

Reliabilities/Validities: The Birkman Method[®] and the Myers-Briggs Type Indicator [MBTI]

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This paper discusses three issues that confront decision-makers when they must select an assessment instrument. The Birkman Method and the MBTI are compared on a conceptual level to aid this decision-making process. An introduction to the terminology of reliability and validity of the Birkman Method is also provided. The three issues are:

- **How should the overall effectiveness of an instrument be evaluated?**
- **What basic conceptual knowledge is required to understand reliability and validity data provided by the companies creating the instruments?**
- **What factors should be considered in deciding between simple, low-priced instruments and more complex, higher priced instruments?**

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Organizations are faced with several issues when they decide to select an assessment instrument. *First*, while professionals within organizations must compare and contrast many diverse instruments, there is no “consumers' union” to assist them in testing and evaluating the over-all effectiveness of their choice. *Secondly*, competing claims can only be analyzed by performing a detailed analysis of reported statistical results. Few professionals possess either the knowledge of, or the desire to relearn, the statistics and experimental design methodology required to understand the data. *Finally*, professionals must often choose between inexpensive, short assessments and more expensive, comprehensive analytical instruments. The purpose of this paper is to provide an introduction to the reliabilities and validities of The Birkman Method and direct answers to the problems of instrument selection (a comprehensive reliabilities and validities report is available online at <http://www.birkman.com>). To keep this discussion brief only one instrument, the Myers-Briggs Type Indicator (MBTI), will be used for comparison purposes.

Issue 1: Purpose. The primary purpose of any personality inventory is to predict specific socially relevant outputs (criterion) such as behavior, performance and learning. The overall effectiveness of an instrument should be based on how well its methods of assessment, selection, placement, training and career development predict and facilitate success. A clear indicator of a fundamental difference in the Birkman instrument is the unique name extension of “Method”. Implied is a methodology used for human capital selection, classification, assessment, motivation counseling and training, not just an assessment inventory. Early in development (1960s), Birkman International (BI) was driven by empirical research that analyzed job performance of 1,444 managers and employees in thirty-five companies. Application of predictive equations to actual employment cases demonstrated higher performance levels than existing practices in several studies across several organizations. These and ongoing research results with hundred of thousands of employees have

produced over thirty-five prediction equations which are combined with thirty-one additional scales to compute scores in The Method.

The MBTI has generated a significant body of research. While the majority of MBTI studies have looked at classification of sixteen types, research has also been directed to prediction of job performance. A major obstacle to the interpretation of organizational research results is the disagreement among researchers as to what is the appropriate level of analysis – the Type (e.g., INTJ) or the Pair (e.g., NF, NT). This has been a lively debated topic within the MBTI research family and has complicated interpretation and application of the instrument. While MBTI research has been very broad, BI has a research strategy that focuses primarily on organization development.

Issue 2: Validity and Reliability. In general, validity refers to whether an instrument measures what it intends to measure and reliability refers to the consistency of assessment scores. Validity thus refers to the application of the instrument in a particular setting and must be constantly reassessed and updated. There are five general categories of validities relevant to the Birkman Method. *Construct validity* refers to how well an instrument measures an abstract concept such as a trait, attitude, or perception. Birkman has established construct validity through construct comparisons with the well-established instruments such as the Sixteen Personality Factors (16PF), Eysenck Personality Inventory (EPI), Minnesota Multiphasic Personality Inventory (MMPI), California Psychological Inventories (CPI), and the Strong Campbell Interest Inventory (SCII). *Internal* and *external* validities are used to establish the quality of scientific methodology. Both types of validities have been established through Birkman research conducted within organizations. Criterion-related validities (predictive and concurrent) have been discussed in the section above concerning purpose. The predictive validity of the instrument is robust. The MBTI validities report also favorably compares with most of the same instruments but application is limited due to the small number of scales (while types are considered dichotomous *preferences*, construct validity research treats continuous scores as four scales).

Reliability for The Birkman Method has been established through application of test-retest, split-half, and coefficient alpha significance tests. Results are comparable to other instruments including the MBTI.

Issue 3: Comprehensiveness. While comparing instruments using statistical methodology is fundamental in choosing an instrument, there are also three important distinguishing characteristics which set The Birkman Method apart from other assessment tools.

1. The Birkman Method is a particularly effective organization analytical tool providing multi-level descriptive and predictive data.
2. The Birkman Method is an integrated system in that it combines behavioral, motivational, interest, and career choice information.
3. The Birkman Method uses a four-dimensional approach that measures an individual's Usual Behavior, Needs, Stress Behavior and their relationships.
4. The Birkman Method offers both descriptive and prescriptive information to be used to help develop skills when faced with challenging situations.

In order to create such a comprehensive analysis, The Method uses over fifty-six scales. Yet, for organizations needing simplicity, the data can be represented in a small number of reports based on four colors representing the four basic job functions of planning, communicating, expediting, and systematizing. Instruments with a few scales, such as the MBTI, cannot provide the comprehensive relational and organizational analysis often required in the current market place. The Birkman Method provides a powerful tool kit of unprecedented flexibility for the organizational consultant, manager, human relations professional and counselor.