The Relationship of Psychological Type and a Student's Choice of a Jesuit Business School

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Abstract

The purpose of this research was to explore the hypotheses that Jesuit universities attract more "feeling" students than do public universities and, furthermore, that Jesuit university business schools attract more "feeling" students than do public university business schools. Participants (N=200) were students at the Helzberg School of Management at Rockhurst University, a Jesuit university in Kansas City, Missouri and students represented in raw data (N=9000) provided by the Center of Psychological Type (CAPT). The data failed to validate the hypotheses. The author explores the possibility that studentsmay choose to attend Jesuit universities not because they are hard-wired as "feelers" but based on a need to be in an environment that supports their tightly held religious beliefs.

Keywords: Jesuit education, business school, Myers-Briggs Type Indicator (MBTI®).

1. Introduction

Powerful demographic trends have recently shaped American higher education. The United States has approximately 4,860 private and public colleges and universities with 18,000,000 students. The population of high school graduates has increased from 2.46 million in 1994 to nearly 3 million in 2012 (Projections, 2011). But that trend is over. In 2013, only 3.1 million high school students will graduate (Lowney, 2010). While the entering pool of traditional-aged high school graduates has grown steadily for the past decade, in the coming decade it really won't grow at all. A better understanding is needed of the kind of student who is and is not self-selecting into Jesuit business schools and whether a student's personality type has any bearing on the decision.

For almost 500 years, Jesuit education has left its imprint on the world. The underlying spirit of Jesuit education was born in 1521, when a Spanish soldier was struck in the leg by a cannonball at Pamplona That soldier, later to be known as St. Ignatius of Loyola, used his recovery period to develop his spirituality and approach to life which culminated in the formation of the Society of Jesus i.e., Jesuits. The Jesuits' shared goal is to provide an excellent education to develop competent, compassionate, and committed leaders through a value-centered education. Together, Jesuits and professors embrace the contributions of other religious and ethical traditions because they complement the Catholic intellectual tradition of social thought and service. Today 196 Jesuit Colleges and universities exist throughout the world: 28 of them are in the United States (Association of Jesuit Colleges, 2012).

Rockhurst University is one of the 28 Jesuit universities in the United States. Founded by the Jesuits in 1910, Rockhurst University, located in the heart of Kansas City, Missouri, initially opened its doors to high school students, and college classes began in 1917. Today the university serves approximately 3000 students at its campus and offers more than 50 undergraduate and graduate programs. Rockhurst University's motto is "Learning, Leadership, and Service in the Jesuit Tradition."

Rockhurst University's business school is located in the Helzberg School of Management, is accredited by The Association to Advance Collegiate Schools of Business (AACSB), and is the only accredited private business school in the greater Kansas City area. The nearest AACSB private business schools are Creighton University in Omaha, Nebraska and Saint Louis University in St. Louis, Missouri. The Helzberg School of Management, named for Barnett Helzberg, a member of the founding family of Helzberg Diamonds, exists to prepare leaders to make a positive difference in the world which is reflected in its motto, "Where Leaders Learn." Its driving force is to educate and develop leaders of competence and conscience.

The student body of the business school is comprised of approximately 300 undergraduate students and 350 graduate students. Significant "firsts" include Kansas City's first co-educational business degree for working adults (1933), the city's first part-time MBA program (1976) and first executive MBA program (1978), and the Kansas City University of Medicine and Biosciences' DO/MBA Dual Degree program featuring a Rockhurst MBA in Health Care Leadership (2001) (http://www.rockhurst.edu/hsom).

Students choose Jesuit institutions of higher learning for a number of reasons. According to the theory of Myers-Briggs typology, all of these students come to us hard wired with a preference for making decisions as either "thinkers" or "feelers." Having studied human beings through the lens of typology for over 25 years, the author had become astute at recognizing these preferences in human beings. After two years of full-time teaching at Rockhurst University she began to notice that a preponderance of students behaved in such a way to make her believe they had a preference for "feeling."

"Feeling" and "thinking" are rational functions that differentiate themselves by how a person sorts and prioritizes information for decision-making. In the language of the Jesuits, "feeling" is similar to what Spitzer (2012) refers to as the "affect" and the "who;" "thinking" is similar to what he calls the "what" and the "effect." Jesuit education is steeped in caring and compassionate language and behaviors similar to the language and behaviors of "feelers." O'Malley (2000) stated that the Jesuit tradition of education allows us to live our lives in ways that satisfy the deepest yearning of our "heart."

At the 15th Annual CJBE Conference at Loyola Marymount University, Father Spitzer (2012) in his speech "What Differentiates Jesuit Business Education from the Rest of the Market?" used "feeling" talk when he stated that leading pertains to the heart and that decision-making should involve answers that impact the greater good. At the same conference Vance (2012) spoke the language of "feelers" when he talked about treating people as "unique" individuals and that if educators can get students' "hearts" that their commitment will follow.

"Thinkers" are often said to think with their "head;" "feelers" are often said to think with their "heart." Ignatius pedagogy aims to provide students with a well-rounded education of mind, "heart," and hand. One of the key Catholic social teaching principles is the principle of life and dignity of the human person which says each life is precious and that "people are more important than things" (Principe & Eisenhauer, 2012). Lonergan advocates insight as a means to illuminate and unify our thinking; and, when leveraged effectively, can reach into the "heart" and soul of those who lead or will lead into the future (Little, 2012).

2. Research Questions

- Do more feeling types choose Jesuit universities than they choose public universities?
- Do more feeling types choose Jesuit university business schools than they choose public university business schools?

3. Personality Models

Sorting and classifying people according to their personality type and temperaments began thousands of years ago. A great many classificatory schemes for temperament based on human behavior have surfaced throughout history, dating back to such men as Hippocrates, Plato, and Aristotle. One of the earliest methods of sorting and classifying was a theory devised by Hippocrates. Based on his own observations and logic, Hippocrates (460 BC) suggested that the four bodily fluids were at the root of all health and personality (Jones, 1931). In 1780, nearly 1700 years later, the German philosopher Immanuel Kant popularized these ideas by organizing the personality constructs along the two axes of feelings and activity (Engler, 2003).

During the 1800s, the psychologist Wilhelm Wundt (Blumenthal, 2001) proposed that the four temperaments fell along the axes of changeability and emotionality. The philosopher, Friedrich Wilhelm Nietzsche, introduced his famous distinction between the Apollonian (rational) element in human nature and the Dionysian (passionate) element (Nietzsche, Tanner, & Whiteside, 1872). Another philosopher, Erich Adickes (1907), attempted to understand man's personality by dividing man into four worldviews: dogmatic, agnostic, traditional, and innovative. Carl G. Jung, a Swiss psychiatrist, introduced the theory of psychological type in the 1920s. Jung discussed the various aspects of consciousness and the attitudes that the mind might take toward the world in his book, Psychological Types (Jung & Baynes, 1921).

Shortly after the publication of the book, Ernst Kretschmer (1925) further identified abnormal behaviors by temperaments: hyperesthetic, anesthetic, melancholic and hypomanic. Three years later, Eduard Spränger (1928) identified six human values that set apart people: religious, theoretic, economic, social, political, and artistic.

3.1. Myers-Briggs Personality Type Theory

Katharine Briggs and Isabel Myers, mother and daughter, both astute observers of human behavior, put to practical use the preferences from Carl Jung's typological theories. Jung & Baynes (1921) proposed that people tend to have specific preferences for perceiving the world and judging preferences for processing the information. Three pairs of opposing attitudes were developed based upon an attitude toward life (extraversion [E] versus introversion [I]), perception (sensing [S] versus intuition [N]), and judgment (thinking [T] versus feeling [F]). Based upon Jung's work and additional research, Isabel Briggs Myers proposed a fourth dimension "orientation toward life" (judging [J] versus perceiving [P]), which addresses a person's tendency toward an orderly, controlled life versus a more flexible approach (Lawrence, R., Sebastianelli, R. & Kepler, C. 2000).

During the 1940s, Briggs and Myers developed and published their instrument, the Myers-Briggs Type Indicator ® **(**MBTI®) that identified 16 personality types (Saunders, 1995). Since then, the MBTI® has evolved and been perfected through continued test research (Myers & McCaulley, 1992; Schaubhut & Thompson, 2008). In keeping with type theory, the MBTI® classifies the individual on each index, and the four indices are combined to yield 16 individual composite types, e.g., ESTP, INTJ, and ESFJ.

Based on type theory, these preferences are fixed and should not vary with age or external conditions (Jung & Baynes, 1921; Kroeger & Thuesen, 1988; Myers & Myers, 1980; Myers& McCaulley, 1992). Jung argued that psychological type has a biological foundation, and Myers & Myers (1980) believed that preferences are inborn. Their theories of personality development are seen as increased differentiation and growth within a given type, rather than movement between different types.

3.2 Temperament Theory

Inspired by the work of Kretschmer and Spränger, the modern psychologists, David Keirsey and Marilyn Bates (1978) more fully developed descriptions of each MBTI® classification based upon their long-term clinical study of differences in temperament and character and noted the consistent tendency of human behavior to sort itself. Keirsey and Bates (1978) combined Kretschmer's temperament hypothesis, Jung's behavior description, and Nietzsche's Greek typology, and identified their own four patterns: sensing perceiver (SP): ISTP, ESTP, ISFP, and ESFP; sensing judger (SJ): ISFJ, ESFJ, ISTJ, and ESTJ; intuitive thinker (NT): INTP, ENTP, INTJ, and ENTJ; and intuitive feeler (NF): INFJ, ENFJ, INFP, and ENFP. They mapped patterns to the existing Myers-Briggs system and labeled the four basic temperaments as the artisan (SP), the guardian (SJ), the rational (NT), and the idealist (NF). Keirsey (1998) expanded the descriptions of the four temperament types based on an individual's preferred word usage (abstract versus concrete) and preferred tool usage (cooperative versus utilitarian.) The four temperaments were not simply arbitrary collections of characteristics but the interaction of the two basic dimensions of human behavior: communication and action, i.e., what people said and did.

3.3 Feeling and Thinking Preferences

An individual's decision-making strategy determines the preference of either "feeling" or "thinking." When making decisions, an individual with a preference for "thinking" (T) tends to focus on logic and analysis. An individual with a preference for "feeling" (F) tends to focus on human values and priorities, prefer ideals, are tolerant, and seek harmony. These preferences are both rational; i.e., they are more easily controlled and directed at will. Like the other preference, the synergy of the two result in a better outcome than reliance upon only one.

"Feelers" value interdependence and focus on others' needs as they make decisions or arrive at judgments. Attitudes typically developed from a preference for feeling include an understanding of people and a desire to affiliate with them, a desire for harmony, and a capacity for warmth, empathy, and compassion. "Feelers" strive for outcomes by the believed mission, ideal, or value bases in a situation or circumstance. These individuals are subjective about each situation, often see the exception to the rule, and treat people uniquely.

"Thinkers" value logical connections, put more weight on impersonal facts, and prefer to approach events and issues from an objective point of view.

Attitudes typically developed from a preference for thinking include impartiality, a sense of fairness and justice, and skill in applying logical analysis. "Thinkers" choose to decide things impersonally on analysis, principle, and science and use systems and models to support their decision-making. They value asking questions in their search for truth and use sound arguments to confirm their decisions. Their critical tough-mindedness allows them to beobjective and questioning resulting in "thinkers" being able to treat others fairly.

4. Literature Review

Type literature contains substantial research on how type preferences may be relevant to education. In the early 1960s, Sanford (1962) and Tyler (1964) found that students in a particular major shared certain personality traits which were significantly different from those in other majors. Goldschmid (1965) validated their research and further predicted college majors by personality tests.

Carland and Carland (1987) included gender differentiation in their research of business students. The personality types of female business students dominated with intuitive-feeling-judging (NFJ) and sensing-feeling-judging (SFJ), while male business students dominated with intuitive-thinking-perceiving (NTP), intuitive-thinking-judging (NTJ), sensing-thinking-perceiving (STP), and sensing-thinking-judging (STJ) types. Cooper and Miller (1991) found that a greater than expected number of female business students were extraverted-sensing (ES) types, and a lower than expected number was the introverted-intuitive (IN) type. Walck (1992) found that the business field attracted more intuitives (N) than sensors (S).

Although Nourayi and Cherry (1993) did not differentiate between male and females, they found that accounting students who had a preference for "sensing" academically outperformed those with a preference for "intuiting" in Tax, Auditing, and Intermediate IT college courses. Laribee (1994) found that while female accounting students were much less likely to be thinking than male accounting students, the difference decreased toward graduation. He also found that female accounting students had a significantly greater preference for thinking than did females college students in general (56% versus 32%). In 1995 Bayne (Järlström, 2000) found businessstudents' personality types were predominantly thinking-judging (TJ) and intuitive-thinking (NT).

Cano (1999) investigated the relationships between learning style and academic performance using the Myers-Briggs Type Indicator ®. The learning style of the 1994 incoming freshmen enrolled in the College of Food, Agricultural, and Environmental Sciences at Ohio State University, for the most part, were ST/NT. Lawrence, Sebastianelli, & Kepler (2000) learned more about the relationships between the personality traits of women and their choices of business majors. Female business students in the sample were more likely to be extroverted, sensing, feeling and judging (ESFJ), the most common personality type of all women in the United States

Bisping & Eells (2006) examined how personality type impacted student performance in introductory economics courses. Although a casual comparison of estimated coefficients across disciplines implied differences in the role of type in the two fields, these differences were not supported by formal testing. Fallan (2006) pointed out the relationship between personality types and the content of optional majors in business schools, but gender was no part of his study. According to Fallan (2006) sensing-judging (SJ) types preferred majors in accounting and taxation, auditing, economics and finance. Sensing-perceiving (SP) and intuitive-feeling (NF)types were more likely to enroll in majors where the subject emphasized people and human relations.

Type literature also contains research relating to how type preferences may be related to religion. Osborn and Osborn (1991) argued that psychological type theory helped Christians to identify and appreciate individual differences and gifting. Repicky (1981) argued that psychological type theory was useful as a tool for deepening awareness of God's gifts and grace, and Duncan (1993) argued that psychological type theory may be employed to enhance religious growth and development in response to God's calling.

In addition to these research studies, raw data exists for hundreds of college and university samples of personality types collected over the last 50 years. In 1962 Myers (1980) collected type data from the Wharton School of Finance and Commerce at the University of Pennsylvania, a public university. Demarest (1975) collected MBTI® data from incoming freshmen at Hope College, a private liberal arts Catholic college in Holland, Michigan. Demarest (1979) collected the same kind of data from Adrian College, a private, co-educational liberal arts college related to the United Methodist Church in Adrian, Michigan. Reichard & Uhl (1979) looked at the personality type of incoming freshmen at University of North Carolina, a public university in Greensboro.

Bourg (1982) did the same for freshmen (1979, 1980, 1981, & 1982) entering Nicholls State University, a public university located in Thibodaux, Louisiana. Provost (1984) collected MBTI® data from incoming freshmen at Rollins College, Florida, a private, coeducational liberal arts college located in Winter Park. Schroeder (1984) collected the same data from incoming freshmen at St. Louis University, a Jesuit University in St. Louis, Missouri. Jacobsen (1985) gathered data from freshmen at Rosemont College, a Catholic women's college in southeastern Pennsylvania. Storey (1982) gathered MBTI® data from freshmen students who entered between 1972 and 1982 at Berkshire Christian College, a conservative private liberal arts college in Pennsylvania; and Erich von Frange (1985) gathered MBTI® data from incoming freshmen who entered between 1975 and 1985 at Concordia College in Ann Arbor, Michigan.The type table of a college or university student population can provide information about the fields of study most likely to be popular, and the probable balance of student interest in the more academic versus more applied fields. Macdaid, McCaulley, & Kainz (1985) believed the more the focus on liberal arts, the more introverted and intuitive students are expected; technical and business schools are expected to have more sensing types; and religious schools are expected to attract more feeling types.

5. Research Methods

5.1 Survey Instrument

All of the students in the Rockhurst University sample took the MBTI® instrument, designed by Katharine Briggs and Isabel Myers and the most widely used personality assessment in the world (Schaubhut& Thompson, 2008). This psychometric questionnaire measures psychological preferences in how people perceive the world and make decisions. The instrument is not a test, no right or wrong answers exist, and all types add value to the world.

The students responded to items on Form M which was scored using item response theory (IRT), a method that provides a more precise indication of preferences than other scoring methods (Myers & McCaulley, 1992). The MBTI®, which is based on a conceptual schema modeled after Jungian typology, classifies people on the basis of their self-reported behavior, preferences, and value judgments into dichotomous categories along four dimensions: gaining energy: extraversion (E) or introversion (I); gathering information: sensing (S) or intuition (N); coming to a conclusion about that information: thinking (T) or feeling (F); and dealing with the external world: judging (J) or perceiving (P).

Keirsey and Bates' framework narrowed the 16 types into four temperaments: sensing-judging (SJ), sensing-perceiving (SP), intuitive-feeling (NF), and intuitive-thinking (NT). David Keirsey developed the Keirsey Temperament Sorter (KTS) which uses 70 MBTI-style questions to classify people according to the 16 MBTI types. Myers-Briggs' type and Keirsey's temperament have two different theoretical bases; however, the samewords used to describe type and temperament make for a common language (Keirsey & Bates, 1978). Of all the data referenced in this study, only the students (N=85) in the Lawrence, Sebastianelli, & Kepler (2000) study took the KTS; however, temperament could be gleaned for all of the other students from the MBTI® data.

5.2 Data Collection & Sample

The research sample consisted of 200 full-time students who were juniors and seniors in the ACSSB accredited Helzberg School of Management at Rockhurst University, a Jesuit university in Kansas City, Missouri. Of the 200 student sample, 59% (N=118) were male, and 41% (N=82) were female (See Appendix 1 & Appendix 2). These students had all self-selected business as their major by their junior year.

5.3 Reporting of Type Sample Data

- Whole type (ISTJ, ISFJ, INFJ, INTJ, ISTP, ISFP, INFP, INTP, ESTP, ESFP, ENFP, ENTP, ESTJ, ESFJ, ENFJ, ENTJ): total number and percentage of individuals of that type in the sample
- Preferences (I, E, S, N, T, F, J, P): total number and percentage of individuals of that type in the sample
- Attitude pairs (IJ, IP, EP, EJ): total number and percentage of individuals of that type in the sample
- Function pairs (ST, SF, NF, NT): total number and percentage of individuals of that type in the sample
- Focus of energy and perception pairs (IN, EN, IS, ES) total number and percentage of individuals of that type in the sample

- Judging and external orientation pairs (TJ. TP, FP, FJ): total number and percentage of individuals of that type in the sample
- Temperaments (SJ. SP, NF, NT): total number and percentage of individuals of that temperament in the sample
- Self-selection ratios: percentage of what types tend to be attracted to a base population

The degree of self-selection exercised by any type in these samples is indicated by the Self-Selection Ratio (SSR), the percentage frequency of that type in the sample divided by its percentage frequency in the appropriate base population. Applying Granade and Myers' (1987) Selection Ratio Type Table (SRTT), the author generated a frequency distribution of types for all of the type tables she used in the research. An SSR of less than 1.0 means a lower percentage of individuals of that type are in the research sample vs. the base population. An SSR around 1.0 means a nearly equal percentage and an SSR of more than 1.0 means a higher percentage of individuals of that type are in the research sample.

In this research, the author determined the SSR of the research samples against several appropriate base populations: United States general population; college and university; males and females; public university freshmen; Jesuit university freshmen; church affiliated university freshmen; male and female Jesuit university undergraduate business students; and male public university undergraduate business students. No base population could be found for female public university undergraduate business students. These self-selection (SSR) percentages helped to answer the following questions:

- What is the SSR of public university freshmen from the US population?
- What is the SSR of public university undergraduate business school students from male college students?
- What is the SSR of Jesuit university freshman from the US population?
- What is the SSR of Jesuit university undergraduate business student from Jesuit university freshmen?
- What is the SSR of male Jesuit undergraduate business school students from male college students?
- What is the SSR of female Jesuit university undergraduate business school students from female college students?

6. Results

6.1 Personality Type and Temperament Distribution

The normative data on the MBTI® indicates the approximate frequency of each preference in the United States population at large. A number of sources (Keirsey & Bates, 1978; McCaulley, Macdaid, & Kainz, 1985; Isachsen & Berens, 1991; Myers& McCaulley, 1992) estimated the following percentages: 70%-75% of the population prefers extraversion (E), with the remaining 25%-30% preferring introversion (I); 70%-75% prefers sensing (S), with the remaining 15%-30% preferring intuition (N); 50% prefers thinking (T), with the remaining 50% preferring feeling (F). The TF scale, however, also shows a reliable sex difference, with 60%-70% of men preferring thinking (T), and 60%-65% of women preferring feeling (F). Finally, 50%-65% of the population prefers judgment (J) with the remaining 35%-50% preferring perception (P). Only Hammer's (2003) study indicated different percentages: 46% extraversion and 53% introversion; 67% sensing and 33% intuiting; 53% thinking and 47% feeling (no gender difference); and 57% judging and 43% perceiving.

In this study the author began by comparing the type table of the freshman class at Jesuit universities against the freshman class at public universities and church-affiliated universities (see Table 1). When compared against the general population at large, all the universities had a freshman student total population with a higher percentage of feelers (public 68.71%; Jesuit 62.73%; church-affiliated non-Jesuit 74.02%) than the general population (59.9%) and all three shared the highest frequency of type (ENFP) unlike the general population where the ISTJ type had the highest frequency. The ENFP type is described as dynamic, enthusiastic, highly skilled with people, affirming, and gregarious. These people lead through their contagious enthusiasm for causes that further good and develop latent potential (Isachsen & Berens, 1988). They do not hesitate to get involved especially if it calls for the realization dreams and a better future for those involved. By virtue of their enthusiasm and accepting nature, they have the capacity to empathize and put themselves in others shoes (Kroeger & Thuesen, 1988). ENFPs are frustrated by criticism and cold logic, impersonal attitudes, and doing things by the book. In Howell's (2001) research, students typed Jesus as an ENFP.

The highest frequency of temperament was the NF temperament at both the Jesuit and church-affiliated universities; the SJ temperament was the highest frequency of temperament in the public university and general population samples (see Table 1). The NF temperament focuses on the abstract and "what ifs" of people while the SJ temperament focuses on the concrete and "what is" of the world. The NF temperament often speaks of emotion, the heart, and becoming all that one is capable of becoming. Since these people are all about caring and wanting to uncover meaning and significance in the world, it is understandable why Macdaid, McCaulley, & Kainz (1985) assumed more "feeling" types would be attracted to religious schools.

Next, the author compared the percentage of feelers in each of the business schools. Myers & Myers (1980), however, warned against looking at samples that were co-mingled and highly recommended that researchers compare samples of a homogenous gender, i.e., all males or all females. Based on this recommendation, the author separated the samples by gender when analyzing the personality type of the population of business schools.

The frequency of feeling types began to shift once freshmen and sophomore males declared a business major (see Table 2). Fewer feeling types were found in both the male public university business students' sample (31.4%) and the male Jesuit business students' sample (35.6%) than in either the general population of males (43.5%) or college & university males (43.49%) population which included both public and private schools.

Except for the general population sample whose highest frequency type was introverted-sensing-thinking-judging (ISTJ), the highest frequency type for all the male samples was extraverted-sensing-thinking-judging (ESTJ). This is quite fitting and supported by the findings in "Attractiveness of Business as a Field of Study to High School Seniors" (Myers & McCaulley, 1992) which indicated that business is more attractive to males with ES and ST types probably because these types find the activities of the career compatible with their type preferences. The ESTJs are task oriented and direct high levels of aggressive energy to planning, action, and implementing goals (Pedersen, 1993). They are efficient and get the job done in the most practical, logical time-efficient manner possible and enjoy structure, organization, and predictable routines. Traditional business values and rewards these preferences which, oftentimes, manifest themselves into strengths (Pedersen, 1993).

The highest frequency of temperament in all the groups was sensing-judging (SJ) except the Jesuit university males who differentiated themselves from the others with sensing-perceiving (SP) as their highest frequency. The SJ temperament prefers the concrete sensible world to the abstract theoretical world and discusses business topics like goods and services, credits and debits, prices and wages, and gains and losses (Keirsey, 1998). The SP temperament found in the male Jesuit undergraduate business students is quite different. Although concrete and sensible, this temperament usually talks about what is going on at the moment and what is immediately at hand; and conversation is filled with details but no planning. This temperament tends to be to be more experiential than theoretical in thought and speech and considers talking about anything abstract as idle chit chat and a waste of time (Keirsey, 1998).

Like the males, the frequency of female feeling types in the Rockhurst freshman class looked differently once the females declared business as a major (see Table 3). The percentage of feeling types in the female Jesuit university business students (46.3%) was significantly less than college & university females (71.93%), the general population (75.5%), and the females at an East Coast Jesuit business school (74.7%). The highest frequency type for all the female samples male peers, the highest frequency of temperament in all the female samples was sensing-judging (SJ).

6.2 Self-Selection Ratios

In exploring the hypotheses, adopting a reasonable estimate of the frequency to be expected for feeling types was necessary. Table 4 adopts for this purpose the frequencies found in the freshman classes at Jesuit universities.

The Jesuit university freshmen (N=550) who declare a business major have the highest self-selection ratios in three of the four ST personality types (ESTP 3.56; ISTP 1.83; and ISTJ 1.81). The ST combination is the one where the main objects of interest are the facts and may, in part, support the shift in personality types from feeling found in the freshmen to the more thinking types found in the business students. STs emphasize job specificity, factual details, control and certainty; work first, then the worker; and organizational goals, hierarchy, and stability. They value people who responsibly complete their work on schedule. All of these qualities and preferences lend themselves to the discipline of business.

The greatest contrast in this self-selection table is between the high incidence of feelers in the Jesuit university freshman class (62.73%) and a much lower incidence of feelers (40%) in the undergraduate business class.

Table 5 shows the self-selection of male undergraduate business school students from a sample of male college students (N= 5632). Differences did surface between the public and the Jesuit universities. The self-selection area for the public university undergraduate male business students was the ES quadrant plus the two IST types, which again is wholly suitable for a business major. The ST column is the one where the emphasis is on facts, approached with impersonal analysis. The ES quadrant is the most practical and realistic quadrant and the least given to intellectual abstractions. The strongest SSR was ESTP (2.00). The ST combination surfaced throughout the research. This was not the case, however, for the Jesuit university business school students. The degree of interest that male college students had in choosing business as a major at a Jesuit university was scattered. Nine of the 16 types showed positive self-selection: (3) _ST_, _NT_, (2) _NF_, and (1) ESFP. The distribution of types included 3 introverts and 5 extraverts; 4 sensors and 5 intuitives; 3 feelers and 6 thinkers; and 3 judgers and 5 perceivers.

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One noticeable difference was that a greater number of intuitive college males self-selected Jesuit business schools than students at the public university business schools where a greater number of sensing college males self-selected its business school. The strongest self-selection ratio (SSR) for the Jesuit male undergraduate business students was ENTP (1.93) in the male college student sample Although Walck's study (1992) found more intuitives (N) in business, the majority of research showed more sensing types in business schools (Myers & Myers, 1980) and more intuitive types in liberal arts schools (Macdaid, McCaulley, & Kainz, 1985). The weakest SSR was the INFJ for both the Jesuit and public university undergraduate business students.

Finally, the sample used for the males was replicated for the female sample of Jesuit university undergraduate business students (i.e., female college students N= 9615). Table 6 shows the self-selection area for the Jesuit university undergraduate female business students was (3) _ST _ and (3) EN__ types (1) INTP and (1) ISFP. Like the male public university business students, the positive self-selection was scattered.

However, the strongest self-selection ratio for Jesuit female business students was ESTP (1.93), unlike the ENTP (1.93) type of their male counterparts, and more like the ESTP (2.00) public university male who self-selected the public undergraduate business school. The ES combination lends itself to the more practical and realistic and the least given to intellectual abstractions. Both the female college students (ESTP) and the female Jesuit freshmen students who self-selected into the Jesuit business school (ESTP) shared the ST combination which is fully suited for business because it values productivity, efficiency, profitability, maximization of resources, statistical validation, empirical problem solving, thoroughness, and certainty.

7. Conclusion

The author was incorrect when she hypothesized that more feelers were attracted to Jesuit Universities than other universities and, furthermore, that more feelers selected Jesuit business schools over other business schools:

- The public universities had more feeling types in their freshman classes than did the Jesuit universities although not as many as the sample of non-Jesuit church affiliated universities.
- Fewer feeling types were found in the male public university business students sample and the male Jesuit business students sample than in either the general populations of males or college & university males.

- The percentage of feeling types in the female Jesuit university business students was significantly less than college & university females, the general population, and the females at an East Coast religious business school.
- The strongest self-selection ratio for Jesuit female business students was ESTP, unlike the ENTP type of their male counterparts, and more like the ESTP public university male who self-selected the public undergraduate business school.

8. Implications

The Jesuit universities' shared goal is to develop competent, compassionate, and committed leaders through a value-centered education. Other religious based universities are steeped in conscience and service as well. Macdaid, McCaulley, & Kainz (1985) might have assumed that more "feelers" would be attracted to religious schools since these individuals make their decisions on a value-based foundation. But this assumption may little to do with personality type or "feeling" and more about a philosophy and core beliefs. Many of the students that attend Jesuit schools have attended Catholic high schools where the belief and value system has been instilled in them. Their choice to attend Jesuit universities may be based more in wanting an environment that supports their tightly held religious beliefs more than any hard-wired personality type.

What the author thought was a preponderance of hard-wired "feelers" was a handful of "feelers" in a student body of human beings who were in the process of embracing and modeling the Jesuit mission of business education. Understanding this personality type research presents huge opportunities for Jesuit business education educators. The language of Jesuit business education is "feeling" in content and context. And whereas students with a feeling preference are hard-wired to embrace the Jesuit business education mission, students with thinking preference may not be as quick. Based on the conclusion that many thinkers appear to be feeling implies that thinking types can be taught to embrace the "feeling" laden Jesuit mission and language. Educators can use the Jesuit vernacular of both "thinking" and "feeling" to provide "thinking" students the opportunity to learn, embrace, and adapt the kinds of behaviors and beliefs embodied in their "thinking" paradigm.

Educators can teach all students to use both "feeling" and "thinking." Teaching "thinking" involves an impersonal analysis of cause and effect and the consequences of pleasant and unpleasant alternative solutions. Teaching "feeling" involves counting the full cost of everything on all stakeholders, not collectively, but individually

Educators can help students to evaluate and determine timing of critique and to explore others' underlying commitments. "Feelers" have the gift of knowing values and sense of mission but may need to learn to constructively detach and analytically evaluate action. Educators can help "feelers" evaluate worth and how to explore others' value systems including the logic for their points of view. "Thinkers" have the gift of evaluating frameworks and being precise; however, they may need to learn to challenge self-validated models and to accommodate very different views to become more fully engaged with Jesuit teachings.

Thinkers have the gift of analysis and critique but may need to learn a language that promotes constructive critique and support and validates emotions of others. Feelers have the aft of attending to an individual's needs but may need to learn when empathy and self-disclosure are appropriate and when critique is needed. As with all the other processes, connecting is important and knowing when to back off and give others space is of no less value.

Both "thinking" and "feeling" are ways of selecting what to do or not to do and are critical to making good decisions. Some students are more comfortable with impersonal, objective judgments and are less comfortable with personal value judgments. Others are more comfortable with value judgments and less comfortable with logic and objectivity. An educator's ability to facilitate the Jesuit business school mission using the language of both "feelers" and "thinkers" is the difference between using human intelligence and living in the dark.

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Table 1: Personality Type & Temperament of Jesuit University Students Compared to Public University Students (Freshmen)

School	% of Feeling type	Highest frequency type	Highest frequency temperament	Source
Public University Freshmen N=10342	68.71	ENFP	SJ	Grant 1965
Jesuit University Freshmen N=550	62.73	ENFP	NF	Schroeder 1984
Church-Affiliated University Freshmen (non-Jesuit) N=1505	74.02	ENFP	NF	Demarest 1975
General Population	59.90	ISTJ	SJ	Hammer 2003

Table 2: Personality Type & Temperament of Jesuit University Business Students Compared to Public University Business Students (Undergraduate Males)

School	% of Feeling type	Highest frequency type	Highest frequency temperament	Source
General Population (Males)	43.50	ISTJ	SJ	Hammer 2003
College & University (Males) N=5632	43.39	ESTJ	SJ	Myers & McCaulley 1992
Public University Business School (Males) N=488	31.40	ESTJ	SJ	Myers & Myers
Jesuit University Business School (Males) N=118	35.60	ESTJ	SP	Lampe 2011

Table 3: Personality Type & Temperament of Public University Business Students Compared to Jesuit University Business Students (Undergraduate Females)

School	% of Feeling type	Highest frequency type	Highest frequency temperament	Source
General Population (Females)	75.50	ESFJ	SJ	Hammer 2003
College & University (Females) N=9615	71.93	ESFJ	SJ	Myers & McCaulley 1992
Rockhurst University Business (Jesuit) (Females) N=82	46.30	ESTJ	SJ	Lampe 2011
East Coast Jesuit University Business School (Females) N=80	74.70	ESFJ	SJ	Lawrence, Sebastianelli, & Kepler, 2000

Table 4: Self-Selection of Jesuit University Freshmen into the Jesuit Undergraduate Business School

School	Jesuit University Freshmen SSR	Jesuit University Freshmen Strongest SSR	Jesuit University Freshmen Weakest SSR
Jesuit University Undergraduate Business Students	(3) _ST_	ESTP (3.56)	INFJ (0.19)

Table 5: Self-Selection of Male College Students into Public University & Jesuit University Undergraduate Business Schools

School	Male College Students SSR	Male College Students Strongest SSR	Male College Students Weakest SSR
Public University Undergraduate Business Students (Males)	ES quadrant (2) IST	ESTP (2.00)	INFJ (0.07)
Jesuit University Undergraduate Business Students (Males)	(3)_ST_, _NT_ (2)_NF_	ENTP (1.93)	INFJ (0) INTP (0)

Table 6: Self-Selection of Female College Students into Public University & Jesuit University Undergraduate Business Schools

School	Female College Students SSR	Female College Students Strongest SSR	Female College Students Weakest SSR
Female Jesuit University Business Students	(3) _ST _ (3) EN_ _ (1) INTP (1)ISFP	ESTP (3.8)	ESFP (0) ENTP (0) INTJ (0)

Appendix 1

Helzberg School of Management
Rockhurst University
Undergraduate Business Students
Females
N=82
SSR against female college students (N=9615)

ISTJ N=12 14.63% SSR=2.43	**ISFJ** N=2 2.43% SSR=0.20	**INFJ** N=2 2.43% SSR=0.64	**INTJ** N=0 0% SSR=0.00
ISTP N=2 2.43% SSR=0.78	**ISFP** N=6 7.31% SSR=1.19	**INFP** N=2 2.43% SSR=0.42	**INTP** N=2 2.43% SSR=1.25
ESTP N=8 9.75% SSR=3.80	**ESFP** N=0 0% SSR=0	**ENFP** N=12 14.63% SSR= 1.19	**ENTP** N=0 0% SSR=0
ESTJ N=14 17.07% SSR=2.27	**ESFJ** N=8 9.75% SSR=0.60	**ENFJ** N=6 7.31% SSR=1.06	**ENTJ** N=6 7.31% SSR=2.56

Type	N	%
E	54	65.9
I	28	34.1
S	52	63.4
N	30	36.6
T	44	53.6
F	38	46.3
J	50	89.5
P	32	39.1
IJ	16	19.5
IP	12	14.6
EP	20	24.4
EJ	34	41.5
ST	36	43.9
SF	16	19.5
NF	22	19.5
NT	8	17.1
SJ	36	43.9
SP	16	19.5
NP	16	19.5
NJ	14	17.1
TJ	32	39.1
TP	12	14.6
FP	20	24.4
FJ	18	21.9
IN	6	7.3
EN	24	29.2
IS	22	26.8
ES	30	36.6
ET	28	34.1
EF	26	31.7
IF	12	14.6
IT	16	19.5
Temperament		
NF	22	19.5
NT	8	17.1
SJ	36	43.9
SP	16	19.5

Appendix 2

Helzberg School of Management
Rockhurst University
Undergraduate Business Students
Males
N= 118
SSR against male college students (N=5632)

ISTJ N=8 6.77% SSR=0.75	**ISFJ** N=6 5.08% SSR=0.96	**INFJ** N=0 0% SSR=0.00	INTJ N=6 5.08% SSR=1.18
ISTP N=10 8.47% SSR=1.25	**ISFP** N=2 1.69% SSR=0.33	**INFP** N=8 6.77% SSR=1.16	**INTP** N=0 0% SSR=0.00
ESTP N=14 11.86% SSR=1.84	**ESFP** N=10 8.47% SSR=1.57	**ENFP** N=10 8.47% SSR=1.13	**ENTP** N=14 11.86% SSR=1.93
ESTJ N=16 13.55% SSR=1.21	**ESFJ** N=4 3.38% SSR=0.51	**ENFJ** N=2 1.69% SSR=0.46	**ENTJ** N=8 6.77% SSR=1.26

Type	N	%
E	39	66.1
I	20	33.9
S	35	59.3
N	24	40.6
T	38	64.4
F	21	35.6
J	25	42.3
P	34	57.6
IJ	10	16.9
IP	10	16.9
EP	24	40.7
EJ	15	25.4
ST	24	40.7
SF	11	18.6
NF	10	16.9
NT	14	23.7
SJ	17	28.8
SP	18	30.5
NP	16	27.1
NJ	8	13.5
TJ	19	32.2
TP	19	32.2
FP	15	25.4
FJ	6	10.1
IN	7	11.8
EN	17	28.8
IS	13	22
ES	22	37.2
ET	26	44
EF	13	22
IF	8	13.5
IT	12	20.3
Temperament		
SJ	17	28.8
SP	18	30.5
NF	10	16.9
NT	14	23.7