

ANNOTATED BIBLIOGRAPHY  
Myers-Briggs Type Indicator

## **INTRODUCTION**

The purpose of the Myers-Briggs Type Indicator (MBTI) is to make the theory of psychological types described by C. G. Jung (1921/1971) understandable and useful in people's lives. The essence of the theory is that much seemingly random variation in behavior is actually quite orderly and consistent, being due to basic differences in the way individuals prefer to use their perception and judgment. (Myers and McCaulley, 1985, pg. 1)

The Myers-Briggs Type Indicator is a cognitive assessment designed to identify personality preferences, which include the dichotomies of typology that were initially developed by Carl Jung, Swiss psychologist and researcher. These include: Introversion vs. Extroversion, Intuition vs. Sensing, and Thinking vs. Feeling. Based on Jung's initial work in typology, the mother and daughter team of Katherine Briggs and Isabel Briggs Myers expanded Jung's research on personality, which include the three dimensions aforementioned, adding a fourth, which was the preference for Judging vs. Perceiving—a measure of how a person orders and organizes (or lacks ordering and organizing) their life and world.

### **Jung's & Myer's-Briggs Theory of Psychological Type**

There are four different indices in the MBTI which hold two different letter choices, with a combination of 16 different possibilities of personality type. Each index offers a "window" into an individual's personality: the E/I index determines where an individual received his or her energy; the S/N index refers to how an individual takes in information; the T/F index represents how an individual thinks about and makes a decision; and the P/J index suggests how individuals prefer to interact with their world. A more detailed summary is offered here:

***Extraversion–Introversion (E–I)***

The E–I index is designed to reflect whether a person is an extravert or an introvert in the sense intended by Jung. Jung regarded extraversion and introversion as "mutually complementary" attitudes whose differences "generate the tension that both the individual and society need for the maintenance of life" (Myers & McCaulley, 1985, quoting Jung, 1921/1971, p.160). Extraverts are oriented primarily toward the outer world; thus they tend to focus their perception and judgment on people and objects. Introverts are oriented primarily toward the inner world; thus they tend to focus their perception and judgment upon concepts and ideas.

***Sensing–Intuition (S–N)***

The S–N index is designed to reflect a person's preference between two opposite ways of perceiving; one may rely primarily upon the process of sensing (S), which reports observable facts or happenings through one or more of the five senses; or one may rely upon the less obvious process of intuition (N), which reports meanings, relationships and/or possibilities that have been worked out beyond the reach of the conscious mind.

***Thinking–Feeling (T–F)***

The T–F index is designed to reflect a person's preference between two contrasting ways of judgment. A person may rely primarily through thinking (T) to decide impersonally on the basis of logical consequences, or a person may rely primarily on feelings (F) to decide primarily on the basis of personal or social values.

***Judgment–Perception (J–P)***

The J–P index is designed to describe the process a person uses primarily in dealing with the outer world, that is, with the extraverted part of life. A person who prefers judgment (J) has reported a preference for using a judgment process (either thinking or feeling) for dealing with

the outer world. A person who prefers perception (P) has reported a preference for using a perceptive process (either S or N) for dealing with the outer world. (Myers and McCaulley, 1985, pg. 2).

This annotated bibliography will focus on the MBTI and the college student in a variety of settings: small religious colleges, state supported universities, gifted and talented programs, and in specific academic areas such as engineering. The goal for using the MBTI in education include: (1) to develop different teaching methods to meet the needs of different types, (2) to understand type differences in motivation for learning, (3) to analyze curricula, methods, media, and materials in light of the needs of different types, (4) to help teachers, administrators, and parents to work together more constructively (Myers and McCaulley, 1985, pg. 4).

#### **ANNOTATIONS:**

Cross, T.L., Speirs Neumeister, K.L., & Cassady, J.C. (2007). Psychological types of academically gifted adolescents. *The Gifted Child Quarterly*, 51 (3), 285 – 294. Retrieved March 30, 2008, from the H.W. Wilson database.

#### ***Summary of Source***

The purpose of this study was to determine the MBTI for 931 gifted adolescents (high school juniors). Gender was accounted for within the group of gifted students. The goal was "...to enhance the literature within the gifted sample as well base on psychological type of gifted adolescents by providing the first clear examination of differential type orientations for gifted males and females. The study sought to examine gender differences as gender-specific comparisons between the gifted and the norming sample" (p. 287). Additionally, the implications for educating gifted students based on their MBTI was addressed.

The study concluded that "gifted girls and boys in the present study indicated stronger preferences for N and P...Findings have implications for educators to emphasize the importance of instructional style on gifted learning" (p. 292). This study also presented new information on the comparison of psychological type and gender in gifted students. Authors stated that "when looking at patterns of psychological type in gifted students, one must examine each gender separately for the most descriptive portrait."

When teaching gifted students, using psychological type can help teachers develop a better curriculum and teaching methods (pp. 291-292).

### ***Methodology***

Cross, Speirs Neumeister and Cassady from Ball State University sampled 931 academically gifted adolescents in a public residential academy during 1999 – 2004. The MBTI was administered to each student during a summer orientation before their enrollment in the fall. Fifty-six percent (524) were female and forty-four percent (407) were male. Students were identified as “gifted” through a variety of indicators: “Scholastic Aptitude Test (SAT) scores, standardized achievement measures, grades, completion of the state’s high school graduation qualifying exam by the tenth grade year, an interview, open-ended essays, and recommendations from teachers, parents and school guidance counselors” (p. 286).

### ***Analysis/Critique***

The authors’ prior research indicated that “when compared to the normal population, there tends to be a higher orientation toward N and Intuition-Perceiving (NP) among the gifted population” (p. 286). The four most common personality types among gifted adolescents are: INFP, INTP, ENFP and ESFJ (p. 286). This study helps us to further understand the MBTI type of gifted adolescents and how gender impacts findings. Knowing this information about gifted students gives teachers an advantage in devising a curriculum that meets their students’ needs.

As a college professor, I can be more attuned to my student with a preference for Intuition/Perception. They typically will be more creative, imaginative and theoretical as opposed to their sensing counterparts. This can certainly translate into different writing assignments which might utilize their creative abilities.

Folger, W.A., Kanitz, H.E., Knudsen, A.E., & McHenry, S. (2003). Analysis of MBTI type patterns in college scholars. *College Student*, 37 (4), 598 – 603. Retrieved March 30, 2008, from the H.W. Wilson database.

### ***Summary of Source***

The MBTI was administered to a group of college students at Central Michigan University who were identified as “scholars”—recipients of competitive scholarships. Researchers wanted to find out if these scholars used the Thinking preference more than the Feeling preference (or, in other words, registered as a T or F in the decision-making aspect of the MBTI).

Results of this study show that over 50% of the scholars devalued the decision making function “thinking”; most used a Feeling preference. The author raises a thoughtful question: “Are the 53 overrepresented feeling types engaged in some form of emotional intelligence?” (p. 601). “The Centralis Scholars study resulted in 57% with Thinking in the “whole unconscious.” Twenty-six scholars had thinking in their inferior and 27 in their Tertiary. The remaining 40 scholars had Thinking as a dominant function (53 were Feelers and 47 were Thinkers) (p. 600). “One can only generalize that Thinking, as measured by the MBTI, constitutes critical thinking. Nevertheless, 57% of the gifted and talented Centralis Scholars had Thinking as a lowered level of consciousness” (p. 601).

### ***Methodology***

The study by Folger et al. researched 93 students, all known as “Centralis Scholars,” over a five-year period. “The Centralis Scholars Program at CMU is a competitive scholarship program for high school seniors and community college students with a grade point average (GPA) of 3.4 or higher...the student will receive the full cost of tuition, fees, room and board, and a small stipend for books and supplies” (pp. 598-599). These students represent the best and brightest at Central Michigan University. All students were administered Form F of the MBTI.

### ***Analysis/Critique***

This study helps us realize that not all incredibly intelligent scholarly people have the Thinking preference. This is good news! The implications for education are that students whose natural preference for Feeling can excel academically. This study, albeit small, noted “To speculate that a high percentage of academically talented individuals bypass logic in their decision-making is truly controversial. Even more controversial is the notion that the success of these scholars is predicated upon Goleman’s (1995) contention that emotional intelligence can matter more than IQ” (p. 601).

This study needs to be replicated with a larger population over a period of time to give more information.

McClanaghan, M.E. (2000). A strategy for helping students learn how to learn. *Education*, 120 (3), 479 – 486. Retrieved March 30, 2008, from the H.W. Wilson database.

### ***Summary of Source***

A small Catholic college (Marygrove) administered the MBTI to new students and used this information to help these students identify the ways they learn most effectively. There were four objectives of this study: (1) Work with the Student Support Service tutors and career services to empower them to build on the introduction that the students receive regarding learning style theory in the First Year Seminar course. (2) Provide workshops for students with very strong learning preferences to assist them in developing their weaker styles. (3) Study and report the results of the learning style profiles of new Marygrove students to identify any possible clustering of styles in the population. (4) Offer ongoing support to the First Year Seminar faculty to help them make better use of the information to assist their students in monitoring their own learning style development (p. 480).

The results showed the following: Introverts, 68%; Feelers, 66%; Intuitive Feelers (NF)—25%; Intuitive Thinkers (NT)—18%; and Sensing Thinkers (ST)—16 %. Faculty and support staff at Marygrove took into consideration the styles of incoming students in order to “work with the students’ most natural style” in their learning (p. 484).

### ***Methodology***

Student sample included 207 freshmen; the study took place between the years of 1995 and 1998. Of the sample taken, 167 were female and 40 were male. The short form of the MBTI was administered to these incoming freshmen in addition to Form G of the MBTI to assess learning styles.

### ***Analysis/Critique***

This study is encouraging in that there are institutions that administer the MBTI for the reason of helping students succeed—by teaching to their style of learning and helping them become aware of their styles of learning. This can be more easily accomplished at a smaller school like Marygrove as opposed to a larger community college such as Johnson County Community College or a university such as the University of Kansas. It helps me, however, in that this is an important aspect of the student's use of the MBTI as a tool: identifying their learning styles so they can become a facilitator in their own learning. Extroverted students who sit through boring 45-minute to 3-hour lectures can realize that they can create study groups of other students to help them learn.

Sears, S.J., Kennedy, J.J., & Kaye, G. L. (1997). Myers-Briggs personality profiles of prospective educators. *The Journal of Educational Research*, 90 (4), 195 – 202. Retrieved March 30, 2008, from the H.W. Wilson database.

### ***Summary of Source***

The objectives of this study were "... first was to identify the personality types of students who, after exposure to an early teaching experience program, decided either to (a) continue their preparation to teach as evidenced by receiving a bachelor's degree from the college of education at the Ohio State University, or (b) abandon their efforts to obtain a degree from the college of education at OSU" (p. 195-196). The second objective was to identify the personality types of those students who completed their bachelor's degree in education within the subgroups of elementary, secondary and special education.

The purpose of this study was to determine the most prevalent Myers-Briggs types of education majors at Ohio State University. A previous study from 1979 by Lawrence showed that the primary type for educators was ESFJ. A second study in 1990 by Marso and Pigge had the same findings with the most common type being ESFJ. Lastly, a more recent study completed in 1991 by Hinton and Stockburger also found the same results (p. 195). Sears, Kennedy and Kaye wanted to find out if this was true of the education students at Ohio University. Additionally, they wanted to see which Myers-Briggs types were more likely to continue as educators and which were least likely to continue in the field of education.

The study found that "the common S-F-J component appeared to account for a major portion of observed results. Students who were judged to be S-F-Js—irrespective of their E or I designation—were found in greater numbers than would be expected by chance to have remained in the college of education and to have received degrees. Conversely, fewer S-F-Js

than would be expected by chance withdrew from education after an exposure as freshmen to the realities of teaching” (p. 199).

“Results indicated that the S-F-J profile on the MBTI described a significant number of students who continued in education” (p. 195). S-F-Js were described as “warm, sociable, responsible and caring about people. SFJs work hard to master facts, are concrete in their approach to tasks, do not appear interested in theory, trust their feelings, value harmony, make schedules and follow them, and thrive on order. As this study suggests, these are the personality dimensions of significant numbers of college students who are attracted to elementary education” (p. 201).

### ***Methodology***

“Participants included 4, 483 freshman students who had completed the Freshman Early Experience Program (FEEP) at OSU...from fall 1977 to spring 1984” (p. 196). Form F of the MBTI was administered to all FEEP students beginning in 1984. In 1989, the OSU Alumni office provided data regarding which students had completed a bachelor’s degree in education and which students did not complete the same degree.

Additionally, certification information was provided for 1,013 education graduates. “Hence the resultant sample for the second phase of the study consisted of 886 FEEP students who had obtained an education degree by 1989 in one of the following certification areas or majors; elementary, K through 12, secondary or special education” (196).

### ***Analysis/Critique***

This study offers interesting insights into using the MBTI for college students in the field of education. As an educator, I am interested in helping students discover more about themselves, but specifically, to use the MBTI as an instrument to help them decide on an academic major and career. Although students and their MBTI types should not be pigeonholed, it is interesting to realize that certain careers interest certain Myers-Briggs types—education appealing to S-F-Js specifically. Sears, Kennedy and Kaye’s findings echoed the findings of the three studies they used to inform their research.

Taking this study further, one might go back to these 1,013 education graduates for a post-study to identify how many of them are still in the field of education. Is there a type designation for those who continue past five years in this field?

Williamson, J. (2003, Spring). Suiting library instruction to the Myers-Briggs personality types and Holland vocational personality types of engineering students. *Issues in Science and Technology Librarianship*. Retrieved March 30, 2008, from the H.W. Wilson database.

### ***Summary of Source***

The purpose of this study was first to offer a literature review of two theories of personality typology: the MBTI and the Holland Vocational Personality Types. Secondly, to determine ways that librarians could successfully “design instruction” and assist engineering students at the

University of Tennessee Knoxville in their academic endeavors by examining findings of prior research on the Myers-Briggs types in general of engineering students (pg. 1). Seven prior studies were reviewed and their results used for analysis for the typical Myers-Briggs types of engineering students in America. The MBTI was administered to the engineering faculty at the University of Tennessee Knoxville. Data from Sherdin (1994) was used for the typical Myers-Briggs types of librarians.

The results of this study helped librarians at the University of Tennessee Knoxville to better assist engineering students. “Librarians should attempt to appeal to engineering students’ Thinking and Judging preferences, while balancing appeals to the Sensing/Intuitive dimension.

### ***Methodology***

The author used the results from seven studies done between 1987 and 1997 which determined the Myers-Briggs types of a variety of engineering students:

Scott and Scott (1996)—University of Tennessee Knoxville engineering freshmen

McCaulley et al. (1987) – Eight colleges and universities

Felder et al. (1993)—chemical engineering students

Thomas et al. (2000)—Georgia Tech engineering students

Saiger (1990)—Electrical engineering students from three universities

Sloan and Jens (1992)—Colorado School of Mines engineering students

Rosati (1997)—Canadian sample of engineering students (p. 3).

The top type across the board for each study for engineering students was ISFJ. The second type in four of the studies was ESTJ. The third and fourth most common types fell in the T-J categories.

“These results show a clear Thinking preference among engineering students in a variety of samples. It is notable that in all of these samples, ISTJ is the most common type for engineering students. This type is described as: quiet, serious, earn success by thoroughness and dependability. Practical, matter of fact, realistic and responsible” (p. 3-4).

Engineering faculty MB types at the University of Tennessee were: ISTJ (22.6%), INTJ (17.8%), INTP (17.8%), and ENTJ (14.3%). Knowing the types of engineering faculty can help librarians understand them better—that they are analytical, conceptual and abstract (p. 4).

Previous research indicated that the MBTI of the librarian are: ISTJ (16.5%); INTJ (11.5%); INTP (9.1 %); ISFJ (8.1%) and ENGJ (7.9%). “Librarians would appear to share the personality of life (Judging) with many engineering students. Librarians also often share temperaments (NT

and SJ) with many engineering students” (p. 4). “Those having the NT temperament are innovative, intellectual, and theoretical. There would appear to be much common ground between librarians and the majority of engineering students, so it should come naturally to librarians to provide logical, objectively worded, and organized instruction” (p. 4).

### *Analysis/Critique*

This study is significant because it offers an excellent example of how auxiliary services by college and university staff can be enhanced through the knowledge of students’ MBTI. When you get down to it, a person’s typology can help us understand why certain careers are a good fit and why others miss the mark. This article shows how the MBTI of facilitators and students can enhance relationships, thus learning.

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