



# L&D SUPPORT

the human growth company

Quality criteria  
L&D Support Instrument

## L&D Support Instrument – quality criteria

### Introduction

The L&D support tool is a science-based tool and behaviourally captures the true potential and factors that influence performance. It helps to identify preferences, attitudes and behaviour, stress management, cooperation style, working methods, emotional balance and other individual strengths and development potential of a person on a wide range of issues.

### Scientific basis

The development of the L&D Support tool was already based on scientific theories and selected aspects of psychological concepts. The scientific basis and theories (see white paper "Scientific background") are generally recognised as sound and their validity has been proven by numerous studies.

### Test quality

Internationally defined standards are used to assess psychological evaluation procedures. For this purpose, the BoA (EFPA Board of Assessment) has published a Test Review Model, which serves as a standard for the assessment of tests throughout Europe. These are checked by independent experts on the basis of corresponding test quality criteria. Test quality criteria are criteria that provide information about how good a psychological test is. In total, there are three criteria: Objectivity, reliability, validity.

- **Objectivity (independence):** Measurement procedures can be falsified by human influence. In order to guarantee the quality and significance of the results, it is important to design the implementation, evaluation and interpretation of tests in a non-judgemental and independent manner. Objectivity can be divided into three areas: Implementation objectivity, evaluation objectivity and interpretation objectivity. In all three areas, the objectivity of the measurement procedure ensures an equal procedure independent of the test taker and test subject.
- **Reliability (accuracy):** The term 'reliability' refers to the accuracy of measurement. The main concern here is that results cannot be altered by inaccuracy. Accurate measurements also produce accurate and reliable results. Reliability is measured by means of Cronbach's alpha (measurement of consistency).
- **Validity:** While reliability and objectivity focus on measurement accuracy, validity focuses on the validity of the measurement result. Validity is therefore the premise for reliability (Cronbach's alpha) and objectivity from which the quality of a test procedure is derived.

The consistency of the content of the measurement with a logical measurement concept must be demonstrated, so that it is proven that the characteristic to be measured is actually measured. The evidence on objectivity and reliability serves this purpose.

## EFPA Review Model

The international standard for the evaluation of psychological measurement procedures is developed and implemented by the EFPA (European Federation of Psychologists' Associations) through the Revised EFPA Review Model for the Description and Evaluation of Psychological and Educational Tests (version 4.2.6).

The Review Model defines the standard for test quality criteria for psychological tests, evaluations and questionnaires. It is recognised by 37 different European psychology associations with over 300,000 psychologists in Europe, including (for example) the BDP (Berufsverband Deutscher Psychologinnen und Psychologen e.V.) and the DGPs (Deutsche Gesellschaft für Psychologie e.V.). In addition, the Review Model is also recognised outside Europe (including in the US and Australia). A list of all associated members of the EFPA is available at the EFPAs website: [www.efpa.eu](http://www.efpa.eu).

The EFPA Review Model was developed with the cooperation of the DGPs (Deutsche Gesellschaft für Psychologie e.V.). Prof. Dr. Carmen Hagemester from Dresden has made a significant contribution to the development of the EFPA Review Model as a member of the DGPs and in the development committee of the EFPA Review Model. Information on Prof. Dr. Carmen Hagemester can be found on the website of the Technische Universität Dresden - Faculty of Psychology - Professorship for Diagnostics and Intervention.

## Result

The reviewers Dr. Wouter Schoonman (Psy Tech Industrial Psychology, The Hague, The Netherlands), Prof. Dr. Hennie Kriek (TTS- Top Talent Solutions Inc. and University of South Africa, Melbourne, Florida, USA) and Dr. John Michael Smith (British Psychological Society, UK) reviewed the L&D support tool according to the EFPA Review Model and found that the theoretical and empirical basis of the tool meets the requirements and standards set. In particular, the procedure achieves very good values in the areas of "overall adequacy of reliability" and "overall adequacy of validity".

The internal consistency of the different scales ranges between 0.63-0.82; Cronbach's  $\alpha$  as a measure for reliability has an average value of 0.74.

Internal reliability is not susceptible to demographic differences and is consistent over time. The same applies to the so-called standard errors/standard deviations within the measurements. This aspect is constant over time.

The test-retest analysis shows that the L&D support tool is consistent when a person is measured several times in a given interval. A sample was analysed and found to have correlations between 0.52 and 0.80 over an average interval of 285 days.

In detail, the adequacy of the following aspects was confirmed:

- Quality of the basic description
- Adequacy of the available documentation
- Quality of the process statements
- Quality of the materials
- Adequacy of the overall reliability
- Adequacy of the overall construct validity
- Adequacy of the overall criterion validity
- Total validity
- Adequacy of the computer-generated reports

We are proud to have received this internationally recognised evaluation. The L&D support tool meets the requirements and standards set by EFPA according to the Review Model for the Description and Evaluation of Psychological and Educational Tests (version 4.2.6).

## Summary

The quality of the L&D support tool was confirmed by the review procedure of the EFPA (European Federation of Psychologists' Associations; recognised by 37 European psychologists' associations with a total of 300,000 psychologists), which certifies that the procedure has very good values in the areas of "overall adequacy of reliability" and "overall adequacy of validity".

The internal consistency of the different scales ranges between 0.63-0.82; Cronbach's  $\alpha$  has an average value of 0.74.

The theoretical and empirical basis of the L&D support tool complies with the requirements and standards set by EFPA according to the "Review Model for the Description and Evaluation of Psychological and Educational Tests (Version 4.2.6)". The Review Model defines the standard for test quality criteria for psychological tests, evaluations and questionnaires and is recognised in Europe, the USA and Australia.