

META DYNAMICS™ PROFILING TOOL

DEVELOPMENT & CONSTRUCTION OF THE TOOL

Development of Primary Characteristics

The structural definitions, including item content was examined to determine similarities and dissimilarities of content between personality and behavioural models such as the Occupational Personality Questionnaire, NEO-PI(R), MBTI, eDISC and Big 5 model, and the E.S.I.P. Critical Alignment Model.

The results of this examination revealed a total of **57 primary characteristics** from the personality and behavioural models and **41 primary characteristics from the E.S.I.P. Critical Alignment Model**. Primary characteristics were then regrouped based on similarity and likeness, (e.g. Socially Confident and Outgoing) and integrated to form a single primary characteristic.

The grouping of characteristics was based on a logical and non-statistical clustering of the content. Characteristics that were not theoretically linked, that were not represented in the E.S.I.P. Critical Alignment Model, were eliminated. Following the regrouping and integrating of the remaining factorial characteristics, 41 primary characteristics were identified.

Selection & Placement of Test Items

The item selection process rendered a minimum of 12 items per scale, 560 items in all. Items were also selected to attain a balance between positively worded and negatively worded items. This was important to reduce the potential of test sabotaging by certain items contaminating the response selected on the following item i.e., 'yea saying' or 'nay saying'.

The beta version of the MDPT was piloted early in 2014 and included 16 dimensions and 560 items. Item analysis revealed that scales possessed strong internal consistency and that it was possible to reduce the number of items per scale without losing significant reliability of the scales.

Accordingly, the lowest correlating items were discarded which in certain cases increased the internal consistency of some scales. In order to maximize both the reliability and efficiency of the instrument, 7 items were retained per scale. This resulted in the final version of the MDPT(i) having 280 items in total, although there is an **ongoing process of item refinement based on statistical analysis.**

Once items had been established, they were placed in the final format using a rotation process, also known as counterbalancing. This ensured items from each scale, including negatively and positively worded items, were distributed evenly throughout the instrument.

Reporting of Social Desirability Scale

All self-report measures rely on the accuracy of the information provided by the test taker / candidate. Accordingly, self-report measures of any construct are always subject to **response bias**, including a tendency to make a positive impression by providing socially desirable responses. In certain situations people may deliberately distort their response in the interests of secondary gain. For example, an applicant for a job requiring certain skills, may be reluctant to admit to a lack in some areas. Sometimes, response bias may not reflect a deliberate attempt to deceive, but rather a lack of awareness of one's own shortcomings.

In order to combat these types of problems, self-report measures can include scales that measure the amount people are distorting or are otherwise open to the effects of socially desirable responding. The MDPT(i) includes the Social Desirability Scale as a measure of validity.

The Social Desirability Scale was designed to detect respondents who may be giving an exaggerated positive impression of themselves. Elevated scores on this scale may also indicate that a person holds very high moral standards or lack psychological insight.

Items were generated by identifying content from other well validated instruments such as the MMPI-2 and MBTI that possess sophisticated validity indicators. Items were considered that pulled for social desirability on the one hand, and items biased towards denial of shortcomings on the other. The Social Desirability Scale contains **72 items that deny minor human flaws and assert virtues that most individuals do not feel the need to deny or assert when taking the MDPT(i).**

When scores reach or exceed two standard deviations from the mean in the positive direction, the results are considered invalid from a psychometric point of view. Scores of this magnitude may indicate that an individual has likely approached the assessment task by being overly concerned to create a positive impression or experiences a lack of self-awareness.