# Research on the Popularity and Impact of the Myers-Briggs Type Indicator on Young People in China

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**Abstract:** Self-concept is always an essential part of individuals. A personality test can help people recognize the connections between themselves and the mass society. In recent two years, Myers-Briggs Type Indicator, or MBTI, has become significantly popular among young people in China. Most past research focuses on the theories and implications of MBTI but does not have a clear investigation of how the wide use of MBTI would have an impact on people. This paper will target MBTI as the research subject, discussing its advantages and limitations as well as the possible impacts on young people in disseminating MBTI. A questionnaire will be distributed randomly to young people from different regions of China, combining past research and psychological concept with the result of the questionnaire to help the analysis and conclusion. The research concludes that young people, mostly in urban areas in China, are highly exposed to the MBTI test. The dissemination of MBTI could contribute to interior factors (psychological aspects) and exterior factors (social aspects). From the data analysis, the reliability of MBTI is still under discussion. In general, most people believe their personality types resemble themselves. However, there are pros and cons that result from the popularity of MBTI. For example, most noticeably, judging a person purely based on their personality test results.

**Keywords:** MBTI, dissemination, psychology, youth, China

## 1. Introduction

Isabel Briggs Myers and Katherine Briggs created MBTI in the early 1940s. They developed the test upon Carl Jung's *psychological type*, and the primary purpose of the test was to be used for career selection. Gradually, by the end of the 1970s, MBTI was exposed to a considerable number of people worldwide[1]. Recently, in China, the MBTI has become one of the most popular personality tests among young people. Personality includes all the psychological qualities and processes that keep an individual's behavior consistent through time and occasions. The concept of personality is broad, and we can also describe it as a psychological tendency to be constant throughout our lives[2]. To some extent, humans have similar qualities. For example, people prefer to be happy rather than sad, and they have a positive utility towards change. Except for those similar aspects, everyone is different from each other. A personality test aims to classify individuals based on these similarities. However, since every person is unique, there do exist limitations to personality tests, as does MBTI.

This research aims to combine literature reviews and questionnaire survey analysis to investigate the impact of the MBTI. The intentions of combining those results are as follow:

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- 1. Previous research mainly focuses on the fundamental theory, how MBTI works, and its implications, such as how it can be used. However, there is little research looking at how MBTI spreads. With the development of social media and in-person contact, MBTI has been exposed to a huge number of people, especially the youth. Yet, no research has tested how its popularity grows.
- 2. Since MBTI has been exposed to many young people in China, and every personality test has its limitation, the limitations may lead to impacts on young people. The paper aims to discuss these limitations, whether MBTI has an impact, and how the impact affects young people.

For researchers, this study provides basic information about how popular the MBTI is in China today, and what young people think about it. For society, to make the public, especially MBTI lovers, aware of the probable impacts of MBTI, so that some of the negative effects can be prevented in communications.

#### 2. MBTI

Most people are attracted by the unique four dimensions, the basic theory of the Myers-Briggs Type Indicator because they can be easily interpreted. The four dimensions are: Extroversion (E) and Introversion (I), Sensing (S) and Intuition (N), Thinking (T) and Feeling (F), Judgment (J) and Perception (P)[3]. The combinations of the four dimensions map to 16 personalities quickly provides insights to the test takers. For instance, if a person's MBTI result is INTP, his/her four dimensions are introversion, intuition, thinking, and perception. Generally, MBTI websites interpret the result for the test taker, usually by providing the meanings of the four letters and the types of jobs that may fit the personalities.

#### 3. Methodology

## 3.1. Hypothesis

The research hypothesizes that MBTI is highly popular among the youth and that the majority of them have learned about this personality test recently. The research also hypothesizes reliability of this test is relatively low compared to other personality tests, and the impact of MBTI is profound among young people, both positive and negative.

### 3.2. Questionnaire Investigation Introduction

The study randomly sent questionnaires online to young people from all regions of China. Young people are defined as those who are aged 0 to 30. The result can be obtained on the questionnaire website backstage. The language of the questionnaire is Chinese to help the subject understand the question precisely and accurately. The questionnaire results are combined with some literary reviews to help interpret and understand the data. The survey's primary purpose is to have a basic interpretation of the popularity of MBTI among young people and the general attitude toward it. The analysis and conclusion of the questionnaire may also help to discuss the evaluation of the positive and negative impact of MBTI upon youth. Finally, 133 samples were collected, and 98 (73.68%) of them were used for later analysis.

## 3.3. Specific Content Settings

In the questionnaire, 19 questions were asked. The questions can be divided into four parts: basic information, MBTI's popularity, reliability of MBTI results, and subjects' attitude toward the MBTI test. The first three sections consist of quantitative data, while the fourth part includes quantitative data coupled with some qualitative data. In the first part, the questions are, for example, "How would you describe your gender?" The main focus of the questions is on genders, ages, and educational

backgrounds. In the second part, there are some questions about the popularity of MBTI, how popular the MBTI is in China, and how the MBTI has become popular in China. For instance, "Have you ever heard of MBTI?" and "How did you learn about MBTI?" The third part, reliability, asks how many times participants have done the MBTI test and how many results they have obtained. Lastly, the questionnaire will discuss the subjects' attitudes toward the MBTI with the intent of understanding the reasons and consequences. The issues can set scores from 0 to 10. For example, "To what extent do you think your MBTI personality resembles yourself?" In this way, the subjective attitude can be evaluated as quantitative data. Some questions also ask about personal opinions, "What kind of positive or negative impact did MBTI have on you?" By looking at those opinions, probable positive or negative impacts can be listed and discussed.

### 4. Result and Analysis

#### 4.1. Basic Information

According to the questionnaire, of over 98 participants, 50 are male, 40 are female, and eight are LGBT. 40%, 46%, and 14% of participants are, respectively, aged below 18, between 18 to 25, and 26 to 30. Over half of the participants are high school students, 36 are undergraduate students, five are in graduate school, four are in junior high school, and one is in primary school. This information can assist the researcher in determining the relationship between personal attitudes toward MBTI and factors such as gender, age, or educational background. Considering the difference between economics and development in each region where participants completed the questionnaire, participants' regions have been recorded and analyzed together with some data. The data reveals that 32.22% of the participants are from Shanghai, 15.04% are from the Zhejiang province, and the rest are distributed in other provinces. Most of the people are from developed areas in the country, where those regions.

### 4.2. Popularity

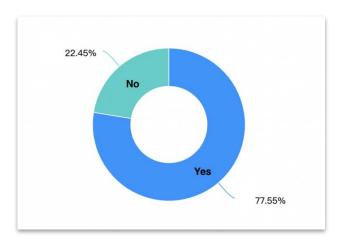


Figure 1: The data statistics of the question "Have you ever heard of MBTI?".

To test popularity, the questionnaire was designed with three questions. The first two questions collect information about MBTI's popularity and the time when it becomes popular. The last one was designed to find the reason why MBTI became widespread. As shown in Figure 1, the first question asks whether people have heard about MBTI. The fact that 77.55% of participants answered "Yes" to this question suggests that the test is indeed exposed to most of the people in China.

Then, the second question requested participants to tell whether they had known about MBTI in the last two years. This question was intended to discover if MBTI has only been prevalent recently.

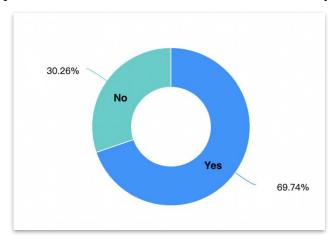


Figure 2: The data statistics of the question "Did you know MBTI in recent two years?".

The result is shown in Figure 2. 69.74% of participants have known MBTI in the last two years, which confirms the idea that MBTI has increasingly become popular in China. The reasons for the dramatic rise in MBTI popularity need to be investigated. The final question asks, "How do you know MBTI?" and provides four possible options that are "Family members or friends," "Social media," "School or other organization," and "Newspaper or Magazine" for the participants to choose.

In Figure 3, 43.42% of participants know MBTI from their family members or friends, and both social media and school or other organizations have an equal percentage of 27.63%. Therefore, inperson is the primary way of MBTI transmission, and mass media has also become a significant way of spreading.

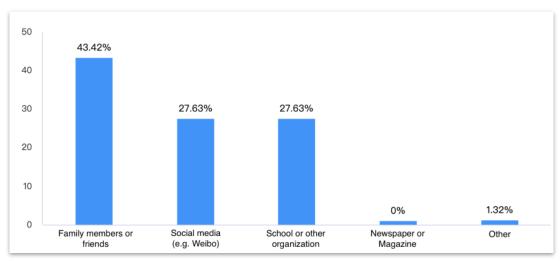


Figure 3: The data statistics of the question "In which way do you know MBTI?".

As a result, the popularity of MBTI can be attributed to both interior and exterior factors. Firstly, interior factors (personal aspect) are the increasing willingness of people to understand their personalities. Possible reasons are that rapid economic growth in China could result in changes in the needs of young people, which would combine with young people's attributes. The prefrontal cortex is vital for rational thinking and decision-making. For younger people, especially adolescents whose

brains are still undergoing massive changes, the prefrontal cortex does not fully develop for controlling their amygdala, which is responsible for controlling emotions — adding to the increase in estrogen and testosterone hormones in adolescents' bodies[4][5]. As a result, adolescents tend to be more curious about new things, such as MBTI, which has recently become popular in China. Another possible contribution is Maslow's hierarchy of needs. According to Maslow, there are five needs: physiological, safety, love, esteem, and self-actualization. Each of the needs is built upon the previous one[6]. Therefore, with the increase of the economy, those physiological and safety needs have been improved to a great extent. In particular, physiological and safety needs are no longer a problem in highly developed regions in China, such as Shanghai, Zhejiang province, and so forth. Therefore, young people will pursue love, esteem, and self-actualization, which helps explain the increase in popularity of the MBTI test. The exterior factor, the factor that does not have a dependency on participants themselves, contributes to prevailing technology, to be more specific, the advance in the ways of communication. As shown in the result of the questionnaire, social media can be one of the main factors that promote the spread of MBTI. Research has been done to test the power of social media in dissemination. The study was conducted by monitoring the conversation posted with the hashtag #CSANZ2013. The result shows that there are a total of 1,432,573 potential impressions in Twitter users' tweet streams. The conclusion strongly suggests that social media is powerful for topic and information dissemination[7]. As for the MBTI, a similar effect could be expected.

#### 4.3. Reliability

Reliability is an essential part of determining whether a personality test is trustworthy or not. The next question requires those who have taken more than twice the time of MBTI to write down how many times they took the test and how many times their personalities have changed. The result is processed by calculating the chance of having an MBTI test and getting different personalities. For example, a person has done four MBTI tests and got two different MBTI results, so the chance of getting a different result will be 2/4, which is 50%. This way, the data are collected, and the average possibility is 57.62%, meaning that the stability of the personality is relatively low. Test takers on one of the most popular MBTI websites, 16 Personalities, need to complete 60 questions according to their perceptions and feelings, which usually takes 10 minutes to complete. Although a test does not cost much time and is usually convenient for test takers, this becomes a reason that MBTI is not seen as a professional personality test. Comparing MBTI to professional personality tests, for example, the Minnesota Multiphasic Personality Inventory (MMPI), which has been widely used in psychiatry and contains 567 true-false items and often takes 60 to 90 minutes for the test takers. Even if the brief version of MMPI, MMPI-2-RF, has 338 questions and needs about 35 to 50 minutes to complete[8]. The massive difference in the number of questions and the time required for completion reveals some inaccuracy of MBTI. To be more specific, the length of MMPI-2 allows it to include massive scales, including a validity indicator. Among the 10 validity indicators, the K scale is worth mentioning because of its importance in evaluating the correction. K scale can measure the defensiveness of the test taker. A low K scale score means that the test taker holds a defensive attitude toward the test and vice versa[9]. Therefore, from this indicator, the examiner can determine whether the result of the test is reliable or not. However, for MBTI, those indicators do not exist, and the reliability of test results is called into question.

#### 4.4. Personal Attitudes

After investigating the popularity and reliability of MBTI, the questionnaire then explores personal attitudes toward MBTI and gives an overview of how this test impacts young people. The first question is, "To what extent do you think your MBTI result resembles yourself?" The participants

are asked to choose a score from 0 to 10.0 means remarkably not resemble, and 10 means remarkably resembles. The results are collected, and the calculated average score is 7.3, which means most young people do think that their MBTI results are similar to themselves. Then, apart from the result of the entire young population, the correlation between people from different educational backgrounds and their beliefs of MBTI is similar to themselves is analyzed.

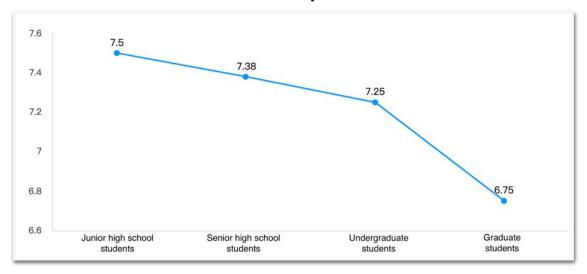


Figure 4: The data statistics of the question "The correlation between people from different educational backgrounds and their beliefs of MBTI is similar to themselves".

In Figure 4, the y-axis represents scores, and the x-axis represents the educational backgrounds. The average scores of people from different educational backgrounds are calculated. A trend indicates that when people have higher education backgrounds, their beliefs that they think the MBTI result resembles themselves are prone to decrease. It is possible that as people get higher education, it is more likely that they will have a more comprehensive understanding of themselves. Therefore, they do not acknowledge some of the attributes that MBTI personality suggests.

Unlike the first one, the next question asked about the participant's subjective attitudes toward themselves, "To what extent do you think other people's MBTI results resemble themselves?" The question is designed to change people's perspectives from first-person to third-person. As a result, they may give a different rating or have an objective view of MBTI. The scores' results differ from the first question asking about the similarity between themselves and their MBTI personalities. The average score is 6.84, which indicates that most young people think that MBTI personalities are similar to other people from a third-person view. However, comparing the first and second scores, most young people are prone to believe that others' personality results to themselves are not as similar as that of their own personalities to themselves.

The research also wanted to determine whether the MBTI result would add to the negative effect of stereotyping and labeling. A question asks, "To what extent does MBTI impact yourself?" The average score is 3.29, which somewhat demonstrates that some impacts do indeed exist on young people. The reason for the relatively low data may contribute to the third-person effect. People have the tendency to think that mass media message has little impact on themselves but a greater impact on others. Therefore, the actual average score could be bigger than it is now[10].

To test whether the effect on young people is positive or negative, the questionnaire then asked participants to choose "Does the impact of MBTI on you positive or negative?" 44.74% of participants think MBTI has a positive impact on them, and 2.64% of the participants believe MBTI has a negative effect on them. The rest, 52.63%, of participants think the implications of MBTI are

both positive and negative. The result of this question implies that most young people have a positive attitude. The answers that are the most persuasive and frequently appear are selected and listed below. The pros of MBTI are that, first, the test provides a topic for communication. MBTI is known as an exciting topic discussed among friends and on social media. Young people create memes relating to MBTI, so in particular circumstances, for example, people who do not know each other well can talk about some of those memes for communication. Secondly, MBTI is a test that can achieve one's self-concept to answer those people "who they are." Even though the answer might seem vague, the MBTI test encourages young people to learn about their personality types. They can gain guidance from people of the same MBTI type as them, who also have undergone a rather profound development, as well as attain confidence, which can be accomplished through others' positive feedback on one's MBTI type that sort of serves as praise. Learning to appreciate the differences in others allows people to take a different perspective and make decisions with a more inclusive attitude[11].

In contrast, the cons of MBTI are as follows. Firstly, judging a person based purely on her or his MBTI type may lead to stereotyping and deviation from her or his actual characteristics. This will lead to stigmatization of particular MBTI types, for example, judging ISFJ since they are "ordinary" in people's minds. Also, since MBTI is a career indicator and MBTI itself has stereotypical features, it is likely that choosing a career based on the stereotypical features of one's MBTI type might mislead the person. For instance, a person with personality type INTP, who has a stereotype of seeking some occupations that fancy logic and innovations, might suggest being a computer programmer but ends up finding himself unfit for the job, which is a waste of time and energy. Moreover, MBTI not only shows low reliability but also has critiqued the way it categorizes its four dimensions: MBTI utilizes a simple dichotomic method. This means that a person will be forced to have a label of, for instance, introversion or extroversion, but this categorization ignores the fact that a person can both have introversion and extroversion or both have thinking and feeling attributes inside him or her. This limitation will cause a person with 51% introversion and 49% extroversion labeled with introversion and a person with 49% introversion and 51% extroversion labeled with extroversion. These two people are similar in terms of the first dimension of MBTI, but surprisingly, they are seen as different personality types, which in turn will cause misdirected suggestions.

#### 5. Conclusion

It can be concluded from the questionnaire result that MBTI is well-known among young people in China, since 69% of participants have confirmed that they know MBTI. Since most people have become conscious of what MBTI is in the last two years, MBTI has grown in popularity in the past two years. Nonetheless, MBTI has limitations in its reliability. Although the analysis of the questionnaire results demonstrates popularity, reliability, and young people's attitude toward MBTI, there are some limitations in the study which would need further discussion. On the one hand, the majority of the survey responses are collected from Shanghai and Zhejiang Province, which are two of the most developed regions in China. This sampling bias may have led to inaccuracy in the conclusion that MBTI is highly popular in China since the subjects are mainly from those regions that are vastly exposed to hot spot topics from social media and so forth, which in turn ignores the fact that in some of the developing regions of China, people may not have access to the test. Furthermore, more samples are needed for the analysis to decrease random error so that some of the calculations can be more precise. This may add more precision to the scientific evidence. Moreover, apart from the questionnaire survey, more methods can be used to investigate how MBTI has positively or negatively influenced the youth. For instance, an experiment design that tests whether MBTI type will have an impact on the first impression of strangers.

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#### **References**

- [1] Pittenger, D. J. (1993). Measuring the MBTI and coming up short. Journal of Career Planning and Employment, 54(1), 48-52.
- [2] Cervone, D., & Shoda, Y. (1999). Beyond traits in the study of personality coherence. Current Directions in Psychological Science, 8(1), 27-32.
- [3] Introduction to Myers-Briggs Type Indicator (MBTI). (n.d.). https://www.ucl.ac.uk/careers/sites/careers/files/pers onality-profiling.pdf
- [4] McClure, S. M., Laibson, D. I., Loewenstein, G., & Cohen, J. D. (2004). Separate neural systems value immediate and delayed monetary rewards. Science, 306(5695), 503-507.
- [5] Spear, L. P. (2000). Neurobehavioral changes in adolescence. Current directions in psychological science, 9(4), 111-114.
- [6] Maslow, A. H. (1970). Motivation and personality (Rev. ed.). New York, NY: Harper & Row.
- [7] Ferguson, C., Inglis, S. C., Newton, P. J., Cripps, P. J., Macdonald, P. S., & Davidson, P. M. (2014). Social media: a tool to spread information: a case study analysis of twitter conversation at the Cardiac Society of Australia & New Zealand 61st annual scientific meeting 2013. Collegian, 21(2), 89-93.
- [8] "MMPI®-2 Overview." University of Minnesota Press, www.upress.umn.edu/test-division/mmpi-2.
- [9] "MMPI-2 Scales." University of Minnesota Press, www.upress.umn.edu/test-division/mmpi-2/mmpi-2-scales.
- [10] "Third-Person Effect." Obo, www.oxfordbibliographies.com/view/document/obo-9780199756841/obo-978019975 6841-0082.xml#.
- [11] Thompson, R. C., Kulas, J. T., Anderson, M. G., & Arneson, J. J. (2015). The Myers-Briggs Type Indicator in organizational settings: A theoretical review and psychometric analysis. (Under review).