLR – Clerical, SALE – Sales; MNGR – Manager.



**Table 3.6. Global HPI Form 5 Norms (N = 40,708) – Occupational Scales**

| Raw Score | SALE Norm | Raw Score | SALE Norm | Raw Score | SALE Norm |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 178       | 43        | 219       | 98        | 260       | 100       |
| 179       | 45        | 220       | 98        | 261       | 100       |
| 180       | 48        | 221       | 99        | 262       | 100       |
| 181       | 50        | 222       | 99        | 263       | 100       |
| 182       | 53        | 223       | 99        | 264       | 100       |
| 183       | 55        | 224       | 99        | 265       | 100       |
| 184       | 58        | 225       | 99        | 266       | 100       |
| 185       | 61        | 226       | 99        | 267       | 100       |
| 186       | 63        | 227       | 99        | 268       | 100       |
| 187       | 65        | 228       | 100       |           |           |
| 188       | 67        | 229       | 100       |           |           |
| 189       | 69        | 230       | 100       |           |           |
| 190       | 71        | 231       | 100       |           |           |
| 191       | 73        | 232       | 100       |           |           |
| 192       | 75        | 233       | 100       |           |           |
| 193       | 77        | 234       | 100       |           |           |
| 194       | 79        | 235       | 100       |           |           |
| 195       | 80        | 236       | 100       |           |           |
| 196       | 82        | 237       | 100       |           |           |
| 197       | 83        | 238       | 100       |           |           |
| 198       | 85        | 239       | 100       |           |           |
| 199       | 86        | 240       | 100       |           |           |
| 200       | 87        | 241       | 100       |           |           |
| 201       | 88        | 242       | 100       |           |           |
| 202       | 89        | 243       | 100       |           |           |
| 203       | 90        | 244       | 100       |           |           |
| 204       | 91        | 245       | 100       |           |           |
| 205       | 92        | 246       | 100       |           |           |
| 206       | 93        | 247       | 100       |           |           |
| 207       | 93        | 248       | 100       |           |           |
| 208       | 94        | 249       | 100       |           |           |
| 209       | 94        | 250       | 100       |           |           |
| 210       | 95        | 251       | 100       |           |           |
| 211       | 96        | 252       | 100       |           |           |
| 212       | 96        | 253       | 100       |           |           |
| 213       | 96        | 254       | 100       |           |           |
| 214       | 97        | 255       | 100       |           |           |
| 215       | 97        | 256       | 100       |           |           |
| 216       | 98        | 257       | 100       |           |           |
| 217       | 98        | 258       | 100       |           |           |
| 218       | 98        | 259       | 100       |           |           |

Note. VAL – Validity; SERV – Service Orientation; ST – Stress Tolerance; REL – Reliability; CLR – Clerical, SALE – Sales; MNGR – Manager.

### 3.2. HDS Norms

We built the Global HDS norm using all available HDS Form 5 data from people in the Global norm sample. Table 3.7 displays the characteristics of people in the Global norm sample with available and complete HDS Form 5 data. Table 3.8 presents normative results for the HDS scales.

**Table 3.7. Global HDS Normative Sample – Form 5 (N = 115,793)**

| Variable                                  | Sample Size | Sample Percentage | Workforce Percentage |
|---|-------------|-------------------|----------------------|
| <b>Job Category</b>                       |             |                   |                      |
| Managers and executives                   | 20,304      | 17.5              | 5.8                  |
| Professionals                             | 18,239      | 15.8              | 17.2                 |
| Technicians and specialists               | 12,597      | 10.9              | 10.6                 |
| Operations and trades                     | 6,573       | 5.7               | 35.4                 |
| Sales                                     | 12,329      | 10.6              | 9.0                  |
| Customer support                          | 2,157       | 1.9               | 1.9                  |
| Administrative and clerical               | 9,458       | 8.2               | 6.3                  |
| Service and support                       | 4,961       | 4.3               | 13.7                 |
| Military                                  | 313         | 0.3               | 0.3                  |
| Student                                   | 480         | 0.4               |                      |
| Not reported                              | 28,382      | 24.5              |                      |
| <b>Assessment Purpose</b>                 |             |                   |                      |
| Selection                                 | 35,478      | 30.6              |                      |
| Development                               | 43,995      | 38.0              |                      |
| Other                                     | 11,780      | 10.2              |                      |
| Not reported                              | 24,540      | 21.2              |                      |
| <b>Age Group</b>                          |             |                   |                      |
| Under 40                                  | 45,819      | 39.6              |                      |
| 40 and older                              | 49,395      | 42.7              |                      |
| Not reported                              | 20,579      | 17.8              |                      |
| <b>Gender</b>                             |             |                   |                      |
| Men                                       | 51,492      | 44.5              |                      |
| Women                                     | 49,481      | 42.7              |                      |
| Not reported                              | 14,820      | 12.8              |                      |
| <b>Industry</b>                           |             |                   |                      |
| Advertising and marketing                 | 1,864       | 1.6               |                      |
| Banking and financial services            | 11,069      | 9.6               |                      |
| Business support services                 | 4,019       | 3.5               |                      |
| Construction                              | 2,824       | 2.4               |                      |
| Education                                 | 1,918       | 1.7               |                      |
| Energy, utilities, and telecommunications | 6,454       | 5.6               |                      |
| Entertainment and media                   | 643         | 0.6               |                      |
| Food and beverage                         | 3,960       | 3.4               |                      |

Note. Percentage may not sum to 100 due to rounding.

**Table 3.7. Global HDS Normative Sample – Form 5 (N = 115,793)**

| Variable                     | Sample Size | Sample Percentage | Workforce Percentage |
|------------------------------|-------------|-------------------|----------------------|
| <b>Industry</b>              |             |                   |                      |
| Government                   | 2,135       | 1.8               |                      |
| Healthcare                   | 3,823       | 3.3               |                      |
| Industrial metals and mining | 2,437       | 2.1               |                      |
| Information technology       | 6,177       | 5.3               |                      |
| Law enforcement              | 425         | 0.4               |                      |
| Leisure and hospitality      | 559         | 0.5               |                      |
| Manufacturing                | 9,549       | 8.2               |                      |
| Pharmaceuticals              | 3,744       | 3.2               |                      |
| Retail sales                 | 3,595       | 3.1               |                      |
| Sports and recreation        | 353         | 0.3               |                      |
| Transportation               | 2,916       | 2.5               |                      |
| Other                        | 15,469      | 13.4              |                      |
| Not reported                 | 31,860      | 27.5              |                      |

Note. Percentage may not sum to 100 due to rounding.

**Table 3.8. Global HDS Form 5 Norms (N = 115,793)**

| Raw Score | EXC Norm | SKE Norm | CAU Norm | RES Norm | LEI Norm | BOL Norm | MIS Norm | COL Norm | IMA Norm | DIL Norm | DUT Norm |
|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 14        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 15        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 16        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 17        | 1        | 1        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 18        | 2        | 1        | 1        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 19        | 3        | 2        | 2        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 20        | 4        | 3        | 2        | 1        | 1        | 0        | 0        | 0        | 0        | 0        | 0        |
| 21        | 6        | 4        | 4        | 2        | 1        | 0        | 0        | 0        | 0        | 0        | 0        |
| 22        | 8        | 6        | 5        | 4        | 2        | 0        | 1        | 1        | 0        | 0        | 0        |
| 23        | 11       | 8        | 7        | 5        | 3        | 0        | 1        | 1        | 0        | 0        | 0        |
| 24        | 15       | 10       | 10       | 7        | 4        | 0        | 1        | 1        | 1        | 0        | 0        |
| 25        | 19       | 13       | 13       | 10       | 6        | 1        | 2        | 2        | 1        | 0        | 1        |
| 26        | 24       | 17       | 17       | 13       | 9        | 1        | 3        | 3        | 1        | 0        | 1        |
| 27        | 31       | 22       | 23       | 18       | 14       | 1        | 5        | 5        | 2        | 0        | 1        |
| 28        | 40       | 28       | 30       | 24       | 20       | 2        | 7        | 8        | 4        | 1        | 2        |
| 29        | 50       | 36       | 39       | 31       | 30       | 4        | 11       | 11       | 6        | 1        | 4        |
| 30        | 60       | 45       | 49       | 40       | 41       | 6        | 17       | 16       | 9        | 2        | 5        |
| 31        | 69       | 55       | 59       | 50       | 53       | 8        | 23       | 23       | 14       | 3        | 8        |
| 32        | 77       | 64       | 67       | 60       | 65       | 12       | 31       | 30       | 20       | 4        | 12       |
| 33        | 83       | 72       | 75       | 69       | 75       | 17       | 40       | 39       | 27       | 6        | 18       |
| 34        | 87       | 79       | 81       | 76       | 83       | 24       | 50       | 48       | 35       | 9        | 26       |
| 35        | 91       | 84       | 86       | 82       | 88       | 31       | 60       | 58       | 44       | 13       | 35       |
| 36        | 94       | 88       | 90       | 87       | 93       | 40       | 68       | 66       | 53       | 18       | 45       |
| 37        | 96       | 92       | 93       | 91       | 95       | 49       | 76       | 74       | 63       | 24       | 57       |
| 38        | 97       | 94       | 95       | 94       | 97       | 58       | 83       | 81       | 71       | 32       | 67       |
| 39        | 98       | 96       | 97       | 96       | 98       | 67       | 88       | 86       | 78       | 41       | 77       |
| 40        | 99       | 97       | 98       | 97       | 99       | 75       | 92       | 90       | 84       | 51       | 84       |
| 41        | 99       | 98       | 98       | 98       | 99       | 81       | 94       | 93       | 88       | 60       | 89       |
| 42        | 99       | 99       | 99       | 99       | 100      | 86       | 96       | 95       | 91       | 68       | 93       |
| 43        | 100      | 99       | 99       | 99       | 100      | 90       | 98       | 97       | 94       | 74       | 95       |
| 44        | 100      | 99       | 100      | 99       | 100      | 93       | 98       | 98       | 95       | 79       | 97       |
| 45        | 100      | 100      | 100      | 100      | 100      | 94       | 99       | 98       | 97       | 84       | 98       |
| 46        | 100      | 100      | 100      | 100      | 100      | 96       | 99       | 99       | 98       | 88       | 99       |
| 47        | 100      | 100      | 100      | 100      | 100      | 97       | 100      | 99       | 98       | 91       | 99       |
| 48        | 100      | 100      | 100      | 100      | 100      | 98       | 100      | 100      | 99       | 94       | 100      |
| 49        | 100      | 100      | 100      | 100      | 100      | 98       | 100      | 100      | 99       | 96       | 100      |
| 50        | 100      | 100      | 100      | 100      | 100      | 99       | 100      | 100      | 100      | 97       | 100      |
| 51        | 100      | 100      | 100      | 100      | 100      | 99       | 100      | 100      | 100      | 99       | 100      |
| 52        | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 99       | 100      |
| 53        | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      |
| 54        | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      |
| 55        | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      |
| 56        | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      |

Note. EXC – Excitable; SKE – Skeptical; CAU – Cautious; RES – Reserved; LEI – Leisurely; BOL – Bold; MIS – Mischievous; COL – Colorful; IMA – Imaginative; DIL – Diligent; DUT – Dutiful.

### 3.3. MVPI Norms

We built the Global MVPI norms using all available MVPI Form 1 data from people in the Global norm sample. Table 3.9 displays the characteristics of people in the Global norm sample with available and complete MVPI Form 1 data. Table 3.10 presents normative results for the MVPI scales.

**Table 3.9. Global MVPI Normative Sample – Form 1 (N = 99,568)**

| Variable                                  | Sample Size | Sample Percentage | Workforce Percentage |
|---|-------------|-------------------|----------------------|
| <b>Job Category</b>                       |             |                   |                      |
| Managers and executives                   | 17,544      | 17.6              | 5.8                  |
| Professionals                             | 16,106      | 16.2              | 17.2                 |
| Technicians and specialists               | 10,455      | 10.5              | 10.6                 |
| Operations and trades                     | 5,641       | 5.7               | 35.4                 |
| Sales                                     | 11,037      | 11.1              | 9.0                  |
| Customer support                          | 1,722       | 1.7               | 1.9                  |
| Administrative and clerical               | 8,098       | 8.1               | 6.3                  |
| Service and support                       | 4,471       | 4.5               | 13.7                 |
| Military                                  | 270         | 0.3               | 0.3                  |
| Student                                   | 422         | 0.4               |                      |
| Not reported                              | 23,802      | 23.9              |                      |
| <b>Assessment Purpose</b>                 |             |                   |                      |
| Selection                                 | 28,744      | 28.9              |                      |
| Development                               | 39,713      | 39.9              |                      |
| Other                                     | 10,589      | 10.6              |                      |
| Not reported                              | 20,522      | 20.6              |                      |
| <b>Age Group</b>                          |             |                   |                      |
| Under 40                                  | 38,757      | 38.9              |                      |
| 40 and older                              | 43,125      | 43.3              |                      |
| Not reported                              | 17,686      | 17.8              |                      |
| <b>Gender</b>                             |             |                   |                      |
| Men                                       | 43,800      | 44.0              |                      |
| Women                                     | 43,795      | 44.0              |                      |
| Not reported                              | 11,973      | 12.0              |                      |
| <b>Industry</b>                           |             |                   |                      |
| Advertising and marketing                 | 1,695       | 1.7               |                      |
| Banking and financial services            | 9,128       | 9.2               |                      |
| Business support services                 | 3,724       | 3.7               |                      |
| Construction                              | 2,485       | 2.5               |                      |
| Education                                 | 1,771       | 1.8               |                      |
| Energy, utilities, and telecommunications | 4,618       | 4.6               |                      |
| Entertainment and media                   | 615         | 0.6               |                      |
| Food and beverage                         | 3,645       | 3.7               |                      |

Note. Percentage may not sum to 100 due to rounding.

**Table 3.9. Global MVPI Normative Sample – Form 1 (N = 99,568)**

| <b>Variable</b>              | <b>Sample Size</b> | <b>Sample Percentage</b> | <b>Workforce Percentage</b> |
|------------------------------|--------------------|--------------------------|-----------------------------|
| <b>Industry</b>              |                    |                          |                             |
| Government                   | 1,870              | 1.9                      |                             |
| Healthcare                   | 3,550              | 3.6                      |                             |
| Industrial metals and mining | 1,911              | 1.9                      |                             |
| Information technology       | 5,630              | 5.7                      |                             |
| Law enforcement              | 303                | 0.3                      |                             |
| Leisure and hospitality      | 493                | 0.5                      |                             |
| Manufacturing                | 8,137              | 8.2                      |                             |
| Pharmaceuticals              | 3,480              | 3.5                      |                             |
| Retail sales                 | 3,275              | 3.3                      |                             |
| Sports and recreation        | 315                | 0.3                      |                             |
| Transportation               | 2,440              | 2.5                      |                             |
| Other                        | 13,771             | 13.8                     |                             |
| Not reported                 | 26,712             | 26.8                     |                             |

Note. Percentage may not sum to 100 due to rounding.

**Table 3.10. Global MVPI Form 1 Norms (N = 99,568)**

| Raw Score | REC Norm | POW Norm | HED Norm | ALT Norm | AFF Norm | TRA Norm | SEC Norm | COM Norm | AES Norm | SCI Norm |
|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 20        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 21        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 22        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 2        | 0        |
| 23        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 3        | 0        |
| 24        | 2        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 5        | 0        |
| 25        | 3        | 0        | 1        | 0        | 0        | 0        | 1        | 0        | 8        | 1        |
| 26        | 4        | 0        | 1        | 0        | 0        | 0        | 2        | 1        | 12       | 1        |
| 27        | 5        | 0        | 2        | 0        | 0        | 0        | 2        | 1        | 16       | 2        |
| 28        | 8        | 1        | 3        | 0        | 0        | 0        | 4        | 1        | 21       | 3        |
| 29        | 9        | 1        | 4        | 1        | 0        | 1        | 5        | 2        | 25       | 3        |
| 30        | 13       | 2        | 6        | 1        | 0        | 1        | 6        | 3        | 30       | 5        |
| 31        | 15       | 2        | 8        | 1        | 1        | 2        | 8        | 4        | 35       | 6        |
| 32        | 19       | 3        | 11       | 2        | 1        | 3        | 11       | 5        | 40       | 8        |
| 33        | 21       | 4        | 14       | 2        | 1        | 4        | 13       | 6        | 44       | 10       |
| 34        | 26       | 5        | 18       | 3        | 1        | 6        | 16       | 8        | 49       | 12       |
| 35        | 29       | 6        | 22       | 3        | 2        | 7        | 19       | 11       | 53       | 14       |
| 36        | 35       | 8        | 27       | 4        | 2        | 10       | 23       | 14       | 57       | 17       |
| 37        | 38       | 10       | 31       | 5        | 3        | 13       | 27       | 17       | 61       | 20       |
| 38        | 44       | 13       | 37       | 7        | 4        | 18       | 32       | 21       | 65       | 23       |
| 39        | 48       | 15       | 42       | 8        | 5        | 22       | 35       | 24       | 68       | 26       |
| 40        | 53       | 18       | 48       | 10       | 6        | 28       | 41       | 29       | 72       | 30       |
| 41        | 57       | 21       | 53       | 12       | 8        | 33       | 45       | 33       | 75       | 34       |
| 42        | 62       | 26       | 60       | 14       | 10       | 42       | 51       | 39       | 78       | 38       |
| 43        | 66       | 29       | 64       | 17       | 12       | 48       | 56       | 44       | 81       | 42       |
| 44        | 70       | 34       | 71       | 20       | 16       | 56       | 62       | 50       | 83       | 47       |
| 45        | 73       | 38       | 75       | 23       | 18       | 62       | 66       | 55       | 86       | 51       |
| 46        | 78       | 44       | 80       | 28       | 24       | 70       | 72       | 61       | 88       | 56       |
| 47        | 80       | 49       | 84       | 31       | 28       | 75       | 76       | 66       | 90       | 60       |
| 48        | 84       | 55       | 88       | 37       | 36       | 81       | 81       | 73       | 92       | 65       |
| 49        | 86       | 59       | 90       | 41       | 41       | 85       | 85       | 77       | 93       | 69       |
| 50        | 89       | 66       | 93       | 47       | 51       | 90       | 89       | 83       | 95       | 74       |
| 51        | 90       | 70       | 95       | 52       | 57       | 92       | 91       | 86       | 96       | 78       |
| 52        | 93       | 76       | 97       | 59       | 67       | 95       | 95       | 91       | 97       | 83       |
| 53        | 94       | 80       | 98       | 65       | 73       | 97       | 96       | 93       | 98       | 86       |
| 54        | 96       | 86       | 99       | 71       | 82       | 98       | 98       | 96       | 98       | 90       |
| 55        | 97       | 89       | 99       | 77       | 86       | 99       | 99       | 97       | 99       | 93       |
| 56        | 98       | 93       | 100      | 83       | 93       | 100      | 99       | 99       | 99       | 96       |
| 57        | 99       | 95       | 100      | 87       | 95       | 100      | 100      | 99       | 100      | 97       |
| 58        | 99       | 98       | 100      | 93       | 98       | 100      | 100      | 100      | 100      | 99       |
| 59        | 100      | 99       | 100      | 96       | 99       | 100      | 100      | 100      | 100      | 99       |
| 60        | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      | 100      |

Note. REC – Recognition; POW – Power; HED – Hedonism; ALT – Altruism; AFF – Affiliation; TRA – Tradition; SEC – Security; COM – Commerce; AES – Aesthetics; SCI – Science.

## References

- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for educational and psychological testing*. Washington, DC: American Educational Research Association.
- Hogan Assessment Systems. (2020). *Job family assessments: Hogan Talent technical manual*. Author: Tulsa, OK.
- International Labour Organization. (2022). *Employment by sex and occupation – ISCO level 2 (thousands)* [Dataset].
- Myors, B., Lievens, F., Schollaert, E., Van Hoye, G., Cronshaw, S. F., Mladnic, A., ... Sackett, P. R. (2008). International perspectives on the legal environment for selection. *Industrial and Organizational Psychology*, *1*, 206-246.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York City, NY: McGraw-Hill.



## Appendix: Between-scale Correlations

**Table A1. HPI Scale Correlations**

|     | ADJ   | AMB   | SOC    | INP   | PRU   | INQ   | LRN |
|-----|-------|-------|--------|-------|-------|-------|-----|
| ADJ |       |       |        |       |       |       |     |
| AMB | .57** |       |        |       |       |       |     |
| SOC | .10** | .45** |        |       |       |       |     |
| INP | .54** | .51** | .42**  |       |       |       |     |
| PRU | .59** | .32** | -.07** | .46** |       |       |     |
| INQ | .24** | .40** | .43**  | .34** | .15** |       |     |
| LRN | .33** | .46** | .23**  | .30** | .29** | .45** |     |

Note. N = 153,223. \* Statistically significant at the .05 level. \*\* Statistically significant at the .01 level. ADJ – Adjustment; AMB – Ambition; SOC – Sociability; INP – Interpersonal Sensitivity; PRU – Prudence; INQ – Inquisitive; LRN – Learning Approach.

**Table A2. HPI - HDS Scale Correlations**

|     | EXC    | SKE    | CAU    | RES    | LEI    | BOL   | MIS    | COL    | IMA    | DIL   | DUT    |
|-----|--------|--------|--------|--------|--------|-------|--------|--------|--------|-------|--------|
| ADJ | -.77** | -.63** | -.53** | -.40** | -.47** | .06** | -.20** | .01**  | -.02** | .12** | .01*   |
| AMB | -.53** | -.36** | -.77** | -.44** | -.38** | .38** | .19**  | .44**  | .33**  | .25** | -.13** |
| SOC | -.20** | -.10** | -.43** | -.40** | -.09** | .37** | .47**  | .67**  | .43**  | .06** | .04**  |
| INP | -.54** | -.44** | -.44** | -.60** | -.31** | .21** | .09**  | .30**  | .21**  | .22** | .19**  |
| PRU | -.48** | -.42** | -.22** | -.34** | -.29** | .13** | -.43** | -.15** | -.15** | .43** | .23**  |
| INQ | -.22** | -.11** | -.33** | -.17** | -.09** | .35** | .30**  | .30**  | .48**  | .24** | .01*   |
| LRN | -.30** | -.20** | -.34** | -.19** | -.16** | .32** | .07**  | .21**  | .27**  | .25** | -.05** |

Note. N = 113,159. \* Statistically significant at the .05 level. \*\* Statistically significant at the .01 level. ADJ – Adjustment; AMB – Ambition; SOC – Sociability; INP – Interpersonal Sensitivity; PRU – Prudence; INQ – Inquisitive; LRN – Learning Approach. EXC – Excitable; SKE – Skeptical; CAU – Cautious; RES – Reserved; LEI – Leisurely; BOL – Bold; MIS – Mischievous; COL – Colorful; IMA – Imaginative; DIL – Diligent; DUT – Dutiful.

**Table A3. HPI - MVPI Scale Correlations**

|     | REC    | POW    | HED    | ALT   | AFF   | TRA    | SEC    | COM    | AES    | SCI   |
|-----|--------|--------|--------|-------|-------|--------|--------|--------|--------|-------|
| ADJ | -.22** | -.03** | -.21** | .12** | .23** | -.01** | -.11** | -.02** | -.08** | .05** |
| AMB | .14**  | .35**  | -.14** | .10** | .38** | -.02** | -.20** | .18**  | -.02** | .14** |
| SOC | .45**  | .34**  | .27**  | .16** | .54** | -.12** | -.27** | .21**  | .18**  | .16** |
| INP | .05**  | .07**  | .02**  | .34** | .44** | .00    | -.10** | .03**  | .09**  | .03** |
| PRU | -.13** | -.01*  | -.22** | .20** | .11** | .25**  | .30**  | .07**  | -.07** | .08** |
| INQ | .19**  | .28**  | .02**  | .26** | .19** | .00    | -.12** | .26**  | .35**  | .55** |
| LRN | .08**  | .23**  | -.10** | .15** | .16** | .04**  | -.06** | .15**  | .16**  | .35** |

Note. N = 97,580. \* Statistically significant at the .05 level. \*\* Statistically significant at the .01 level. ADJ – Adjustment; AMB – Ambition; SOC – Sociability; INP – Interpersonal Sensitivity; PRU – Prudence; INQ – Inquisitive; LRN – Learning Approach. REC – Recognition; POW – Power; HED – Hedonism; ALT – Altruism; AFF – Affiliation; TRA – Tradition; SEC – Security; COM – Commerce; AES – Aesthetics; SCI – Science.

**Table A4. HDS Scale Correlations**

|     | EXC    | SKE   | CAU    | RES    | LEI   | BOL   | MIS    | COL    | IMA    | DIL   | DUT |
|-----|--------|-------|--------|--------|-------|-------|--------|--------|--------|-------|-----|
| EXC |        |       |        |        |       |       |        |        |        |       |     |
| SKE | .70**  |       |        |        |       |       |        |        |        |       |     |
| CAU | .51**  | .38** |        |        |       |       |        |        |        |       |     |
| RES | .51**  | .48** | .45**  |        |       |       |        |        |        |       |     |
| LEI | .51**  | .54** | .42**  | .41**  |       |       |        |        |        |       |     |
| BOL | -.02** | .14** | -.32** | -.08** | .15** |       |        |        |        |       |     |
| MIS | .19**  | .28** | -.20** | .03**  | .20** | .39** |        |        |        |       |     |
| COL | -.06** | .01** | -.42** | -.26** | .00   | .46** | .58**  |        |        |       |     |
| IMA | .00    | .11** | -.30** | -.05** | .10** | .54** | .56**  | .54**  |        |       |     |
| DIL | -.06** | .05** | -.14** | -.04** | .03** | .38** | -.02** | .01**  | .17**  |       |     |
| DUT | -.02** | .04** | .14**  | -.05** | .04** | .08** | -.08** | -.02** | -.07** | .25** |     |

Note. *N* = 115,793. \* Statistically significant at the .05 level. \*\* Statistically significant at the .01 level. EXC – Excitable; SKE – Skeptical; CAU – Cautious; RES – Reserved; LEI – Leisurely; BOL – Bold; MIS – Mischievous; COL – Colorful; IMA – Imaginative; DIL – Diligent; DUT – Dutiful.

**Table A5. HDS - MVPI Scale Correlations**

|     | REC    | POW    | HED   | ALT    | AFF    | TRA    | SEC    | COM    | AES   | SCI    |
|-----|--------|--------|-------|--------|--------|--------|--------|--------|-------|--------|
| EXC | .20**  | .06**  | .22** | -.09** | -.28** | .07**  | .19**  | .07**  | .06** | -.03** |
| SKE | .28**  | .19**  | .27** | -.09** | -.20** | .11**  | .24**  | .18**  | .08** | .05**  |
| CAU | -.09** | -.24** | .08** | -.09** | -.38** | .06**  | .22**  | -.13** | .01** | -.10** |
| RES | -.04** | -.02** | .06** | -.25** | -.58** | .02**  | .16**  | .02**  | .01** | .02**  |
| LEI | .22**  | .14**  | .24** | -.02** | -.17** | .11**  | .21**  | .13**  | .09** | .06**  |
| BOL | .54**  | .56**  | .23** | .18**  | .22**  | .17**  | .12**  | .39**  | .20** | .28**  |
| MIS | .41**  | .41**  | .32** | .06**  | .22**  | -.13** | -.28** | .23**  | .21** | .13**  |
| COL | .49**  | .40**  | .19** | .13**  | .38**  | -.08** | -.23** | .21**  | .20** | .11**  |
| IMA | .35**  | .38**  | .15** | .16**  | .16**  | -.05** | -.17** | .23**  | .30** | .26**  |
| DIL | .13**  | .28**  | .00   | .21**  | .02**  | .27**  | .35**  | .27**  | .05** | .21**  |
| DUT | .09**  | -.03** | .10** | .14**  | .03**  | .18**  | .33**  | .11**  | .03** | .01**  |

Note. *N* = 96,027. \* Statistically significant at the .05 level. \*\* Statistically significant at the .01 level. EXC – Excitable; SKE – Skeptical; CAU – Cautious; RES – Reserved; LEI – Leisurely; BOL – Bold; MIS – Mischievous; COL – Colorful; IMA – Imaginative; DIL – Diligent; DUT – Dutiful. REC – Recognition; POW – Power; HED – Hedonism; ALT – Altruism; AFF – Affiliation; TRA – Tradition; SEC – Security; COM – Commerce; AES – Aesthetics; SCI – Science.

**Table A6. MVPI Scale Correlations**

|     | REC   | POW   | HED   | ALT   | AFF    | TRA   | SEC   | COM   | AES   | SCI |
|-----|-------|-------|-------|-------|--------|-------|-------|-------|-------|-----|
| REC |       |       |       |       |        |       |       |       |       |     |
| POW | .52** |       |       |       |        |       |       |       |       |     |
| HED | .39** | .26** |       |       |        |       |       |       |       |     |
| ALT | .12** | .22** | .17** |       |        |       |       |       |       |     |
| AFF | .28** | .31** | .24** | .28** |        |       |       |       |       |     |
| TRA | .08** | .21** | .00   | .25** | .01*   |       |       |       |       |     |
| SEC | .08** | .11** | .09** | .17** | -.12** | .50** |       |       |       |     |
| COM | .39** | .55** | .22** | .16** | .17**  | .21** | .23** |       |       |     |
| AES | .24** | .17** | .27** | .33** | .12**  | .04** | .00   | .11** |       |     |
| SCI | .21** | .37** | .09** | .26** | .09**  | .13** | .14** | .37** | .21** |     |

Note. N = 99,568. \* Statistically significant at the .05 level. \*\* Statistically significant at the .01 level. REC – Recognition; POW – Power; HED – Hedonism; ALT – Altruism; AFF – Affiliation; TRA – Tradition; SEC – Security; COM – Commerce; AES – Aesthetics; SCI – Science.