

Facts at Hand: The MBTI(R) instrument, Jungian Functions, and 16 Types

DARIO NARDI• Jan. 25, 2019, updated Nov. 27, 2025

People often ask me about the MBTI(R) personality assessment, which provides a data point for the 16 Myers-Briggs types (ESTJ, INFP, etc.). Or they ask about the framework that inspired it, the 8 Jungian mental functions developed by Dr. C.G. Jung. Now and then, I also stumble across beliefs about it and type in general that are uninformed (aka false). Here are some key points to know when talking about the MBTI instrument, and the 8 Jungian functions and 16 types, whether for conducting research and/or responding to criticism.

1) **Official Resources:** There is an official website with responses to questions about MBTI construction, validity, applications, etc. with case studies. Here is an official Q&A article.

<https://ap.themyersbriggs.com/themyersbriggs-mbti-facts.aspx>

Plus, here is a related article on applications:

<https://www.themyersbriggs.com/en-US/Explore-Solutions/MBTI>

And, here are case studies on use and impact in various companies and organizations:

<https://www.themyersbriggs.com/en-US/Access-Resources/Case-Studies>

It's best self-educate from the official source over replying on hearsay and rumor.

2) **The current instrument:** The current MBTI instrument, Form M, was constructed by university psychometricians in the late 1990s using the most accepted statistical approach called IRT, or Item Response Theory. It is NOT the same version constructed in the 1940s by Isabel Myers and her mother Katherine Briggs. Most of the criticism leveled against the MBTI was in the early 1990s regarding Form G, which is no longer in use. BTW, in addition to the MBTI (Step I), there is also MBTI Step II and then Step III, which is only available to clinical psychologists and similar folks.

3) **The Official Manual:** There is a very extensive MBTI manual that delves into numerous statistical study results, charts, the theory underlying it, etc. It's huge! You can buy it on Amazon, though it's costly. Your local library may have a copy.

<https://www.amazon.com/MBTI-Manual-Development-Myers-Briggs-Indicator/dp/0891061304/>

4) **The MILO Database:** As you'll discover from references in points 1-3 above, the MBTI instrument is heavily researched and documented. There are thousands of references that address a multitude of facets of its construction and use. To find these, CAPT, or the Center for Application of Psychological Type, offers its huge MILO database. There, you can search and sort through 1000s of articles, including hundreds of dissertations, peer reviewed journal articles, etc. Also, there's the *Journal of Psychological Type*.

<https://capt.booksys.net/opac/ibml/index.html#menuHome>

5) **Preference, not skill or behavior:** The MBTI instrument aims to assess a person's preferences (what we like to do); in contrast, the Big 5 (aka Five Factor Model) aims to assess measurable behavioral traits (external behaviors). A good metaphor is handedness: If we just measure a person's use of his or her hands, we find nearly equal use of both (a bell curve); nonetheless, the vast majority of people have a preferred hand (right or left) that they use in a lead role with more confidence for critical tasks. In assessing preference, MBTI reliability of 50% - 65% (after 9 months) stands far better than 6.25% by chance alone. That's quite good for trying to psychoanalyze a person's inner life! BTW, there are numerous Internet knock-offs of the official MBTI instrument, and those are usually illegal, lack proper development, and ignore ethical standards.

6) **Various Organizations:** There are multiple organizations, including the publisher, The Myers-Briggs Company (formerly, Consulting Psychologists Press) found at <http://www.themyersbriggs.com/>. There is the Myers-Briggs Foundation, which holds key rights (www.myersbriggs.org) and hosts a library of research; and APTi, or Association of Psychological Type international, which hosts conferences, regional events, and webinars, and publishes seasonal articles by professional users (www.aptiinternational.org). There are also vibrant sister organizations British APT (www.bapt.org.uk) and Australian APT (www.ausapt.org.au), among other places.

7) **C.G. Jung's Original Work:** The MBTI instrument is inspired by the work of psychiatrist Carl G. Jung. Jung observed "mental functions" that people tend to engage in and develop preferentially. So his model is about cognition, not behavior, though of course we tend to engage in behaviors that reflect our cognitive biases. Stemming from this, notice that in MBTI and Jungian language, the terms are verbs: Sensing, Intuiting, Thinking, Feeling, Perceiving, Judging, etc. In contrast, the Big 5 terms are adjectival nouns: Openness, Conscientiousness, etc. Verbs reflect the very different nature of the models: one is cognitive and the other behavioral. If you look at psychology organizations like APA (American Psychological Association), you will see there is also this deep split where some approaches are cognitive and others behavioral. It is a choice of how to approach the question of personality.

8) **Proof of Genetic Heritability:** There is well-documented evidence of heritability of MBTI type. In the huge Minnesota study of genetically identical twins raised apart, the genetic contribution of each MBTI dimension is 40%-60%, in the same range as other personality measures such as Big Five. You can read more here: <https://www.ncbi.nlm.nih.gov/pubmed/9529660>

9) **Application Impact Over Theory:** Admittedly, Dr. Jung wasn't thrilled by the MBTI instrument. He intended for professionals to use his "types" framework to assist people clinically. Nonetheless, Isabel Myers and Katherine Briggs developed the MBTI instrument to assist people in everyday life such as for careers, relationships, etc. and to foster peace in the world. The psychometric approach they took was common at the time (1940s). It is about preference, not performance. Sadly, attacks on Myers and Briggs tend to be personal and sexist; the two women, and other women who worked with them, made tremendous strides in an era when

many professions were mostly closed to women.

10) **A Development Tool:** The theory behind the MBTI instrument proposes a hierarchy of preferences and a path of development. The MBTI items were not designed to assess this hierarchy or development and thus cannot be used *definitively* as proof, or used as ammunition against that claim, one way or another. In contrast, the Majors PTI (a well-developed analog of the MBTI) and the CPA (see below), does lend strong statistical support for a hierarchy of preferences. It is more than a theory. It is real. Here is the dissertation reference to the validity of the developmental aspect.

Barimany, Mina E. *The Hierarchy of Preferences in Jungian Psychological Type: Comparing Theory to Evidence* (ProQuest Number 10264427) [Doctoral Dissertation]. The George Washington University. ProQuest Dissertations & Theses Global database, 2017.

11) **Neuroscience Evidence:** There is modest neurological (EEG) evidence of the MBTI types based on the ongoing work of this author (Dario Nardi). Briefly, people who identify with the same type are far more likely to show similarities in magnitude of brain activity in specific neocortical brain regions and in wiring of networks across those brain regions than people who identify with dissimilar types. This work is ongoing. Here are 2 sample references:

<https://www.semanticscholar.org/paper/Relationship-Between-EEG-and-Psychological-Type.-Gram-Dunn/67d0c4e8ef68ad328465f87e8374fd4c7896d1d2>

https://www.researchgate.net/publication/294727052_Study_about_PR-VEP_Characteristics_on_Perception_Function_and_Judgement_Function_of_MBTI

You can also view a free talk on the subject here:

<https://www.youtube.com/watch?v=vbtE7fpUbpQ&feature=youtu.be>

And here are two book references: “Neuroscience of Personality” (2011) and “Decode Your Personality” (2023), both by Dario Nardi. Though they are popular books, they describe the research process, technical details (appendices), and results.

12) **Expert Panels Validation:** The BBC, with Menton, aired a show, "What am I like". One of the goals of the show was to demonstrate (or not) inter-rater reliability. That is, can a panel of "type experts" actually arrive at a consistent result based on limited observation (without access to MBTI results)? This is a critical scientific hurdle. The answer: "Definitely!". Watch here on YouTube: https://www.youtube.com/watch?v=TeT_j7huzxg&feature=youtu.be

13) **“Big 5” Weaknesses:** Contrary to the claim of many Big 5 proponents, the Big 5 is not entirely scientific. Other psychologists and cognitive scientists criticize Big 5 for assuming that language is the basis of personality (this is called the Lexical Hypothesis). Also, just like the MBTI, it relies on people’s self-reporting. And, Big 5 is a descriptive model (a valid and reliable one), but it lacks explanatory power, which is a key feature of scientific models. That is, Big 5 can’t explain “why”, nor does it address development. In terms of cognition or motivation, it can’t explain people’s behaviors, only describe them. This is like being able to describe apples but not knowing their chemistry, ecology or lifecycle.

Personality is organic, systemic, and metabolic.



Trait Theory

We can describe an apple by referring to its traits. An apple might be red, green, or yellow. We can measure its freshness, crispiness, and sweetness. In the same way, we can describe people's qualities with adjectives such as outgoing, neurotic or open. But traits do not explain people's motivations, cognition, or roles in the big picture.



Systems Theory

If we want to raise healthy apple trees, we need to know more than traits. Why do apples have seeds? How do they metabolize sunlight, soil, and rain. Do animals play a part? Similarly, we can describe people using verbs such as "comparing", "empathizing", or "inferring" to understand how they stumble or thrive within a system.

21

[click to add a caption](#)

14) **The MBTI's 5th Dimension:** The MBTI "Form J" has 5 dimensions, not 4. It includes Comfort-Discomfort, which is akin to the Big 5's Neuroticism scale. The MBTI stewards decided to use only 4 dimensions in the standard "Step I" MBTI and utilize the extra scale to help craft "Step III", which is only available to licensed psychologists. The idea is that this dimension is not appropriate in school/work settings where people can feel vulnerable. You can find a little more about this on Wikipedia under the MBTI entry.

15) **Non-Discriminatory Application:** In the workplace and schools, the materials that support the use of the MBTI instrument are mostly phrased in positive, egalitarian ways that don't privilege particular behaviors. For example, both Sensing and Intuiting are valuable as different ways to approach the world. In contrast, the Big 5 privileges particular behaviors. For example, with Big 5, you might be high, medium or low Openness. There is no beneficial term for low Openness. The implicit message is that Openness is better. It is not a surprise that companies that have switched to using Big 5 report that clients often react to their Big 5 results in less than positive ways.

16) **APA Ethics Guidelines:** There is an ethical way to use MBTI results in line with APA standards. Firstly it is not a "test" (since there are no wrong answers). You can call it an assessment, instrument, or sorter. Second, the instrument results are a single data point, and ethical use requires a facilitated feedback process to confirm the results or otherwise locate a person's "best-fit" type. In a psychological context, the proper process is not "test and tell" like Big 5, but "inform and engage" to increase understanding.

17) **Types Exist in Nature:** Contrary to what most personality statisticians state, "types" (categories) actually do occur throughout nature, and they are more than statistical clusters. Biologically, for example, there is handedness and two primary biological sexes. Mathematically, "types" are simply "attractors" in a dynamic system. An attractor is a *pattern* of behavior to which a complex system is drawn toward. Individual human beings and brains are complex systems, not statistical distributions. You can read more here: <https://en.wikipedia.org/wiki/Attractor>

18) **Strengths-Based:** The theory behind the MBTI instrument advises human development. People are encouraged to rely on their strengths, which is a common belief in psychology today (c.f. StrengthsFinder), but they are also encouraged to find balance and meaningful ways to develop their non-preferences. E.g. If you are right-handed, yes, by all means use your right hand, but don't shut out use of your left hand because you want to use both hands together in many situations. Dr. Jung talked about an inferior function, which is similar.

19) **Multiple Tools and Models:** Firstly, do not confuse an instrument (the MBTI) with a model. For those who are interested, there are multiple ways to arrive at 16 types. The methods to arrive at 16 types include: Firstly, MBTI dichotomous preferences (E-I, S-N, T-F, J-P); secondly, 8 Jungian function-attitudes, with 16 dominant and auxiliary pairings (Ni-Fe, Ti-Se, etc); and thirdly, 4 temperaments, each with 4 interaction styles = 16 types (Ex. Get-Things Going Improviser/Artisan). The last of these were developed and refined by Dr. David Keirsey and Dr. Linda Berens (www.lindaberens.com).

20) **Professional Organizations:** If you want to use the MBTI instrument and type in general in a professional and ethical way, please consider certification, continuing education, and community participation. You can learn how to get started today through these organizations, among others:

- www.apptinternational.org/
- www.bapt.org.uk
- <http://ausapt.org.au/>

These professional organizations host speakers and welcome members from all over the world. They are touchstones for counselors, coaches, educators, and others who wish to connect and learn more about the professional use of the MBTI instrument, the 16 types and related models, and Jung's original therapeutic framework.

Hope this all helps. If you have any more questions, feel free to ask. Cheers,

Dario Nardi

October 11, 2018 ; revised January 7, 2019 and
November 27, 2025. dnardi.ucla@gmail.com |

PS. Failed Criticisms: Several popular books criticize the MBTI instrument or use of type. Among the gaggle of half-baked criticisms is Merve Emre's 2018 book, *The Personality Brokers* (in the US) or *What's Your Type?* (in Australia and Europe). While the book has some useful information about the Myers and Briggs family, its information about the MBTI instrument is outdated and false. Roger Pearman handily analyzes and debunks the book's major errors here: <https://pearmanpersonality.blogspot.com/>. There's also the 2004 book, *The Cult of Personality* by Annie Murphy Paul, which even Emre criticizes. In both cases, the authors fail to get past the mid-1980s in their research and leave readers with the impression they are largely unaware of most of the points above.