

Myers Briggs Personality Types

<p>ISTJ Introverted Sensing with Thinking</p>	<p>ISFJ Introverted Sensing with Feeling</p>	<p>INFJ Introverted iNtuition with Feeling</p>	<p>INTJ Introverted iNtuition with Thinking</p>
<p>ISTP Introverted Thinking with Sensing</p>	<p>ISFP Introverted Feeling with Sensing</p>	<p>INFP Introverted Feeling with iNtuition</p>	<p>INTP Introverted Thinking with iNtuition</p>
<p>ESTP Extraverted Sensing with Thinking</p>	<p>ESFP Extraverted Sensing with Feeling</p>	<p>ENFP Extraverted iNtuition with Feeling</p>	<p>ENTP Extraverted iNtuition with Thinking</p>
<p>ESTJ Extraverted Thinking with Sensing</p>	<p>ESFJ Extraverted Feeling with Sensing</p>	<p>ENFJ Extraverted Feeling with iNtuition</p>	<p>ENTJ Extraverted Thinking with iNtuition</p>

Myers-Briggs Type Indicator

The **Myers-Briggs Type Indicator** (MBTI) assessment is a psychometric questionnaire designed to measure psychological preferences in how people perceive the world and

make decisions.^{[1]:1} These preferences were extrapolated from the typological theories originated by **Carl Gustav Jung**, as published in his 1921 book *Psychological Types* (English edition, 1923).^[2] The original developers of the personality inventory were Katharine Cook Briggs and her daughter, **Isabel Briggs Myers**. They began creating the indicator during **World War II**, believing that a knowledge of personality preferences would help women who were entering the industrial workforce for the first time identify the sort of war-time jobs where they would be "most comfortable and effective".^{[1]:xiii} The initial questionnaire grew into the Myers-Briggs Type Indicator, which was first published in 1962. The MBTI focuses on normal populations and emphasizes the value of naturally occurring differences.^[3]

Some academic psychologists have criticized the MBTI instrument in research literature, claiming that it "lacks convincing validity data."^{[4][5][6][7]} Proponents and sellers of the test cite unblinded anecdotal predictions of individual behavior,^[8] and claim that the indicator has been found to meet or exceed the reliability of other psychological instruments.^[9] For most adults (75-90%), though not for children, the MBTI is reported to give the same result for 364 preferences when the test is administered to the same person more than once (although the period between measurements is not stated).^[10] Some studies have found strong support for construct validity, internal consistency, and test-retest reliability, although variation was observed.^{[11][12]}

The definitive published source of reference on the Myers-Briggs Type Indicator is *The Manual* produced by CPP,^[13] from which much of the information in this article is drawn, along with training materials from CPP and their European training partners, Oxford Psychologists Press. However, a popularized source of the model, with an original test, is published in **David Keirsey's** book **Please Understand Me**.

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Concepts

As the *MBTI Manual* states, the MBTI "is designed to implement a theory; therefore the theory must be understood to understand the MBTI."^{[15]:1}

Fundamental to the Myers-Briggs Type Indicator is the **theory of psychological type** as originally developed by **C. G. Jung**.^{[1]:xiii} Jung proposed the existence of two dichotomous pairs of cognitive functions:

- The "rational" (judging) functions: **thinking** and **feeling**
- The "irrational" (perceiving) functions: **sensing** and **intuition**

Jung went on to suggest that these functions are expressed in either an introverted or extraverted form.^{[1]:17} From Jung's original concepts, Briggs and Myers developed their own theory of psychological type, described below, on which the MBTI is based.

Type

The Myers-Briggs typology model regards personality type as similar to left or right handedness: individuals are either born with, or develop, certain preferred ways of thinking and acting. The MBTI sorts some of these psychological differences into four opposite pairs, or "dichotomies," with a resulting 16 possible psychological types. None of these types is "better" or "worse"; however, Briggs and Myers theorized that individuals naturally *prefer* one overall combination of type differences.^{[1]:9} In the same way that writing with the left hand is hard work for a right-hander, so people tend to find using their opposite psychological preferences more difficult, even if they can become more proficient (and therefore behaviorally flexible) with practice and development.

The 16 different types are often referred to by an abbreviation of four letters, the initial letters of each of their four type preferences (except in the case of *iNtuition*, which uses N to distinguish it from Introversion). For instance:

- ESTJ - Extraversion, Sensing, Thinking, Judging
- INFP - Introversion, iNtuition, Feeling, Perceiving

And so on for all 16 possible type combinations.

The four dichotomies

Dichotomies	
Extraversion	Introversion
Sensing	iNtuition
Thinking	Feeling
Judging	Perceiving

The four pairs of preferences or **dichotomies** are shown in the table to the right.

Note that the terms used for each **dichotomy** have specific technical meanings relating to the MBTI which differ from their everyday usage. For example, people who prefer judging over perceiving are not necessarily more "judgmental" or less "perceptive".

Nor does the MBTI instrument measure aptitude; it simply indicates for one preference over another.^{[15]:3} Someone reporting a high score for extraversion over introversion cannot be correctly described as 'more' extraverted: they simply have a *clear* preference.

Point scores on each of the dichotomies can vary considerably from person to person, even among those with the same type. However, Isabel Myers considered the *direction* of the preference (for example, E vs. I) to be more important than the *degree* of the preference (for example, very clear vs. slight).^[13]

Attitudes: Extraversion (E) / Introversion (I)

The preferences for **extraversion** (thus spelled in Myers-Briggs jargon) and **introversion** are sometimes referred to as *attitudes*. Briggs and Myers recognized that each of the cognitive functions can operate in the external world of behavior, action, people and things (*extraverted attitude*) or the internal world of ideas and reflection (*introverted attitude*). The Myers-Briggs Type Indicator sorts for an overall preference for one or the other of these.

The terms *extravert* and *introvert* are used in a special sense when discussing the Myers-Briggs Type Indicator. People who prefer extraversion draw energy from action: they tend to act, then reflect, then act further. If they are inactive, their level of energy and motivation tends to decline. Conversely, those who prefer introversion become less energized as they act: they prefer to reflect, then act, then reflect again. People who prefer introversion need time out to reflect in order to rebuild energy.

The extravert's flow is directed outward toward people and objects, and the introvert's is directed inward toward concepts and ideas. There are several contrasting characteristics between extraverts and introverts: extraverts are action-oriented and desire breadth, while introverts are thought-oriented and seek depth. Extraverts often prefer more frequent interaction, while introverts prefer more substantial interaction.^[16]

Functions: Sensing (S) / iNtuition (N) and Thinking (T) / Feeling (F)

Jung identified two pairs of psychological functions:

- The two *perceiving* functions, sensing and intuition
- The two *judging* functions, thinking and feeling

According to the Myers-Briggs typology model, each person uses one of these four functions more dominantly and proficiently than the other three; however, all four functions are used at different times depending on the circumstances.

Sensing and intuition are the information-gathering (perceiving) functions. They describe how new information is understood and interpreted. Individuals who prefer *sensing* are more likely to trust information that is in the present, tangible and concrete: that is, information that can be understood by the five senses. They tend to distrust hunches that

seem to come out of nowhere. They prefer to look for details and facts. For them, the meaning is in the data. On the other hand, those who prefer *intuition* tend to trust information that is more abstract or theoretical, that can be associated with other information (either remembered or discovered by seeking a wider context or pattern). They may be more interested in future possibilities. They tend to trust those flashes of insight that seem to bubble up from the unconscious mind. The meaning is in how the data relates to the pattern or theory.

Thinking and feeling are the **decision-making** (judging) functions. The thinking and feeling functions are both used to make rational decisions, based on the data received from their information-gathering functions (sensing or intuition). Those who prefer *thinking* tend to decide things from a more detached standpoint, measuring the decision by what seems reasonable, logical, causal, consistent and matching a given set of rules. Those who prefer *feeling* tend to come to decisions by associating or empathizing with the situation, looking at it 'from the inside' and weighing the situation to achieve, on balance, the greatest harmony, consensus and fit, considering the needs of the people involved.

As noted already, people who prefer thinking do not necessarily, in the everyday sense, 'think better' than their feeling counterparts; the opposite preference is considered an equally rational way of coming to decisions (and, in any case, the MBTI assessment is a measure of preference, not ability). Similarly, those who prefer feeling do not necessarily have 'better' emotional reactions than their thinking counterparts.

Dominant Function

Although people use all four cognitive functions, one function is generally used in a more conscious and confident way. This dominant function is supported by the secondary (auxiliary) function, and to a lesser degree the tertiary function. The fourth and least conscious function is always the opposite of the dominant function. Myers called this inferior function the *shadow*.^{[1]:84}

The four functions operate in conjunction with the attitudes (extraversion and introversion). Each function is used in either an extraverted or introverted way. A person whose dominant function is extraverted intuition, for example, uses intuition very differently from someone whose dominant function is introverted intuition.

Lifestyle: Judgment (J) / Perception (P)

Myers and Briggs added another dimension to Jung's typological model by identifying that people also have a preference for using either the **judging** function (thinking or feeling) or their **perceiving** function (sensing or intuition) when relating to the outside world (extraversion).

Myers and Briggs held that types with a preference for *judging* show the world their preferred judging function (thinking or feeling). So TJ types tend to appear to the world

as logical, and FJ types as empathetic. According to Myers,^{[1]:75} judging types prefer to "have matters settled." Those types ending in P show the world their preferred *perceiving* function (sensing or intuition). So SP types tend to appear to the world as concrete and NP types as abstract. According to Myers,^{[1]:75} perceiving types prefer to "keep decisions open."

For extraverts, the J or P indicates their *dominant* function; for introverts, the J or P indicates their *auxiliary* function. Introverts tend to show their dominant function outwardly only in matters "important to their inner worlds".^{[1]:13} For example:

Because ENTJ types are extraverts, the J indicates that their *dominant* function is their preferred judging function (extraverted thinking). ENTJ types introvert their auxiliary perceiving function (introverted intuition). The tertiary function is sensing and the inferior function is introverted feeling.

Because INTJ types are introverts, the J indicates that their *auxiliary* function is their preferred judging function (extraverted thinking). INTJ types introvert their dominant perceiving function (introverted intuition). The tertiary function is feeling, and the inferior function is extraverted sensing.

Whole type

The expression of a person's psychological type is more than the sum of the four individual preferences, because of the way in which the preferences interact through *type dynamics and type development*. Descriptions of each type can be found on the **Myers & Briggs Foundation** website. In-depth descriptions of each type, including statistics, can be found in the MBTI Manual.^[13]

Historical development

Katharine Cook Briggs began her research into personality in 1917, developing a four-

type framework: Social, Thoughtful, Executive, and Spontaneous. After the English translation of Jung's *Psychological Types* was published in 1923 (having first been published in German in 1921), she recognized that Jung's theory was similar to, yet went far beyond, her own.^{[1]:22} Katharine Briggs' first publications were two articles describing Jung's theory, in the journal *New Republic* in 1926 (*Meet Yourself Using the Personality Paint Box*) and 1928 (*Up From Barbarism*).

Katharine Briggs' daughter, Isabel Briggs Myers, added to her mother's typological research, which she would progressively take over entirely. Myers graduated first in her class from Swarthmore College in 1919^{[1]:xx} and wrote the prize-winning mystery novel *Murder Yet to Come* in 1929 using typological ideas. Having no formal training in psychometrics, Myers apprenticed herself to **Edward N. Hay**, who was then personnel manager for a large Philadelphia bank and went on to start one of the first successful personnel consulting firms in the U.S. From Hay, Myers learned test construction,

scoring, validation, and statistics.^{[1]:xiii, xx} In 1942, the "Briggs-Myers Type Indicator" was created, and the *Briggs Myers Type Indicator Handbook* was published in 1944. The indicator changed its name to the modern form (*Myers-Briggs Type Indicator*) in 1956.^{[17][18]}

Myers' work attracted the attention of Henry Chauncey, head of the **Educational Testing Service**, and under these auspices, the first *MBTI Manual* was published in 1962. The MBTI received further support from Donald T. McKinnon, head of the Institute of Personality Research at the University of California; Harold Grant, professor at Michigan State and Auburn Universities; and Mary H. McCaulley of the University of Florida. The publication of the MBTI was transferred to Consulting Psychologists Press in 1975, and the Center for Applications of Psychological Type (CAPT) was founded as a research laboratory.^{[1]:xxi} After Myers' death in May 1980, Mary McCaulley updated the *MBTI Manual*, and the second edition was published in 1985.^[13] The third edition appeared in 1998.

Differences from Jung

Judging vs. Perceiving

The most notable addition of Myers and Briggs to Jung's original thought is their concept that a given type's fourth letter (J or P) is determined by how that type interacts with the **external world**, rather than by the type's **dominant** function. The difference becomes evident when assessing the cognitive functions of introverts.^{[1]:21-22}

To Jung, a type with dominant introverted thinking, for example, would be considered *rational* (judging) because the decision-making function is dominant. To Myers, however, that same type would be *irrational* (perceiving) because the individual uses an information-gathering function (either extraverted intuition or extraverted sensing) when interacting with the outer world.

Orientation of the tertiary function

Jung theorized that the dominant function acts alone in its preferred world: exterior for the extraverts, and interior for the introverts. The remaining three functions, he suggested, operate together in the opposite world. If the dominant cognitive function is introverted, the other functions are extraverted, and vice versa. The *MBTI Manual* summarizes references in Jung's work to the balance in psychological type as follows:

There are several references in Jung's writing to the three remaining functions having an opposite attitudinal character. For example, in writing about introverts with thinking dominant, Jung commented that the counterbalancing functions have an extraverted character.^{[13]:29}

However, many MBTI practitioners hold that the tertiary function is oriented in the same direction as the dominant function.^[19] Using the INTP type as an example, the orientation would be as follows:

- Dominant introverted thinking
- Auxiliary extraverted intuition

- Tertiary introverted sensing
- Inferior extraverted feeling

From a theoretical perspective, noted psychologist H.J. Eysenck calls the MBTI a moderately successful quantification of Jung's original principles as outlined in *Psychological Types*.^[20] However, both models remain theory, with no controlled scientific studies supporting either Jung's original concept of type or the Myers-Briggs variation.^[21]

Applications of the MBTI

The indicator is frequently used in the areas of **career counseling, pedagogy, group dynamics, employee training, marketing, leadership training, life coaching, executive coaching, marriage counseling, workers' compensation claims and personal development.**

Format and administration of the MBTI

The current North American English version of the MBTI Step I includes 93 forced-choice questions (there are 88 in the European English version). *Forced-choice* means that the individual has to choose only one of two possible answers to each question. The choices are a mixture of word pairs and short statements. Choices are not literal opposites but chosen to reflect opposite preferences on the same dichotomy. Participants may skip questions if they feel they are unable to choose.

Using **psychometric** techniques, such as **item response theory**, the MBTI will then be scored and will attempt to identify the preference, and clarity of preference, in each dichotomy. After taking the MBTI, participants are usually asked to complete a *Best Fit* exercise (see above) and then given a readout of their Reported Type, which will usually include a bar graph and number to show how clear they were about each preference when they completed the questionnaire.

During the early development of the MBTI thousands of items were used. Most were eventually discarded because they did not have high *midpoint discrimination*, meaning the results of that one item did not, on average, move an individual score *away* from the midpoint. Using only items with high midpoint discrimination allows the MBTI to have fewer items on it but still provide as much statistical information as other instruments with many more items with lower midpoint discrimination. The MBTI requires five points one way or another to indicate a clear preference.

Additional formats

Isabel Myers had noted that people of any given type shared differences as well as similarities. At the time of her death, she was developing a more in-depth method of measuring how people express and experience their individual type pattern. This tool is called the **MBTI Step II**.

A **Step III** is also being developed in a joint project involving the following organizations: CPP, the publisher of the whole family of MBTI works; CAPT (Center for Applications of Psychological Type), which holds all of Myers' and McCaulley's original work; and the MBTI Trust, headed by Katharine and Peter Myers. Step III will further address the use of perception and judgment by respondents.^[22]

In addition, the **Type Differentiation Indicator (TDI)** (Saunders, 1989) is a scoring system for the longer MBTI, **Form J**,^[23] which includes the 20 subscales above, plus a **Comfort-Discomfort** factor (which purportedly corresponds to the missing factor of Neuroticism). This factor includes seven additional scales to indicate a sense of overall comfort and confidence versus discomfort and anxiety: guarded-optimistic, defiant-compliant, carefree-worried, decisive-ambivalent, intrepid-inhibited, leader-follower, and proactive-distractible. Also included is a composite of these called "strain." Each of these comfort-discomfort subscales also loads onto one of the four type dimensions, for example, proactive-distractible is also a judging-perceiving subscale. There are also scales for type-scale consistency and comfort-scale consistency. Reliability of 23 of the 27 TDI subscales is greater than .50, "an acceptable result given the brevity of the subscales" (Saunders, 1989).

Precepts and ethics

The following precepts are generally used in the ethical administration of the Myers-Briggs Type Indicator:

Type not trait: The MBTI sorts for type; it does not indicate the strength of ability. The questionnaire allows the clarity of a preference to be ascertained (Bill *clearly* prefers introversion), but not the strength of preference (Jane *strongly* prefers extraversion) or degree of aptitude (Harry is *good* at thinking). In this sense, it differs from trait-based tools such as **16PF**. Type preferences are polar opposites: a precept of MBTI is that people fundamentally prefer one thing over the other, not a bit of both.

Own best judge: Individuals are considered the best judge of their own type. While the MBTI questionnaire provides a *Reported Type*, this is considered only an indication of their probable overall Type. A *Best Fit Process* is usually used to allow respondents to develop their understanding of the four dichotomies, to form their own hypothesis as to their overall Type, and to compare this against the Reported Type. In more than 20% of cases, the hypothesis and the Reported Type differ in one or more dichotomies. Using the clarity of each preference, any potential for bias in the report, and often, a comparison of two or more whole Types may then help respondents determine their own Best Fit.

No right or wrong: No preference or total type is considered "better" or "worse" than another. They are all *Gifts Differing*, as emphasized by the title of Isabel Briggs Myers' book on this subject.

Voluntary: It is considered unethical to compel anyone to take the Myers-Briggs Type Indicator. It should always be taken voluntarily.^[24]

Confidentiality: The result of the MBTI Reported and Best Fit type are confidential between the individual and administrator and, ethically, not for disclosure without permission.

Not for selection: The results of the assessment should not be used to "label, evaluate, or limit the respondent in any way."^[24] Since all types are valuable, and the MBTI measures *preferences* rather than *aptitude*, the MBTI is not considered a proper instrument for purposes of employment selection. Many professions contain highly competent individuals of different types with complementary preferences.

Importance of proper feedback: Individuals should always be given detailed feedback from a trained administrator and an opportunity to undertake a Best Fit exercise to check against their Reported Type. This feedback can be given in person or, where this is not practical, by telephone or electronically.

Type dynamics and development

The Sixteen Types			
U.S. Population Breakdown			
The table organizing the sixteen types was created by Isabel Myers (an INFP).			
ISTJ 11.6%	ISFJ 13.8%	INFJ 1.5%	INTJ 2.1%
ISTP 5.4%	ISFP 8.8%	INFP 4.3%	INTP 3.3%
ESTP 4.3%	ESFP 8.5%	ENFP 8.1%	ENTP 3.2%

ESTJ 8.7%	ESFJ 12.3%	ENFJ 2.4%	ENTJ 1.8%
<p>Estimated percentages of the 16 types in the American population using inferential statistics. The figures above are from a random sampling of 3009 people culled from a total pool of 16,000 using the 1998 MBTI Form M. The individuals whose form results were used in this random sampling were not provided with the data to verify or question their accuracy. But these numbers do provide a working base on which to build further understanding and development of the model as extrapolated to larger populations.^[25]</p>			

The interaction of two, three, or four preferences is known as **type dynamics**. Myers and Briggs asserted that for each of the 16 four-preference types, one function is the most **dominant** and is likely to be evident earliest in life. A secondary or **auxiliary** function typically becomes more evident (*differentiated*) during teenage years and provides balance to the dominant. In normal development individuals tend to become more fluent with a third, **tertiary** function during mid life, while the fourth, **inferior** function remains least consciously developed. The inferior function is often considered to be more associated with the unconscious, being most evident in situations such as high stress (sometimes referred to as being *in the grip* of the inferior function).

The sequence of differentiation of dominant, auxiliary, and tertiary functions through life is termed **type development**. Note that this is an idealized sequence that may be disrupted by major life events.

The dynamic sequence of functions and their attitudes can be determined in the following way:

- The overall *lifestyle preference* (J-P) determines whether the judging (T-F) or perceiving (S-N) preference is most evident in the outside world, i.e., which function has an extraverted attitude
- The *attitude* preference (E-I) determines whether the extraverted function is dominant or auxiliary
- For those with an overall preference for extraversion, the function with the *extraverted attitude* will be the dominant function. For example, for an ESTJ type the dominant function is the judging function, thinking, and this is experienced with an extraverted attitude. This is notated as a dominant Te. For an ESTP, the dominant function is the perceiving function, sensing, notated as a dominant Se.
- The *Auxiliary* function for extraverts is the secondary preference of the judging or perceiving functions, and it is experienced with an introverted attitude: for example, the auxiliary function for ESTJ is introverted sensing (Si) and the auxiliary for ESTP is introverted thinking (Ti).

- For those with an overall preference for introversion, the function with the extraverted attitude is the *auxiliary*; the dominant is the other function in the main four letter preference. So the dominant function for ISTJ is introverted sensing (Si) with the auxiliary (supporting) function being extraverted thinking (Te).
- The *Tertiary* function is the opposite preference from the Auxiliary. For example, if the Auxiliary is thinking then the Tertiary would be feeling. The attitude of the Tertiary is the subject of some debate and therefore is not normally indicated, i.e. if the Auxiliary was Te then the Tertiary would be F (not Fe or Fi)
- The *Inferior* function is the opposite preference and attitude from the Dominant, so for an ESTJ with dominant Te the Inferior would be Fi.

Note that for extraverts, the *dominant* function is the one most evident in the external world. For introverts, however, it is the *auxiliary* function that is most evident externally, as their dominant function relates to the interior world.

A couple examples of whole types may help to clarify this further. Taking the **ESTJ** example above:

- Extraverted function is a judging function (T-F) because of the overall J preference
- Extraverted function is dominant because of overall E preference
- Dominant function is therefore extraverted thinking (Te)
- Auxiliary function is the preferred perceiving function: introverted sensing (Si)
- Tertiary function is the opposite of the Auxiliary: intuition
- Inferior function is the opposite of the Dominant: introverted feeling (Fi)

The dynamics of the ESTJ are found in the primary combination of extraverted thinking as their dominant function and introverted sensing as their auxiliary function: the dominant tendency of ESTJs to order their environment, to set clear boundaries, to clarify roles and timetables, and to direct the activities around them is supported by their facility for using past experience in an ordered and systematic way to help organize themselves and others. For instance, ESTJs may enjoy planning trips for groups of people to achieve some goal or to perform some culturally uplifting function. Because of their ease in directing others and their facility in managing their own time, they engage all the resources at their disposal to achieve their goals. However, under prolonged stress or sudden trauma, ESTJs may overuse their extraverted thinking function and fall into the grip of their inferior function, introverted feeling. Although the ESTJ can seem insensitive to the feelings of others in their normal activities, under tremendous stress, they can suddenly express feelings of being unappreciated or wounded by insensitivity.

Looking at the diametrically opposite four-letter type, **INFP**:

- Extraverted function is a perceiving function (S-N) because of the P preference
- Introverted function is dominant because of the I preference

- Dominant function is therefore introverted feeling (Fi)
- Auxiliary function is extraverted intuition (Ne)
- Tertiary function is the opposite of the Auxiliary: sensing
- Inferior function is the opposite of the Dominant: extraverted thinking (Te)

The dynamics of the INFP rest on the fundamental correspondence of introverted feeling and extraverted intuition. The dominant tendency of the INFP is toward building a rich internal framework of values and toward championing human rights. They often devote themselves behind the scenes to causes such as civil rights or saving the environment. Since they tend to avoid the limelight, postpone decisions, and maintain a reserved posture, they are rarely found in executive-director type positions of the organizations that serve those causes. Normally, the INFP dislikes being "in charge" of things. When not under stress, the INFP radiates a pleasant and sympathetic demeanor; but under extreme stress, they can suddenly become rigid and directive, exerting their extraverted thinking erratically.

Every type and its opposite is the expression of these interactions, which give each type its unique, recognizable *signature*.

Expansion of the Myers-Briggs theory

Brain Halves

Some have theorized that the MBTI functions may correlate to the **Lateralization of brain function**.^[26] Others claim, however, that this proposed correlation has no scientific basis.^[citation needed]

Correlations to other instruments

Keirsey Temperaments

David W. Keirsey mapped four 'Temperaments' to the existing Myers-Briggs system groupings SP, SJ, NF and NT; this often results in confusion of the two theories.

However, the **Keirsey Temperament Sorter** is not directly associated with the official Myers-Briggs Type Indicator.

IS_IT_EJ	IS_IF_EJ	IN_IF_EJ	IN_IT_EJ
Inspector	Protector	Counselor	Mastermind
IS_ET_IP	IS_EF_IP	IN_EF_IP	IN_ET_IP
Crafter	Composer	Healer	Architect
ES_ET_IP	ES_EF_IP	EN_EF_IP	EN_ET_IP
Promoter	Performer	Champion	Inventor
ES_IT_EJ	ES_IF_EJ	EN_IF_EJ	EN_IT_EJ
Supervisor	Provider	Teacher	Field Marshal

Big Five

McCrae and Costa^[5] present **correlations** between the MBTI scales and the **Big Five** personality construct, which is a conglomeration of characteristics found in nearly all personality and psychological tests. The five personality characteristics are extraversion, openness, agreeableness, conscientiousness, and emotional stability (or neuroticism). The following study is based on the results from 267 men followed as part of a longitudinal study of aging. (Similar results were obtained with 201 women.)

	Extraversion	Openness	Agreeableness	Conscientiousness	Neuroticism
E-I	-.74	.03	-.03	.08	.16
S-N	.10	.72	.04	-.15	-.06
T-F	.19	.02	.44	-.15	.06
J-P	.15	.30	-.06	-.49	.11

The closer the number is to 1.0 or -1.0, the higher the degree of correlation.

These data suggest that four of the MBTI scales are related to the **Big Five** personality traits. These correlations show that E-I and S-N are strongly related to extraversion and openness respectively, while T-F and J-P are moderately related to agreeableness and conscientiousness respectively. The emotional stability dimension of the Big Five is largely absent from the original MBTI (though the TDI, discussed above, has addressed that dimension).

These findings led McCrae and Costa, the formulators of the Five Factor Theory,^[27] to conclude, "correlational analyses showed that the four MBTI indices did measure aspects of four of the five major dimensions of normal personality. The five-factor model provides an alternative basis for interpreting MBTI findings within a broader, more commonly shared conceptual framework." However, "there was no support for the view that the MBTI measures truly dichotomous preferences or qualitatively distinct types, instead, the instrument measures four relatively independent dimensions."

Study of scoring consistency

Split-half **reliability** of the MBTI scales is good, although test-retest reliability is sensitive to the time between tests. However, because the MBTI **dichotomies** scores in the middle of the distribution form a **bell curve**, type allocations are less reliable. Within each scale, as measured on Form G, about 83% of categorizations remain the same when retested within nine months, and around 75% when retested after nine months. About 50% of people tested within nine months remain the same overall type and 36% remain the same after nine months.^[28] For Form M (the most current form of the MBTI instrument) these scores are higher (see MBTI Manual, p. 163, Table 8.6).

Criticism

Unscientific basis of the theory

Jung's theory of psychological type, as published in his 1921 book, was not tested through controlled, scientific studies.^[21] Jung's methods primarily included **introspection** and **anecdote**, methods largely rejected by the modern field of **psychology**.^[21]

Jung's type theory introduced a sequence of 4 cognitive functions (thinking, feeling, sensing, and intuition), each having 1 of 2 orientations (extraverted or introverted), for a total of 8 functions. The Myers-Briggs theory is based on these 8 functions, although with some differences in expression (see **Differences from Jung** above). However, neither the Myers-Briggs nor the Jungian models offer any scientific, experimental proof to support the *existence*, the *sequence*, the *orientation*, or the *manifestation* of these functions.^[21]

Validity

The **statistical validity** of the MBTI as a **psychometric** instrument has been the subject of criticism. Neither Katharine Cook Briggs nor Isabel Briggs Myers were formally educated in psychology, and thus lacked scientific qualifications in the field of psychometric testing.^{[1]:xiii} It has been estimated that between a third and a half of the published material on the MBTI has been produced for conferences of the Center for the Application of Psychological Type (which provides training in the MBTI) or as papers in the Journal of Psychological Type (which is edited by Myers-Briggs advocates).^[29] It has been argued that this reflects a lack of critical scrutiny.^{[29][30]}

The accuracy of the MBTI depends on honest self-reporting by the person tested.^{[15]:52-53} Unlike some personality measures, such as the **Minnesota Multiphasic Personality Inventory** or the **Personality Assessment Inventory**, the MBTI does not use validity scales to assess exaggerated or socially desirable responses.^[31] This makes it vulnerable to faked responses,^[32] and in fact one study found that the MBTI judging dimension actually correlates with the **Eysenck Personality Questionnaire** lie scale.^[33] If respondents "fear they have something to lose, they may answer as they assume they *should*."^{[15]:53}

Also, the MBTI has not been validated by **double-blind tests** (in which participants are given reports written for other participants, then asked whether the report suits them), and thus may not qualify as a scientific assessment.^[citation needed]

With regard to factor analysis, one study of 1291 college-aged students found *six* different factors instead of the *four* used in the MBTI.^[34] In other studies, researchers found that the JP and the SN scales correlate with one another.^[5]

Reliability

Some researchers have interpreted the **reliability** of the test as being low, with test takers who retake the test often being assigned a different type. According to some studies, 39% to 76% of those tested fall into different types upon retesting some weeks or years later.^{[30][7]} About 50% of people tested within nine months remain the same overall type and 36% remain the same after nine months.^[35] When people are asked to compare their preferred type to that assigned by the MBTI, only half of people pick the same profile.^[36] Critics also argue that the MBTI lacks **falsifiability**, which can cause **confirmation bias** in the interpretation of results.

Statistical structure

The instrument's dichotomous scoring of dimensions has also been subject to criticism. For example, some researchers expected that scores would show a **bimodal distribution** with peaks near the ends of the scales, but found that scores on the individual subscales

were actually distributed in a centrally peaked manner similar to a **normal distribution**. A cut-off exists at the center of the subscale such that a score on one side is classified as one type, and a score on the other side as the opposite type. This fails to support the concept of *type*: the norm is for people to lie near the middle of the subscale.^{[5][6][30][37][7]} Nevertheless, "the absence of bimodal score distributions does not necessarily prove that the 'type'-based approach is incorrect."^[37]

Utility

The relevance of the MBTI for career planning has been questioned, with reservations about the relevance of type to job performance or satisfaction, and concerns about the potential misuse of the instrument in labeling individuals.^{[38][30]} In her original research, Isabel Myers found that the proportion of different personality types varied by choice of career or course of study.^{[1]:40-51 [13]} However, some other researchers examining the proportions of each type within varying professions report that the proportion of MBTI types within each occupation is close to that within a random sample of the population.^[30]

Also, the efficiency of MBTI in an organizational setting has been subject to scrutiny. In 1991 three scholars at the University of Western Ontario analyzed the results of 97 independent studies that evaluated the effectiveness of personality tests in predicting job success and job satisfaction ("Personnel Psychology," winter 1991). The results of the nationwide study challenged the effectiveness of the MBTI when related to individual performance and satisfaction in a corporate setting.

The validity coefficient for personality tests in predicting job success was found to average 0.29 (on a scale of 0 to 1). The corresponding average validity for the MBTI, however, was a weak 0.12. In fact, each study that examined the MBTI found its validity to be below acceptable levels of statistical significance.^[39]

However, as noted above under **Precepts and ethics**, the MBTI measures preference, not ability. The use of the MBTI as a predictor of job success is expressly discouraged in the *Manual*.^{[15]:78} It is not designed to be used for this purpose.

Skepticism

Skeptics criticize the terminology of the MBTI as being so "vague and general"^[40] as to allow any kind of behavior to fit any personality type. They claim that this results in the **Forer effect**, where individuals give a high rating to a positive description that supposedly applies specifically to them.^{[21][30]} Others argue that while the MBTI type descriptions are brief, they are also distinctive and precise.^{[41]:14-15} Some theorists, such as David Keirsey, have expanded on the MBTI descriptions, providing even greater detail. For instance, Keirsey's descriptions of his **four temperaments**, which he derived from the sixteen MBTI personality types, show how the temperaments differ in terms of language use, intellectual orientation, educational and vocational interests, social orientation, self image, personal values, social roles, and characteristic hand gestures.^{[41]:32-207}

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