

**RELATIONSHIP BETWEEN PREFERENCE TYPES AND JOB
CLASSIFICATIONS IN PUBLIC HORTICULTURE**

by

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ACKNOWLEDGMENTS

I wish to thank the members of my thesis committee, Barbara Kelly, James Swasey, and Kiran Taunk, for their time, guidance, and support. They assisted in refining and keeping my thesis within realistic boundaries.

I would also like to express my appreciation to the directors and staff of Longwood Gardens, Morris Arboretum, Scott Arboretum, and Tyler Arboretum who volunteered to participate in my research. I could not have done this thesis without them.

My gratitude also goes to Jean Stokes who gave me a direction and inspiration when I needed it, and to Gerry McDaid who assisted with the data analysis.

I would also like to express my appreciation to the Longwood Foundation who has made this thesis and my training in Public Horticulture possible.

Lastly, but most importantly, I would like to express my deep appreciation to my parents, Janiece and Philip Goin, for their never failing love, encouragement, belief, and Christian example, and to the Lord who gave me new life and the abilities and talents I have.

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ABSTRACT

The purpose of this research was to measure the relationship between employee preference types and their respective job classifications in public horticulture. Preference types were determined by the Myers Briggs Type Indicator (MBTI).

Past and current research indicates that certain preference types gravitate to particular jobs due to type strengths, likes and preferences. By learning about preference types, staff in public horticulture can improve employee interpersonal relations, productivity, individual understanding, and decrease conflict and stress.

The MBTI was given to staff who volunteered to participate in this research from Longwood Gardens, Morris, Scott, and Tyler Arboreta.

The results show that certain preference types seem to be attracted to particular job classifications in public horticulture. There are preference differences between the individual job classifications which could cause miscommunication and conflict; therefore, it is important to understand the differences to be effective managers and employees.

Chapter 1

INTRODUCTION

The purpose of this research was to measure the relationship between employee preference types and their respective job classifications in public horticulture. Preference types were determined by the Myers Briggs Type Indicator (MBTI). The investigator obtained certification to administer and analyze the MBTI from the Otto Kroeger Association located in Fairfax, Virginia. A copy of the MBTI certificate may be found in Appendix A (page 32).

Past and current research indicates that certain preference types gravitate to particular jobs in some disciplines due to type strengths, likes, and preferences and this research tested this theory in public horticulture. Preference type is defined as the way people prefer to look at the external world, perceive information, make decisions, and live a lifestyle. Type theory states that people have characteristics which can be described and categorized into sixteen different types (Myers 1985).

The MBTI is based on Carl Jung's theory of psychological type, which states, "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 judgement" (Myers and McCaulley 1990, 1). The categories he proposed were based on preferences related to our personality. Jung also reported that personality type is innate and set as a small child. His theory is stated and discussed in his book, Psychological Types 1923.

Katherine Briggs and her daughter Isabel Briggs Myers, independent of Jung, classified their family, friends, and other people they knew in the United States based on personality differences. After studying Jung's work, they developed the MBTI as a tool to identify individual preference differences and types. There are four preference pairs:

Extrovert (E) - Introvert (I)
 Sensing (S) - Intuition (N)*
 Thinking (T) - Feeling (F)
 Judging (J) - Perceiving (P)

*Intuition is denoted by "N", since "I" is the symbol for introverts.

In their book Type Talk, Otto Kroeger and Janet Thuesen define the personality preferences as the following:

Extroverts (E) gain their essential stimulation from the outer world of people and things.

Introverts (I) gain their essential stimulation from the inner world of thoughts and reflections.

Sensors (S) take in information by way of the five senses - sight, sound, feel, taste, and smell.

Intuitives (N) process information by way of a "sixth sense" or suppositions.

Thinkers (T) make decisions based on logic and objective values.

Feelers (F) make decisions based on personal and subjective values.

Judgers (J) are decisive, planned and orderly.

Perceivers (P) are flexible, adaptable, and spontaneous.

These preference alternatives may be compared to being right or left handed. A person uses both hands, but usually prefers one over the other. In the same way, a person uses both sides of the preference alternatives, but usually prefers one side over the other (Kroeger with Thuesen, 1992).

Investigators may find differences in preference types, which if found, may help people understand themselves and others and they could begin to work positively with the differences. Directors in public horticulture would be able to understand personal preferences and learn where potential conflicts lie between the director and the other job classifications. Directors may make adjustments in work atmosphere and personal style by identifying potential differences and conflicts which could result in a more effective work environment. This understanding may improve employee interpersonal relations, productivity, individual understanding, and decrease conflict and stress.

By dramatically improving communication and understanding, Typewatching will allow you to draw on your own organizational and individual strengths. With relatively little effort Typewatching permits intractable people problems to get resolved, longtime squabbles between departments to get ironed out, work-flow logjams to unclog, and chronically missed deadlines to get met. We've seen it happen time after time with our clients, which include Fortune 500 companies such as Marine Midland Bank, AT&T, IBM, Ford Motor Company, and Bell Atlantic; government agencies, including all four branches of the U.S. armed forces; and many smaller entrepreneurial firms (Kroeger with Thuesen, 1992, 8).

Type theory can help in managing conflict since many conflicts originate due to preference type differences (Kroeger, Thuesen 1992). The work place can be made more suitable for the variety of preference types to assist in managing conflict.

Two independent studies, completed by Nassar and Johnson (1990) and Potier-Brown (1993) using landscape architects as samples, reported that "the sample tended towards intuition, thinking, and judging" (Nassar and Johnson 1990, 105) and "Compared to a general population sample, Landscape Architects reported significantly greater MBTI preferences for introversion, intuition, thinking, and judging" (Potier-Brown 1993, ix). According to the Center for Applications of Psychological Type (CAPT) in Florida, the largest MBTI data bank in North America, no other research on the relationship of preference type in public horticulture exists among their data (McDaid 1993).

This research will attempt to answer the following questions:

1) Is there a relationship between employee preference types and their respective job classifications in public horticulture?

2) Where would the greatest potential of mis-communication and conflict occur between the job classifications sampled in this research based on preference types?

3) Is there a relationship between Longwood Graduate Program Fellows preference types and the job classifications they are most likely to enter?

4) Are there preference type differences between the four gardens that participated in this research?

The information obtained by answering the above questions may assist staff at all levels in public horticulture in understanding their own preferences, employee interpersonal relations, and ways to increase communication effectiveness and productivity, and decrease conflict and stress.

Many large organizations (IBM, DuPont, United States military) are trying to improve their employee relations by using the MBTI as well as other personality indicators and team building tools. Not-for-profits do not seem to be leading in this area based on conversations with directors of botanical gardens and arboreta. They include:

1. Money is not allocated for employee development or enhancement.
2. Changes may not be seen as necessary.
3. Not-for-profit organizations have less emphasis on the bottom line than for-profit organizations.
4. The organization may have a small staff and see these tools as only needed by

large organizations. 5. The strengths of public gardens lie in horticulture and not necessarily in business and personnel management.

It is important as resources decrease and government control increases, to bring the preference type differences to the awareness of directors, boards, and staff of not-for-profit organizations to assist them in understanding their own preferences, employee interpersonal relations, and ways to increase communication effectiveness and productivity, and decrease conflict and stress.

Chapter 2

PROCEDURES

Approval for administering the MBTI survey was granted by the University of Delaware Human Subjects Review Board on February 18, 1993. See Appendix B for a copy of the approval letter. The MBTI certification qualifying class was completed at Otto Kroeger Association by the author February 15-19, 1993. Refer Appendix A for a copy of the MBTI certificate.

One hundred individuals participated in this research. They included Longwood Graduate Program Fellows, employees, and interns who volunteered to take the MBTI from Longwood Gardens, and the Morris, Scott, and Tyler Arboreta.

The MBTI Form G with 126 multiple choice answers was used to identify individual differences. The MBTI Score Sheet Form G, a single page having a bubble answer format, was used to record the answers. Refer to Appendix C for a sample. Validity and reliability of MBTI reporting have been shown in numerous studies found in the MBTI Manual (Myers and McCaulley, 1990).

The Longwood Graduate Program Fellows served as the pilot group for this research. They completed the MBTI and the author hand scored the results and conducted a follow-up workshop.

Four public garden directors consented to provide access for their employees to voluntarily participate in this research. After gaining the directors' approval, a preliminary memo explaining this research and the MBTI was sent to Longwood Gardens, Morris, Scott and Tyler Arboreta. The author administered the MBTI at three of the gardens, whereas the questionnaires were mailed to the fourth garden and the completed answer sheets were returned to the author for scoring.

Answer sheets were hand scored and assigned a number to insure confidentiality. A list of the answer sheet number, job title, and preference type was made to sort anonymously the preference types of the job classifications. The original answer sheets were locked in a file in the University of Delaware Longwood Graduate Program office.

A follow-up workshop was presented to the volunteer participants at each of the four gardens. The follow-up workshop included an introduction and explanation of the MBTI and an interpretation of individual results. Each participant was given an individual result sheet, resources to read, and time for questions.

The data were sorted into the different job classifications and type tables were developed for the different job classifications. A type table consists of the sixteen different preference types where the number of subjects in each type was recorded. Refer to Appendix D (page 37) for an example. The type tables were then forwarded to CAPT for data analysis using the Chi Square formula, for sample sizes of six or more, or Fishers Exact Probability formula, for sample sizes of five or less. CAPT, located in Gainesville, Florida, assists with research, training, and publications to support the MBTI. CAPT generated Selection Ratio Type Tables (SRTT) from the type tables for each job classification, the four gardens, and the total public horticulture sample. A self selection ratio is computed by dividing the percentage of the type in the sample by the percentage of the type in the base population. Refer to Appendix E for a more detailed explanation and the CAPT SRTTs.

When the self selection ratio (I) is greater than 1.00, there are more people in that type than expected from their numbers in the base population (a positive selection). If the index is less than 1.00, there are fewer people in that type than expected (a negative selection). When the self selection ratio is equal to or near 1.00, that type is similar to the base population with which it is being compared. For the purpose of this research, a positive selection has a ratio of 1.16; a negative selection has a ratio of 0.84; and a similar selection has a ratio of 0.85 to 1.15. A positive selection means there may be an attraction of that

particular type to that job classification. A negative selection means that there may be an absence of that type in the job classification.

Chapter 3

RESULTS AND DISCUSSION

Some preference types tend not to volunteer for this type of activity; therefore, the data may have some biases which could not be controlled.

A positive (above 1.00) or negative (less than 1.00) self selection ratio for a preference type in each job classification will answer two research questions, "Is there a relationship between employee preference types and their respective job classifications in public horticulture?" and "Where would the greatest potential of mis-communication and conflict occur in the individuals sampled in this research based on preference types?" Table 1.1 summarizes the self selection ratios computed for each job classification and shows the preference type of each job classification as: Director (ENTJ), Gardener (IS--), Education (ENFP), Public Relations (ENFJ), Business (I-F-), Supervisor (EST-), Maintenance (ISTP), Secretarial (E-FJ), Research (ISTJ), and Longwood Graduate Fellows (-NFP). The dashes represent no selection for either preference on that particular scale.

The two preferences on the same scale, i.e., extroversion and introversion, have the highest potential of disagreement because the two types are working from two different points of view even in the same problem or situation.

Table 1.1 Self Selection Ratio Comparing Job Classification to Total Public Horticulture Sample

	E	I	S	N	T	F	J	P
DIRECTOR	1.96	0.00	0.54	1.39	1.75	0.00	1.61	0.00
GARDENER	0.51	1.51	1.31	0.72	0.99	1.01	1.05	0.92
EDUCATION	1.31	0.68	0.36	1.54	0.29	1.94	0.67	1.54
PUBLIC RELATIONS	1.96	0.00	0.54	1.39	0.88	1.16	1.21	0.66
BUSINESS	0.78	1.22	1.09	0.93	0.88	1.16	1.13	0.79
SUPERVISOR	1.18	0.82	1.52	0.56	1.58	0.23	1.13	0.79
MAINTENANCE	0.65	1.36	1.21	0.82	1.56	0.26	0.90	1.17
SECRETARIAL	1.47	0.51	1.09	0.93	0.44	1.74	1.21	0.66
RESEARCH	0.78	1.22	1.30	0.74	1.75	0.00	1.29	0.53
LONGWOOD FELLOWS	1.05	0.95	0.58	1.36	0.82	1.24	0.65	1.58

The self selection ratios from Table 1.1 show that there is a relationship between job classification and preference type. The job classifications with higher self selection ratios for extroversion (E) are directors (1.96), education (1.31), public relations (1.96), supervisor (1.18), and secretarial (1.47). Job classifications with higher self selection ratios for introversion (I) include gardeners (1.51), business (1.22), maintenance (1.36), and research (1.30).

The extroverts (E), such as supervisors, may tend to talk first and think later, and "talk out" their ideas before coming to a decision. They may not mind reading or having a conversation while there is other activity going on (including other conversations or radio) in the background. They may be approachable and easily engaged by friends, co-workers, and strangers, though perhaps somewhat dominating in a conversation. They find telephone calls to be welcome interruptions and they do not hesitate to pick up the phone (or drop in on someone) whenever they have something to say. They enjoy going to meetings and tend to let their opinion be heard; in fact they may feel frustrated if not given the opportunity to state their point of view. They prefer generating ideas with a group rather than alone, and may feel drained if they spend too much time in reflective thinking without being able to bounce their thoughts off others. They need affirmation from colleagues, superiors, and subordinates about how they are, what they do, how they look, and just about everything else; they may think they are doing a good job, but until they hear someone tell them, they do not truly believe it.

The introverts (I), such as gardeners, rehearse things before saying them and prefer that others would do the same, they often respond with "I'll have to think about that" or "Let me tell you later." They enjoy the peace and quiet of having time alone, and may find their private time too easily invaded and tend to adapt by developing a high power of concentration that can shut out nearby

conversations, ringing telephones, and the like. They are perceived as "a great listener" but feel that others take advantage of and run over them. They may come across to others as somewhat reserved and reflective. They may wish that they could get their ideas out more forcefully and may resent those who interject with what they were just about to say. They like stating thoughts or feelings without interruptions and they allow others to do the same in the hope that reciprocation will occur when it comes time for them to speak. They need to "recharge" alone after they have spent time in meetings, on the phone, or socializing; the more intense the encounter, the greater the chance they will feel drained afterward. They believe that "talk is cheap," and may be suspicious if people are too complimentary or may become irritated if something is repeated that's already been said by someone else. The phrase "reinventing the wheel" may occur to them as they hear others deliberating.

Based on the above descriptions, the extroverted supervisor needs to be aware that the introverted gardeners need quiet reflective time, listening time, less need of repeated praise, and dislike of repeatedly discussing the same thing. The extroverted supervisor also needs to be aware of how much conversation time they control, how often the introverted gardeners are interrupted, how phone calls are handled for them, how much time they have to internalize a problem or situation to work through it alone, and through what avenues an introvert's ideas are being shared. The extroverted supervisor needs to minimize the times they interrupt,

call, or unexpectedly visit the introverted gardener. The introverted gardener may be more productive when left alone, and when they have their own personal space. An extroverted supervisor may need a more open area to be able to interact with others easily.

The introverted gardeners need to be aware of how much they are saying or not saying, and the potential of being perceived as aloof and reserved. They also need to realize the need of extroverts for a sounding board of ideas and the need for complements and praises. The introverts need to speak up and share ideas even though they may not be fully developed.

The job classifications with higher self selection ratios for sensing (S) are gardeners (1.31), supervisor (1.52), maintenance (1.21), and research (1.30). The job classifications with higher self selection ratios for intuition (N) are director (1.39), education (1.54), public relations (1.39), and Longwood Graduate Fellows (1.36).

The sensors (S), such as maintenance staff, will prefer specific answers to specific questions. They like to concentrate on what they are doing at the moment and generally do not wonder about what's next, and would rather do something than think about it. They find most satisfying those jobs that yield some tangible results. They believe that "if it ain't broke, don't fix it" and do not understand why some people have to try to improve everything. They would rather work with facts and figures than ideas and theories, and like to hear things

sequentially instead of randomly. They read reports from front to back and do not understand why some people prefer to dive into them anywhere they please. They may be frustrated when people do not give them clear instructions or when someone says, "Here's the overall plan-we'll take care of the details later."

The intuitives (N), such as directors, will tend to think about several things at once, and may be accused by colleagues of being absentminded. They find the future and its possibilities more intriguing than frightening, and believe that details are boring. They may believe that time is relative, so no matter what the hour, they are not late unless the meeting has started without them. They find themselves seeking the connections and interrelatedness behind most things rather than accepting them at face value, and ask "What does that mean?" They tend to give general answers to questions, and may be irritated when people push them for specifics.

The intuitive directors need to plan the visions, the future, and the broad picture, and give purpose for doing things, but not ignore the present reality in the process. They need to keep in mind that the sensing maintenance staff will want specific directions, tangible projects, facts and figures, details, and well thought out reasons for change.

The sensing maintenance staff will need to use their preference for the present crucial facts and figures to keep the intuitive director on track and actually moving and completing a project rather than just dreaming about it. The sensing

maintenance staff also need to realize that the intuitive director will want the broad overlying picture, the general theories, the vision, and the reason for a project before the details. When an intuitive director presents a project/problem to a sensing maintenance staff, they should remember that the sensor wants details and a specific plan showing how it will be completed. When a sensing maintenance staff person presents a project/problem to an intuitive director they need to remember that the intuitive will want the broad general overview first. When beginning a project the intuitive director will want to brainstorm and dream and select the "best" option. The sensing maintenance staff will want to start working and tend to just pick something so "we are not wasting time on this dreaming stuff." Both types need each other - one to lead the way, the other to get there.

The job classifications with higher self selection ratios for thinking (T) are director (1.75), supervisor (1.58), maintenance staff (1.56), and research (1.75). The job classifications with higher self selection ratios for feeling (F) are education (1.94), public relations (1.16), business (1.16), secretarial (1.74), and Longwood Graduate Fellows (1.24).

Thinkers (T), such as researchers, may be more likely to stay cool, calm, and objective in situations when everyone else is upset. They would rather settle a dispute based on what is fair and truthful than on what will make people happy. The thinkers enjoy proving a point for the sake of clarity, and it is not beyond them to argue both sides in a discussion simply to expand their intellectual

horizons. They are more firm-minded than gentle-hearted, and if they disagree with people they would rather tell them than say nothing and let them think they are right. They think it is more important to be right than liked, and do not believe it is necessary to like people in order to be able to work with them and do a good job. They also are impressed with and lend more credence to things that are logical and scientific.

Feelers (F), such as secretaries, consider a "good decision" one that takes others feelings into account. They may overextend themselves meeting other people's needs, and will do almost anything to accommodate others, even at the expense of their own comfort. They put themselves in other people's shoes, and are likely to be the one in a meeting who asks "How will this affect the people involved?" They may find themselves wondering "Doesn't anyone care about what I want?", although they may have difficulty actually saying this to anyone. They will not hesitate to take back something they have said that they perceive has offended someone, and as a result may be accused of being undecided. They prefer harmony over clarity, and are embarrassed by conflict and will either try to avoid it or smother it.

The thinking researchers need to keep other people in mind as they go about their decisions and meetings. They may want to ask themselves, "How will this affect the people involved?" They need to remember that others may perceive them as cold and uncaring even though they are not. As decisions are being made,

the thinkers need to be aware of how they are affecting others, not just the bottom line.

The feeling secretaries need to remember that the thinkers will be making decisions based on facts and figures and may not be emphasizing the effects it may have on people. They need to be objective and realize that decisions and some remarks may not be personally aimed to hurt them, but just matter of fact general decisions and comments.

The job classifications with higher self selection ratios for judging (J) are director (1.61), public relations (1.21), secretarial (1.21), and research (1.29). The job classifications with higher self selection ratios for perceiving (P) are education (1.54), and Longwood Graduate Fellows (1.58).

The judgers (J), such as public relations staff, may find themselves waiting for others, who never seem to be on time. They have a place for everything and are not satisfied until everything is in its place. They "know" that if everyone would simply do what they were supposed to do (and when they were supposed to do it), the world would be a better place. When they wake up in the morning, they know fairly well what their day is going to be like, and they have a schedule and follow it and can become unraveled if things do not go as planned. They do not like surprises, and make this well known to everyone. They keep lists and use them, and if they do something that is not on the list, they may even add it to the list just to cross it off. They thrive on order, and have a special system for

keeping things on the desk, in the files, and on the walls. They may be accused of being angry when they are only stating their opinion. They like to work things through to completion and get them out of the way, even if they know they are going to have to do it over again later to get it right.

The perceivers (P), such as educators, are easily distracted, and can get "lost" between the front door and the car. They love to explore the unknown, even if it is something as simple as a new route home from work. They may not plan a task but wait and see what it demands, and may be accused of being disorganized, although they know better. They depend on last-minute spurts of energy to meet deadlines, and usually make the deadline, although they may drive everyone else crazy in the process. They do not believe that "neatness counts" even though they would prefer to have things in order, but what is important is creativity, spontaneity, and responsiveness. They turn most work into play, if it cannot be made into fun, it probably is not worth doing. They may change the subject often in conversations, and the new topic can be anything that enters their mind or walks into the room. They do not like to be pinned down about most things, and would rather keep their options open. They tend to make things less than definite from time to time, but not always - it depends.

The judging public relations staff need to realize that the perceiving educators need some freedom and creativeness in their work. The perceivers need to know the deadlines, and then have the freedom to complete the project in their

own style, which may seem disorganized, at best, to the judger. The perceivers need continued challenges and possibilities. The perceiving educators may have a solution that may seem out of this world, and no one else thought of it, but it may work out the best.

The perceiving educators need to remember that the judging public relations staff need to know that there is some order and stability to the projects that the perceivers are completing. They also need to remember the judging public relations staff members need for timeliness and neatness. In a meeting, the judging public relations staff will want to quickly come to a conclusion and plan, and the perceiving educator will want to keep the options open and investigate all of the possibilities. They will frustrate each other unless they are able to determine which decisions must be made immediately and those that could use more research and take more time. The judging public relations staff needs to make sure the perceiving educator knows what the deadlines are for printing and press releases and then let the educator do their own research and writing in their own style. The perceiving educator needs to make sure they meet deadlines and remember the judging public relations need for orderliness, neatness, and timeliness.

As previously stated, the next question was, "Is there a relationship between Longwood Graduate Program Fellows preference types and the job classifications they are most likely to enter?"

Table 1.2 Self Selection Ratio Comparing Longwood Graduate Fellows to Base Population

BASE POPULATION	E	I	S	N	T	F	J	P
DIRECTOR	0.53	0.00	1.07	0.98	0.47	0.00	0.40	0.00
EDUCATION	0.80	1.40	1.60	0.88	2.80	0.64	0.96	1.03
PUBLIC RELATIONS	0.53	0.00	1.07	0.98	0.93	1.07	0.53	2.40
FOREMAN	0.89	1.17	0.38	2.44	0.52	5.33	0.57	2.00

As seen in Table 1.1, the Longwood Graduate Program Fellows preferred Intuition, Feeling, and Perceiving compared to the total horticulture sample. The director and public relations samples were small and had 100% of one type for a few of the preference scales which caused them to show both preferences lower than one, such as, the director's extrovert 0.53 and introvert 0.00 scale. The Longwood Fellows were compared to the horticultural director, educators, public relations, and supervisor (Table 1.2). The self selection ratio that is nearest to 1.00 will show which job classification is similar to the Longwood Graduate Fellows type. The Longwood Fellows type is similar to the job classification and types respectively of: Directors S/N; Education J/P; Public Relations S/N, T/F; and Supervisor E/I. The Fellows are most similar to the

Public Relations staff with two preference scales in this comparison, but when Table 1.1 is analyzed, the Longwood Fellows type of -NFP matches the Education type of ENFP. The Fellows have at least one or more preferences in common with their potential job classifications. Each of the Fellows have preferences for certain job classifications, and since the Fellows have varied types, it follows that there would be at least some similarity between the Fellow types and job classification types listed.

The last question which was raised was, "Are there preference type differences between the four gardens that participated in this research?" Since not all of the employees participated from each of the gardens, it is difficult to make accurate descriptions of each of the gardens. Only a generalized description of the employees who participated from each garden can be made.

Table 1.3 Self Selection Ratio Comparing Four Sample Gardens to Total Public Horticulture Sample

	E	I	S	N	T	F	J	P
GARDEN 1	0.94	1.0	1.29	0.75	1.10	0.86	1.08	0.88
GARDEN 2	1.12	0.87	0.93	1.06	0.75	1.33	0.92	1.13
GARDEN 3	1.0	0.94	0.92	1.07	1.08	0.89	1.18	0.71
GARDEN 4	0.87	1.13	1.09	0.93	1.07	0.90	0.99	1.02

Refer to Table 1.3 for a summary of the gardens which were compared. The staff who participated in this research from Garden #1 have a positive selection for Sensing. They may tend to be doers and not dreamers. They may need some intuitive guidance from their director, which they may be receiving since three out of four of the directors are intuitives (Appendix E). Garden #2 has a positive selection for Feelers. They probably have the visitors' needs and wants foremost in their mind. They may need a thinker, which the directors are, to keep them focused on the budget and other factual information. Garden #3 has a positive selection for Judgers. They may be making decisions quickly and keeping everything listed, recorded, and organized, but may not be gathering all of the information they need to make the best decision. They may need a perceiver to slow down decision making and to look at all of the possibilities. The directors are not perceivers, so they will need to assume that role, or make sure a perceiver is included in the decision making process.

The total public horticulture sample was compared to four other populations to determine any differences. It was compared to high school students from Pennsylvania from CAPT Atlas of Type Tables #8631300, which is considered typical of the total United States population; Landscape Architects from Potier-Brown Dissertation; Farmers from CAPT Atlas of Type Tables #8629385; and Business: General, Self-employed from CAPT Atlas of Type Tables #8629307.

Table 1.4 Self Selection Ratio Comparing Public Horticulture Sample to Base Population

BASE POPULATION	E	I	S	N	T	F	J	P
HIGH SCHOOL STUDENTS	0.79	1.39	0.68	1.69	1.20	0.82	1.14	0.84
LANDSCAPE ARCHITECTS	1.13	0.89	1.35	0.82	0.74	1.84	0.93	1.14
FARMERS	0.99	1.01	0.60	2.29	0.80	1.47	1.06	0.91
BUSINESS	0.90	1.13	0.85	1.17	0.98	1.03	1.03	0.95

In summary, Table 1.4 indicates that the total public horticulture sample has a positive selection for INT- compared to the high school population. The horticulture field may need to evaluate how they are serving and are perceived by their visitors. As introverts, they may not be interacting enough with the extroverted visitors, which will not encourage them to return. The extroverts want to talk and be involved with their external world. The intuitive horticulture field may have great concepts and theories, but may not be breaking them down into practical, understandable pieces for their sensing visitors. As thinkers, the horticulturists field may be running a "tight ship," but may not be showing the concern, warmth, and amenities a feeling visitor would want.

The horticulture sample has a positive selection for -SF- compared to landscape architects. Landscape architects were reported as -NT- compared to the general population by Nassar and Johnson, and Potier-Brown, which is the same as public horticulture in the previous paragraph. Public horticulture is less -NT- than Landscape architects and shows a selection for -SF- when they are compared. Public horticulture has to be doing present, practical projects to be encouraging the public to visit, and seems to be more concerned about the visitor.

Public horticulture has a positive selection for -NF- when compared to Farmers. Farmers deal with more hands-on practical projects. They do not design and dream of the future in the same way a public horticulturist would. Horticulturists design displays and have to be concerned about the visitor.

Public horticulture has a positive selection for intuition when compared to business. The public horticulturist is designing projects and displays whereas the business deals with numbers, details, and bottom lines. The lack of other positive selection shows that business and public horticulture are more alike than the other populations compared.

The horticulture job classifications were compared to their respective similar job classifications in the CAPT data bank. This data does not answer the questions raised in this research; therefore, it is not included in this discussion, but can be found in Appendix E.

Chapter 4

CONCLUSIONS

The conclusions drawn from the data need to be considered as general descriptions and not exclusive for a preference type or job classification. Any preference type has the potential to fill any job classification. This research was developed to identify general relationships and trends.

This research supports that there is a relationship between job classification and preference types in Public Horticulture. The data in Table 1.1 show the relationship between job classification and preference type as: Director (ENTJ), Gardener (IS--), Education (ENFP), Public Relations (ENFJ), Business (I-F-), Supervisor (EST-), Maintenance (ISTP), Secretarial (E-FJ), Research (ISTJ), and Longwood Graduate Fellows (-NFP).

The greatest potential for conflict occurs between opposite preference types. In this research sample, the public relations/maintenance and education/research job classifications have all four preference scales opposite. The director/maintenance, research/public relations, and maintenance/secretarial have three opposite preference scales. When these differences are realized, the employees can begin to understand their own preferences and then understand how

other employee's preferences may be similar to or different from their own. For example, the educators can learn how to present information and projects to the researchers in a concise, concrete, factual, and complete manner. The researchers can learn how to present their information and data to the educators in a verbal, broad view, personal, and all inclusive way.

There is a relationship between the Longwood Graduate Fellows and some of the job classifications they are most likely to enter. The Fellows prefer -NFP which is most similar to educators who prefer ENFP. The Fellows are also similar to public relations staff who prefer ENFJ. The Fellows may need to expand their -STJ preference side or be sure to have an assistant who has these preferences to balance the -NFP preferences.

Three of the gardens sampled have differences in preference type. This could be due to the director or interviewing team selecting similar preference types, the garden mission lending itself to a particular type, or staff who have similar preference types volunteering to participate in this research. One garden preferred sensing, the second garden preferred feeling, and third garden preferred judging.

If all of the staff would understand and use preference type in everyday life, conflict and mis-communication could decrease and productivity and employee interpersonal relations could increase. Each type should not change to the opposite

type, but keep the differences in mind and use them to assist with dealing with other's needs and preferences.

Further research of preference type in public horticulture could be conducted at more organizations to increase this researcher's sample sizes and increase the reliability of the results. The MBTI could also be administered to public horticulture visitors to determine who comes and why. Is it a particular type that prefers public horticulture in general or is it dependent on the type of public horticultural institution or area of the country? Preference type and communication styles and team work in public horticulture could also be researched. The satisfaction and frustration for each of the preference types in their respective job classifications could be explored. The under-represented types could be surveyed to discover how are they surviving. Changes that could be made to make the work place more conducive for each of the preference types could also be investigated.

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APPENDIX A

MBTI Certificate

Otto Kroeger Associates

CERTIFY THAT

Angela L. Goin

HAS COMPLETED THE

TYPEWATCHING Qualifying Workshop

for the

MYERS-BRIGGS TYPE INDICATOR

Michael Conrad

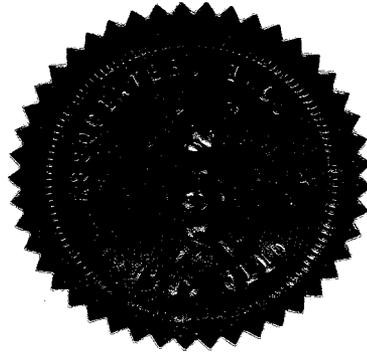
Opie Marie Ebert

Otto Kroeger Associates

Fairfax, Virginia

February 15-19, 1993

DATE



APPENDIX B

Human Subjects Review Board Approval Letter

OFFICE OF THE VICE PROVOST
FOR RESEARCH210 Hullihen Hall
University of Delaware
Newark, Delaware 19716-1551
Ph: 302/831-2136
Fax: 302/831-2828

18 February 1993

TO: James E. Swasey ✓
Angela L. Goin
Longwood Graduate Program

FROM: Costel D. Denson *Costel Denson*
Interim Vice Provost for Research
Chair, Human Subjects Review Board

SUBJECT: Human subjects approval for the project "Correlation
between Personality Preference and Job Type"

The above proposal, which you submitted for human subjects approval, will qualify as research exempt from full Human Subjects Review Board review under the following category:

Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless (1) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects, and (2) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Please notify me if you make any changes in this project.

APPENDIX C

**Sample of MBTI Form G Question and Answer Booklet
(in pocket)**

APPENDIX D
Type Table Sample

GARDENERS
TYPE TABLE

ISTJ	ISFJ	INFJ	INTJ
5	3	3	1
ISTP	ISFP	INFP	INTP
3	0	1	1
ESTP	ESFP	ENFP	ENTP
0	1	1	1
ESTJ	ESFJ	ENFJ	ENTJ
1	1	0	1

APPENDIX E

SRTT's from the Center for Applications of Psychological Type

The SRTT compares one type table with another type table. The type table displayed on the SRTT is called the sample or the group tabulated. The type table to which it is compared is called the base population. If the sample is included in the base population, the SRTT states that "The sample and base are dependent." If the sample and base are from two different populations, the SRTT report states that "The sample and base are independent."

How to read the SRTT

SOURCE OF DATA - found in the upper left hand corner, where the owners of the data receive credit for their work.

GROUP TABULATED - the name of the sample.

LEGEND - explains the % and I.

The % symbol refers to the percent of the total sample that exists in the type or in any grouping of the types.

"I" refers to the index or ratio known as the self-selection index. It is computed in either of two ways: (1) the ratio of the observed frequency to the expected frequency, or (2) the percentage of the type in the sample divided by the percentage of the type in the base population. When the self selection ratio (I) is greater than 1.00, there are more people in that cell of the table than expected from their numbers in the base population. If the index is less than 1.00, there are fewer in that cell than expected.

TYPE TABLE - each block of the type table contains the name of the type, the number of the type in the sample, the percentage of the sample in the type, the index for the type, and a probability statement for the type. The statistical significance of the I index (ratios) is established through a series of 2 x 2 chi-square calculations with one degree of freedom. If cell frequencies are five or less, the SRTT program computes a Fisher's exact probability instead of chi-square. The symbols " denotes $p < .05$, # denotes $p < .01$, and * denotes $p < .001$. Whenever Fisher's exact probability is used, the symbol is underlined.

BOTTOM CHART - the chi-square values are given for each type and then for the type groupings, so that the researcher can check them if interested in doing so. If Fisher's exact probabilities are calculated instead of chi-square, they can be identified because they are underlined.

BASE POPULATION - shown below the note concerning probability symbols and above the calculated values of chi-square. It shows to what the sample was compared. The same data are presented for each of the type groupings to the right of the table of sixteen types (McCaulley 1985).

An I of 1.20 is 20% more than expected, and an I of .80 is 20% less than expected.

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group tabulated:

Directors

N = 4

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of total choosing this group who fall into this type.
I = Self-selection index: Ratio of percent of type in group to % in sample.

SENSING types		INTUITIVE types		N	%	I
with THINKING	with FEELING	with FEELING	with THINKING			
ISTJ		INFJ		J	E	4 100.00 1.96
N= 0	N= 0	N= 0	N= 0	U	I	0 0.00 0.00
%= 0.00	%= 0.00	%= 0.00	%= 0.00	D I	S	1 25.00 0.54
I= 0.00	I= 0.00	I= 0.00	I= 0.00	GN	N	3 75.00 1.39
ISTP		INFP		IT	T	4 100.00 1.75
N= 0	N= 0	N= 0	N= 0	NR	F	0 0.00 0.00
%= 0.00	%= 0.00	%= 0.00	%= 0.00	GO	J	4 100.00 1.61
I= 0.00	I= 0.00	I= 0.00	I= 0.00	V	P	0 0.00 0.00
ESTP		ENFP		PE	IJ	0 0.00 0.00
N= 0	N= 0	N= 0	N= 0	ER	IP	0 0.00 0.00
%= 0.00	%= 0.00	%= 0.00	%= 0.00	RT	EP	0 0.00 0.00
I= 0.00	I= 0.00	I= 0.00	I= 0.00	CS	EJ	4 100.00 3.45 #
ESTJ		ENTJ #		E	ST	1 25.00 0.83
N= 1	N= 0	N= 0	N= 3	P	SF	0 0.00 0.00
%= 25.00	%= 0.00	%= 0.00	%= 75.00	T	NF	0 0.00 0.00
I= 2.50	I= 0.00	I= 0.00	I= 7.50	IE	NT	3 75.00 2.78
				VX	SJ	1 25.00 0.69
				ET	SP	0 0.00 0.00
				SR	NP	0 0.00 0.00
				A	NJ	3 75.00 2.88
				JV	TJ	4 100.00 2.56 "
				UE	TP	0 0.00 0.00
				DR	FP	0 0.00 0.00
				GT	FJ	0 0.00 0.00
				IS	IN	0 0.00 0.00
				N	EN	3 75.00 2.50
				G	IS	0 0.00 0.00
					ES	1 25.00 1.19

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square > 3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

— (underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Total Public Horticulture

Base total N = 100. Sample and base are dependent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

0.6486	1.000	1.000	1.000	E	0.1178	IJ	0.2991	SJ	1.000	IN	0.5697
1.000	9999.990	1.000	1.0000	I	0.1178	IP	0.6112	SP	1.000	EN	0.0795
1.0000	1.000	1.000	1.000	S	0.6223	EP	0.5732	NP	0.3277	IS	0.3572
0.3484	1.000	1.0000	0.0028	N	0.6223	EJ	0.0061	NJ	0.0529	ES	1.0000
				T	0.1322	ST	1.000	TJ	0.0210		
				F	0.1322	SF	0.6112	TP	0.5935		
				J	0.1611	NF	0.3365	FP	0.5809		
				P	0.1611	NT	0.0589	FJ	0.5709		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Gardeners

N = 23

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types with THINKING		SENSING types with FEELING		INTUITIVE types with FEELING		INTUITIVE types with THINKING		N	%	I
ISTJ		ISFJ		INFJ		INTJ				
N= 5	N= 3	N= 3	N= 1							
%= 21.74	%= 13.04	%= 13.04	%= 4.35							
I= 1.67	I= 2.17	I= 1.63	I= 0.72							
ISTP		ISFP		INFP		INTP				
N= 3	N= 0	N= 1	N= 1							
%= 13.04	%= 0.00	%= 4.35	%= 4.35							
I= 2.17	I= 0.00	I= 0.72	I= 1.09							
ESTP		ESFP		ENFP		ENTP				
N= 0	N= 1	N= 1	N= 1							
%= 0.00	%= 4.35	%= 4.35	%= 4.35							
I= 0.00	I= 1.45	I= 0.40	I= 0.62							
ESTJ		ESFJ		ENFJ		ENTJ				
N= 1	N= 1	N= 0	N= 1							
%= 4.35	%= 4.35	%= 0.00	%= 4.35							
I= 0.43	I= 0.62	I= 0.00	I= 0.43							

J	E	6	26.09	0.51 #
U	I	17	73.91	1.51 #
D	S	14	60.87	1.32
G	N	9	39.13	0.72
I	T	13	56.52	0.99
N	R	10	43.48	1.01
G	O	15	65.22	1.05
V	P	8	34.78	0.92
P	E	12	52.17	1.58 "
R	I	5	21.74	1.36
R	T	3	13.04	0.59
C	S	3	13.04	0.45
E	ST	9	39.13	1.30
P	SF	5	21.74	1.36
T	NF	5	21.74	0.81
I	E	4	17.39	0.64
V	X	10	43.48	1.21
E	T	4	17.39	1.74
S	R	4	17.39	0.62
J	A	5	21.74	0.84
V	T	8	34.78	0.89
U	E	5	21.74	1.21
D	R	3	13.04	0.65
G	T	7	30.43	1.32
I	S	6	26.09	1.09
N	EN	3	13.04	0.43
G	IS	11	47.83	1.91 #
	ES	3	13.04	0.62

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square > 3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

— (underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Total Public Horticulture

Base total N = 100. Sample and base are dependent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

0.1693	0.1327	0.3804	1.000	E 7.4186	IJ 4.9667	SJ 0.7250	IN 0.0713
0.1327	9999.990	1.000	1.000	I 7.4186	IP 0.5164	SP 0.2321	EN 0.0675
1.0000	1.0000	0.2983	0.6877	S 2.6588	EP 0.2712	NJ 0.2904	IS 8.3004
0.4464	0.6877	1.000	0.4464	N 2.6588	EJ 0.0683	NP 0.7875	ES 0.3876
				T 0.0028	ST 1.1858	TJ 0.2233	
				F 0.0028	SF 0.5164	TP 0.7574	
				J 0.1312	NF 0.6013	FP 0.3945	
				P 0.1312	NT 0.2929	FJ 0.9323	

Source of data
 Angela L. Goin
 University of Delaware
 Horticulture Study
 Tables Created 10/31/1993

Group tabulated:
 Education Department

MBTI Type Table
 Center for Applications
 of Psychological Type

Legend: % = percent of total choosing this group who fall into this type.
 I = Self-selection index: Ratio of percent of type in group to % in sample.

N = 12

SENSING types		INTUITIVE types		N	%	I	
with THINKING	with FEELING	with FEELING	with THINKING				
ISTJ	ISFJ	INFJ	INTJ				J
N= 0	N= 1	N= 1	N= 0				E
%= 0.00	%= 8.33	%= 8.33	%= 0.00				I
I= 0.00	I= 1.39	I= 1.04	I= 0.00				S
-----							N
ISTP	ISFP	INFP	INTP				T
N= 0	N= 0	N= 2	N= 0				F
%= 0.00	%= 0.00	%= 16.67	%= 0.00				J
I= 0.00	I= 0.00	I= 2.78	I= 0.00				P
-----							V
ESTP	ESFP	ENFP	ENTP				IJ
N= 0	N= 0	N= 3	N= 2				IP
%= 0.00	%= 0.00	%= 25.00	%= 16.67				EP
I= 0.00	I= 0.00	I= 2.27	I= 2.38				EJ
-----							ST
ESTJ	ESFJ	ENFJ	ENTJ				SF
N= 0	N= 1	N= 2	N= 0				NF
%= 0.00	%= 8.33	%= 16.67	%= 0.00				NT
I= 0.00	I= 1.19	I= 8.33	I= 0.00				SJ
-----							SP
							NP
							NJ
							TJ
							TP
							FP
							FJ
							IN
							EN
							IS
							ES

Note concerning symbols following the selection ratios:
 " implies significance at the .05 level, i.e., Chi-square > 3.8;
 # implies significance at the .01 level, i.e., Chi-square > 6.6;
 * implies significance at the .001 level, i.e., Chi-square > 10.8.
 (underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:
 Total Public Horticulture
 Base total N = 100. Sample and base are dependent.

*** Calculated values of Chi-square or Fisher's exact probability ***
 Type table order

0.2167	1.000	1.000	0.6056	E	0.3580	IJ	0.3273	SJ	0.2026	IN	1.000
				I	0.3580	IP	1.0000	SP	0.3589	EN	0.0395
				S	0.0344	EP	0.1297	NP	0.0192	IS	0.2851
0.6056	9999.990	0.1510	1.000	N	0.0344	EJ	1.000	NJ	1.000	ES	0.3027
				T	0.0039	ST	0.0161	TJ	0.0029		
1.000	1.000	0.1253	0.1972	F	0.0039	SF	1.0000	TP	1.0000		
				J	0.2029	NF	0.0026	FP	0.0600		
0.3589	1.000	0.0133	0.3589	P	0.2029	NT	0.5051	FJ	0.1401		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Public Relations

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

N = 4

SENSING types with THINKING		SENSING types with FEELING		INTUITIVE types with FEELING		INTUITIVE types with THINKING		N	%	I
ISTJ		ISFJ		INFJ		INTJ		J	E	4 100.00 1.96
N= 0	N= 0	N= 0	N= 0	N= 0	N= 0	N= 0	N= 0	U	I	0 0.00 0.00
%= 0.00	%= 0.00	%= 0.00	%= 0.00	%= 0.00	%= 0.00	%= 0.00	%= 0.00	DI	S	1 25.00 0.54
I= 0.00	I= 0.00	I= 0.00	I= 0.00	I= 0.00	I= 0.00	I= 0.00	I= 0.00	GN	N	3 75.00 1.39
ISTP		ISFP		INFP		INTP		IT	T	2 50.00 0.88
N= 0	N= 0	N= 0	N= 0	N= 0	N= 0	N= 0	N= 0	NR	F	2 50.00 1.16
%= 0.00	%= 0.00	%= 0.00	%= 0.00	%= 0.00	%= 0.00	%= 0.00	%= 0.00	GO	J	3 75.00 1.21
I= 0.00	I= 0.00	I= 0.00	I= 0.00	I= 0.00	I= 0.00	I= 0.00	I= 0.00	V	P	1 25.00 0.66
ESTP		ESFP		ENFP		ENTP		PE	IJ	0 0.00 0.00
N= 0	N= 0	N= 0	N= 1	N= 1	N= 0	N= 0	N= 0	ER	IP	0 0.00 0.00
%= 0.00	%= 0.00	%= 0.00	%= 25.00	%= 25.00	%= 0.00	%= 0.00	%= 0.00	RT	EP	1 25.00 1.14
I= 0.00	I= 0.00	I= 0.00	I= 2.27	I= 2.27	I= 0.00	I= 0.00	I= 0.00	CS	EJ	3 75.00 2.59
ESTJ		ESFJ		ENFJ		ENTJ		E	ST	0 0.00 0.00
N= 0	N= 1	N= 0	N= 2	N= 0	N= 2	N= 2	N= 2	P	SF	1 25.00 1.56
%= 0.00	%= 25.00	%= 0.00	%= 50.00	%= 0.00	%= 50.00	%= 50.00	%= 50.00	T	NF	1 25.00 0.93
I= 0.00	I= 3.57	I= 0.00	I= 5.00	I= 0.00	I= 5.00	I= 5.00	I= 5.00	IE	NT	2 50.00 1.85
								VX	SJ	1 25.00 0.69
								ET	SP	0 0.00 0.00
								SR	NP	1 25.00 0.89
								A	NJ	2 50.00 1.92
								JV	TJ	2 50.00 1.28
								UE	TP	0 0.00 0.00
								DR	FP	1 25.00 1.25
								GT	FJ	1 25.00 1.09
								IS	IN	0 0.00 0.00
								N	EN	3 75.00 2.50
								G	IS	0 0.00 0.00
									ES	1 25.00 1.19

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square > 3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

(underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Total Public Horticulture

Base total N = 100. Sample and base are dependent.

**** Calculated values of Chi-square or Fisher's exact probability ****
Type table order

0.6486	1.000	1.000	1.000	E	0.1178	IJ	0.2991	SJ	1.000	IN	0.5697
				I	0.1178	IP	0.6112	SP	1.000	EN	0.0795
				S	0.6223	EP	1.0000	NP	1.000	IS	0.3572
1.000	9999.990	1.000	1.0000	N	0.6223	EJ	0.0722	NJ	0.5702	ES	1.0000
				T	1.000	ST	0.3133	TJ	1.000		
1.0000	1.000	0.3773	1.000	F	1.000	SF	1.000	TP	0.5935		
				J	0.6610	NF	1.000	FP	1.0000		
1.000	0.2554	1.0000	0.0488	P	0.6610	NT	0.5717	FJ	1.000		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Business

N = 10

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types		INTUITIVE types		N	%	I																		
with THINKING	with FEELING	with FEELING	with THINKING																					
ISTJ		ISFJ		INFJ		INTJ		J	E	4	40.00	0.78												
N= 1	N= 0	N= 2	N= 2	U	I	6	60.00	1.22	D	I	5	50.00	1.09											
%= 10.00	%= 0.00	%= 20.00	%= 20.00	G	N	5	50.00	0.93	G	N	5	50.00	0.93											
I= 0.77	I= 0.00	I= 2.50	I= 3.33	I	T	5	50.00	0.88	N	R	5	50.00	1.16											
ISTP		ISFP		INFP		INTP		G	O	7	70.00	1.13	V	P	3	30.00	0.79							
N= 1	N= 0	N= 0	N= 0	P	E	I	5	50.00	1.52	E	R	1	10.00	0.62	R	T	2	20.00	0.91					
%= 10.00	%= 0.00	%= 0.00	%= 0.00	C	S	E	2	20.00	0.69	E	J	3	30.00	1.00	P	S	2	20.00	1.25					
I= 1.67	I= 0.00	I= 0.00	I= 0.00	E	S	T	3	30.00	1.00	T	N	3	30.00	1.11	I	E	2	20.00	0.74					
ESTP		ESFP		ENFP		ENTP		V	X	3	30.00	0.83	E	T	2	20.00	2.00	S	R	1	10.00	0.36		
N= 0	N= 1	N= 1	N= 0	J	V	A	4	40.00	1.54	J	V	4	40.00	1.03	U	E	1	10.00	0.56	D	R	2	20.00	1.00
%= 0.00	%= 10.00	%= 10.00	%= 0.00	G	T	F	3	30.00	1.30	I	S	4	40.00	1.67	N	E	1	10.00	0.33	G		2	20.00	0.80
I= 0.00	I= 3.33	I= 0.91	I= 0.00	I	S	N	1	10.00	0.33	G		2	20.00	0.80	E	S	3	30.00	1.43					
ESTJ		ESFJ		ENFJ		ENTJ																		
N= 1	N= 1	N= 0	N= 0																					
%= 10.00	%= 10.00	%= 0.00	%= 0.00																					
I= 1.00	I= 1.43	I= 0.00	I= 0.00																					

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square > 3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

(underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Total Public Horticulture

Base total N = 100. Sample and base are dependent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

1.000	0.6313	0.1819	0.1090	E	0.5208	IJ	0.2910	SJ	0.7449	IN	0.2462
1.000	9999.990	0.6313	1.000	I	0.5208	IP	0.6978	SP	0.2615	EN	0.1744
1.000	0.2735	1.000	0.6110	S	1.000	EP	1.000	NP	0.2750	IS	1.000
1.000	1.000	1.000	0.5920	N	1.000	EJ	0.7193	NJ	0.4467	ES	0.6835
				T	0.7413	ST	1.000	TJ	1.000		
				F	0.7413	SF	1.000	TP	0.6850		
				J	0.7379	NF	1.000	FP	1.000		
				P	0.7379	NT	0.7247	FJ	0.6925		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Middle Management
(Foreman)

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

N = 10

SENSING types		INTUITIVE types		N	%	I
with THINKING	with FEELING	with FEELING	with THINKING			
ISTJ		INFJ		J	E	6 60.00 1.18
ISFJ		INTJ		U	I	4 40.00 0.82
N= 3	N= 0	N= 0	N= 0	D I	S	7 70.00 1.52
%= 30.00	%= 0.00	%= 0.00	%= 0.00	G N	N	3 30.00 0.56
I= 2.31	I= 0.00	I= 0.00	I= 0.00	I T	T	9 90.00 1.58
ISTP		INFP		N R	F	1 10.00 0.23
ISFP		INTP		G O	J	7 70.00 1.13
N= 1	N= 0	N= 0	N= 0	V	P	3 30.00 0.79
%= 10.00	%= 0.00	%= 0.00	%= 0.00	P E	IJ	3 30.00 0.91
I= 1.67	I= 0.00	I= 0.00	I= 0.00	E R	IP	1 10.00 0.62
ESTP		ENTP		R T	EP	2 20.00 0.91
ESFP		ENFP		C S	EJ	4 40.00 1.38
N= 0	N= 1	N= 0	N= 1	E	ST	6 60.00 2.00
%= 0.00	%= 10.00	%= 0.00	%= 10.00	P	SF	1 10.00 0.62
I= 0.00	I= 3.33	I= 0.00	I= 1.43	T	NF	0 0.00 0.00
ESTJ		ENTJ		I E	NT	3 30.00 1.11
ESFJ		ENFJ		V X	SJ	5 50.00 1.39
N= 2	N= 0	N= 0	N= 2	E T	SP	2 20.00 2.00
%= 20.00	%= 0.00	%= 0.00	%= 20.00	S R	NP	1 10.00 0.36
I= 2.00	I= 0.00	I= 0.00	I= 2.00	A	NJ	2 20.00 0.77
				J V	TJ	7 70.00 1.79
				U E	TP	2 20.00 1.11
				D R	FP	1 10.00 0.50
				G T	FJ	0 0.00 0.00
				I S	IN	0 0.00 0.00
				N	EN	3 30.00 1.00
				G	IS	4 40.00 1.60
					ES	3 30.00 1.43

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square > 3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

— (underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Total Public Horticulture

Base total N = 100. Sample and base are dependent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

0.1204	0.6313	0.5985	0.6313	E	0.7412	IJ	1.000	SJ	0.4886	IN	0.1120
				I	0.7412	IP	0.6978	SP	0.2615	EN	1.000
				S	0.1797	EP	1.000	NP	0.2750	IS	0.2625
1.000	9999.990	0.6313	1.000	N	0.1797	EJ	0.4697	NJ	0.7297	ES	0.6835
				T	0.0402	ST	0.0617	TJ	0.0445		
1.0000	0.2735	0.3717	1.000	F	0.0402	SF	0.6978	TP	1.000		
				J	0.7379	NF	0.0581	FP	0.6818		
0.2615	0.6110	1.0000	0.2615	P	0.7379	NT	1.000	FJ	0.1108		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Maintenance

N = 9

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types		INTUITIVE types		N	%	I
with THINKING	with FEELING	with FEELING	with THINKING			
ISTJ	ISFJ	INFJ	INTJ	J	E	3 33.33 0.65
N= 0	N= 1	N= 0	N= 2	U	I	6 66.67 1.36
%= 0.00	%= 11.11	%= 0.00	%= 22.22	D I	S	5 55.56 1.21
I= 0.00	I= 1.85	I= 0.00	I= 3.70	G N	N	4 44.44 0.82
-----				I T	T	8 88.89 1.56
ISTP	ISFP	INFP	INTP	N R	F	1 11.11 0.26
N= 1	N= 0	N= 0	N= 2	G O	J	5 55.56 0.90
%= 11.11	%= 0.00	%= 0.00	%= 22.22	V	P	4 44.44 1.17
I= 1.85	I= 0.00	I= 0.00	I= 5.56	P E	IJ	3 33.33 1.01
-----				E R	IP	3 33.33 2.08
ESTP	ESFP	ENFP	ENTP	R T	EP	1 11.11 0.51
N= 1	N= 0	N= 0	N= 0	C S	EJ	2 22.22 0.77
%= 11.11	%= 0.00	%= 0.00	%= 0.00	E	ST	4 44.44 1.48
I= 11.11	I= 0.00	I= 0.00	I= 0.00	P	SF	1 11.11 0.69
-----				T	NF	0 0.00 0.00
ESTJ	ESFJ	ENFJ	ENTJ	I E	NT	4 44.44 1.65
N= 2	N= 0	N= 0	N= 0	V X	SJ	3 33.33 0.93
%= 22.22	%= 0.00	%= 0.00	%= 0.00	E T	SP	2 22.22 2.22
I= 2.22	I= 0.00	I= 0.00	I= 0.00	S R	NP	2 22.22 0.79
-----				A	NJ	2 22.22 0.85
ISTJ	ISFJ	INFJ	INTJ	J V	TJ	4 44.44 1.14
N= 0	N= 1	N= 0	N= 2	U E	TP	4 44.44 2.47
%= 0.00	%= 11.11	%= 0.00	%= 22.22	D R	FP	0 0.00 0.00
I= 0.00	I= 1.85	I= 0.00	I= 3.70	G T	FJ	1 11.11 0.48
-----				I S	IN	4 44.44 1.85
ESTP	ESFP	ENFP	ENTP	N	EN	0 0.00 0.00
N= 1	N= 0	N= 0	N= 0	G	IS	2 22.22 0.89
%= 11.11	%= 0.00	%= 0.00	%= 0.00		ES	3 33.33 1.59
I= 11.11	I= 0.00	I= 0.00	I= 0.00			

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square > 3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

__ (underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Total Public Horticulture

Base total N = 100. Sample and base are dependent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

0.3611	1.000	0.6085	0.0897	E	0.3134	IJ	1.000	SJ	1.000	IN	0.2123
				I	0.3134	IP	0.1541	SP	0.2212	EN	0.0541
				S	0.7287	EP	0.6792	NP	0.7309	IS	1.000
1.000	9999.990	0.6489	0.0396	N	0.7287	EJ	0.7249	NJ	1.000	ES	0.3920
				T	0.0738	ST	0.4460	TJ	1.000		
0.0900	1.0000	0.5916	0.6252	F	0.0738	SF	1.000	TP	0.0527		
				J	0.7274	NF	0.1082	FP	0.1978		
0.2212	0.6252	1.000	0.5925	P	0.7274	NT	0.2468	FJ	0.4594		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Secretarial

N = 8

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types		INTUITIVE types		N	%	I
with THINKING	with FEELING	with FEELING	with THINKING			
ISTJ	ISFJ	INFJ	INTJ	J	E	6 75.00 1.47
N= 0	N= 1	N= 1	N= 0	U	I	2 25.00 0.51
%= 0.00	%= 12.50	%= 12.50	%= 0.00	D I	S	4 50.00 1.09
I= 0.00	I= 2.08	I= 1.56	I= 0.00	G N	N	4 50.00 0.93
-----				I T	T	2 25.00 0.44
ISTP	ISFP	INFP	INTP	N R	F	6 75.00 1.74
N= 0	N= 0	N= 0	N= 0	G O	J	6 75.00 1.21
%= 0.00	%= 0.00	%= 0.00	%= 0.00	V	P	2 25.00 0.66
I= 0.00	I= 0.00	I= 0.00	I= 0.00	P E	IJ	2 25.00 0.76
-----				E R	IP	0 0.00 0.00
ESTP	ESFP	ENFP	ENTP	R T	EP	2 25.00 1.14
N= 0	N= 0	N= 2	N= 0	C S	EJ	4 50.00 1.72
%= 0.00	%= 0.00	%= 25.00	%= 0.00	E	ST	1 12.50 0.42
I= 0.00	I= 0.00	I= 2.27	I= 0.00	P	SF	3 37.50 2.34
-----				T	NF	3 37.50 1.39
ESTJ	ESFJ	ENFJ	ENTJ	I E	NT	1 12.50 0.46
N= 1	N= 2	N= 0	N= 1	V X	SJ	4 50.00 1.39
%= 12.50	%= 25.00	%= 0.00	%= 12.50	E T	SP	0 0.00 0.00
I= 1.25	I= 3.57	I= 0.00	I= 1.25	S R	NP	2 25.00 0.89
-----				A	NJ	2 25.00 0.96
ISTJ	ISFJ	INFJ	INTJ	J V	TJ	2 25.00 0.64
N= 0	N= 1	N= 1	N= 0	U E	TP	0 0.00 0.00
%= 0.00	%= 12.50	%= 12.50	%= 0.00	D R	FP	2 25.00 1.25
I= 0.00	I= 2.08	I= 1.56	I= 0.00	G T	FJ	4 50.00 2.17
-----				I S	IN	1 12.50 0.52
ISTP	ISFP	INFP	INTP	N	EN	3 37.50 1.25
N= 0	N= 0	N= 0	N= 0	G	IS	1 12.50 0.50
%= 0.00	%= 0.00	%= 0.00	%= 0.00		ES	3 37.50 1.79
I= 0.00	I= 0.00	I= 0.00	I= 0.00			

Note concerning symbols following the selection ratios:
 " implies significance at the .05 level, i.e., Chi-square > 3.8;
 # implies significance at the .01 level, i.e., Chi-square > 6.6;
 * implies significance at the .001 level, i.e., Chi-square > 10.8.
 _ (underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:
 Total Public Horticulture
 Base total N = 100. Sample and base are dependent.

*** Calculated values of Chi-square or Fisher's exact probability ***
 Type table order

0.3801	0.4018	1.000	1.000	E 0.2695	IJ 0.7168	SJ 0.4536	IN 0.6758
				I 0.2695	IP 0.3484	SP 0.5985	EN 0.6935
				S 1.000	EP 1.000	NP 1.000	IS 0.6754
1.000	9999.990	1.000	1.000	N 1.000	EJ 0.2246	NJ 1.000	ES 0.3592
				T 0.0718	ST 0.4294	TJ 0.4772	
1.0000	1.000	0.2132	0.6436	F 0.0718	SF 0.1142	TP 0.3444	
				J 0.4854	NF 0.6789	FP 1.000	
1.000	0.0964	1.000	1.000	P 0.4854	NT 0.4428	FJ 0.0793	

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Research/Curatorial

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

N = 5

	SENSING types with THINKING		INTUITIVE types with FEELING	
	with FEELING	with THINKING	with FEELING	with THINKING
ISTJ	ISFJ	INFJ	INTJ	
N= 2	N= 0	N= 0	N= 1	
%= 40.00	%= 0.00	%= 0.00	%= 20.00	
I= 3.08	I= 0.00	I= 0.00	I= 3.33	
ISTP	ISFP	INFP	INTP	
N= 0	N= 0	N= 0	N= 0	
%= 0.00	%= 0.00	%= 0.00	%= 0.00	
I= 0.00	I= 0.00	I= 0.00	I= 0.00	
ESTP	ESFP	ENFP	ENTP	
N= 0	N= 0	N= 0	N= 1	
%= 0.00	%= 0.00	%= 0.00	%= 20.00	
I= 0.00	I= 0.00	I= 0.00	I= 2.86	
ESTJ	ESFJ	ENFJ	ENTJ	
N= 1	N= 0	N= 0	N= 0	
%= 20.00	%= 0.00	%= 0.00	%= 0.00	
I= 2.00	I= 0.00	I= 0.00	I= 0.00	

	N	%	I
J	2	40.00	0.78
U	3	60.00	1.22
D I	3	60.00	1.30
G N	2	40.00	0.74
I T	5	100.00	1.75
N R	0	0.00	0.00
G O	4	80.00	1.29
V	1	20.00	0.53
P E	3	60.00	1.82
E R	0	0.00	0.00
R T	1	20.00	0.91
C S	1	20.00	0.69
E	3	60.00	2.00
P	0	0.00	0.00
T	0	0.00	0.00
I E	2	40.00	1.48
V X	3	60.00	1.67
E T	0	0.00	0.00
S R	1	20.00	0.71
A	1	20.00	0.77
J V	4	80.00	2.05
U E	1	20.00	1.11
D R	0	0.00	0.00
G T	0	0.00	0.00
I S	1	20.00	0.83
N	1	20.00	0.67
G	2	40.00	1.60
E S	1	20.00	0.95

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square > 3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

_ (underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Total Public Horticulture

Base total N = 100. Sample and base are dependent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

0.1249	1.000	1.000	0.2709	E	0.6747	IJ	0.3281	SJ	0.3475	IN	1.0000
				I	0.6747	IP	0.5899	SP	1.000	EN	1.000
				S	0.6590	EP	1.0000	NP	1.000	IS	0.5964
1.000	9999.990	1.000	1.000	N	0.6590	EJ	1.000	NJ	1.000	ES	1.000
				T	0.0684	ST	0.3184	TJ	0.0743		
1.0000	1.000	0.6433	0.3097	F	0.0684	SF	0.5899	TP	1.000		
				J	0.6469	NF	0.3197	FP	0.5799		
0.4162	1.0000	1.0000	1.000	P	0.6469	NT	0.6097	FJ	0.3408		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Longwood Graduate
Fellows

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

N = 15

SENSING types		INTUITIVE types		N	%	I
with THINKING	with FEELING	with FEELING	with THINKING			
ISTJ	ISFJ	INFJ	INTJ	J	E	8 53.33 1.05
N= 2	N= 0	N= 1	N= 0	U	I	7 46.67 0.95
%= 13.33	%= 0.00	%= 6.67	%= 0.00	D I	S	4 26.67 0.58
I= 1.03	I= 0.00	I= 0.83	I= 0.00	G N	N	11 73.33 1.36
-----				I T	T	7 46.67 0.82
ISTP	ISFP	INFP	INTP	N R	F	8 53.33 1.24
N= 0	N= 0	N= 3	N= 1	G O	J	6 40.00 0.65
%= 0.00	%= 0.00	%= 20.00	%= 6.67	V	P	9 60.00 1.58
I= 0.00	I= 0.00	I= 3.33	I= 1.67	P E	I J	3 20.00 0.61
-----				E R	I P	4 26.67 1.67
ESTP	ESFP	ENFP	ENTP	R T	E P	5 33.33 1.52
N= 0	N= 0	N= 3	N= 2	C S	E J	3 20.00 0.69
%= 0.00	%= 0.00	%= 20.00	%= 13.33	E	S T	3 20.00 0.67
I= 0.00	I= 0.00	I= 1.82	I= 1.90	P	S F	1 6.67 0.42
-----				T	N F	7 46.67 1.73
ESTJ	ESFJ	ENFJ	ENTJ	I E	N T	4 26.67 0.99
N= 1	N= 1	N= 0	N= 1	V X	S J	4 26.67 0.74
%= 6.67	%= 6.67	%= 0.00	%= 6.67	E T	S P	0 0.00 0.00
I= 0.67	I= 0.95	I= 0.00	I= 0.67	S R	N P	9 60.00 2.14 #
-----				A	N J	2 13.33 0.51
				J V	T J	4 26.67 0.68
				U E	T P	3 20.00 1.11
				D R	F P	6 40.00 2.00 "
				G T	F J	2 13.33 0.58
				I S	I N	5 33.33 1.39
				N	E N	6 40.00 1.33
				G	I S	2 13.33 0.53
					E S	2 13.33 0.63

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square > 3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

— (underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Total Public Horticulture

Base total N = 100. Sample and base are dependent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

1.000	0.5872	1.000	0.5872	E	0.0384	I J	0.3732	S J	0.5628	I N	0.5119
				I	0.0384	I P	0.2534	S P	0.3513	E N	0.8403
				S	0.1593	E P	0.3103	N P	8.9636	I S	0.3444
0.5872	9999.990	0.0420	1.000	N	0.1593	E J	0.5435	N J	0.3416	E S	0.5177
				T	0.7688	S T	0.5428	T J	0.3929		
1.000	1.000	0.3633	0.5902	F	0.7688	S F	0.4538	T P	1.0000		
				J	3.6253	N F	3.4630	F P	4.4118		
1.000	1.000	1.000	1.000	P	3.6253	N T	1.000	F J	0.5096		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group tabulated:

Garden #1
Arboretum

N = 27

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of total choosing this group who fall into this type.
I = Self-selection index: Ratio of percent of type in group to % in sample.

SENSING types		INTUITIVE types		N	%	I
with THINKING	with FEELING	with FEELING	with THINKING			
ISTJ	ISFJ	INFJ	INTJ	J	E	13 48.15 0.94
N= 3	N= 4	N= 0	N= 3	U	I	14 51.85 1.06
%= 11.11	%= 14.81	%= 0.00	%= 11.11	D I	S	16 59.26 1.29
I= 0.85	I= 2.47	I= 0.00	I= 1.85	G N	N	11 40.74 0.75
-----				I T	T	17 62.96 1.10
ISTP	ISFP	INFP	INTP	N R	F	10 37.04 0.86
N= 2	N= 0	N= 1	N= 1	G O	J	18 66.67 1.08
%= 7.41	%= 0.00	%= 3.70	%= 3.70	V	P	9 33.33 0.88
I= 1.23	I= 0.00	I= 0.62	I= 0.93	P E	IJ	10 37.04 1.12
-----				E R	IP	4 14.81 0.93
ESTP	ESFP	ENFP	ENTP	R T	EP	5 18.52 0.84
N= 1	N= 1	N= 1	N= 2	C S	EJ	8 29.63 1.02
%= 3.70	%= 3.70	%= 3.70	%= 7.41	E	ST	8 29.63 0.99
I= 3.70	I= 1.23	I= 0.34	I= 1.06	P	SF	8 29.63 1.85 #
-----				T	NF	2 7.41 0.27 #
ESTJ	ESFJ	ENFJ	ENTJ	I E	NT	9 33.33 1.23
N= 2	N= 3	N= 0	N= 3	V X	SJ	12 44.44 1.23
%= 7.41	%= 11.11	%= 0.00	%= 11.11	E T	SP	4 14.81 1.48
I= 0.74	I= 1.59	I= 0.00	I= 1.11	S R	NP	5 18.52 0.66
-----				J A	NJ	6 22.22 0.85
				V	TJ	11 40.74 1.04
				U E	TP	6 22.22 1.23
				D R	FP	3 11.11 0.56
				G T	FJ	7 25.93 1.13
				I S	IN	5 18.52 0.77
				N	EN	6 22.22 0.74
				G	IS	9 33.33 1.33
					ES	7 25.93 1.23

Note concerning symbols following the selection ratios:

- " implies significance at the .05 level, i.e., Chi-square >3.8;
- # implies significance at the .01 level, i.e., Chi-square > 6.6;
- * implies significance at the .001 level, i.e., Chi-square > 10.8.

(underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Total Public Horticulture

Base total N = 100. Sample and base are dependent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

0.7604	0.0439	0.1038	0.3393	E	0.1204	IJ	0.2726	SJ	1.1447	IN	0.5992
				I	0.1204	IP	1.000	SP	0.4521	EN	1.0654
				S	2.6177	EP	0.7872	NP	0.2225	IS	1.3699
				N	2.6177	EJ	0.0071	NJ	0.2744	ES	0.5410
				T	0.5366	ST	0.0024	TJ	0.0471		
				F	0.5366	SF	5.1122	TP	0.4467		
				J	0.3419	NF	0.0099	FP	0.2612		
				P	0.3419	NT	0.7527	FJ	0.1788		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Garden #2
Arboretum

N = 14

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types with THINKING		with FEELING		INTUITIVE types with FEELING		with THINKING		N	%	I
ISTJ		ISFJ		INFJ		INTJ		J	E	8 57.14 1.12
N=	1	N=	1	N=	2	N=	0	U	I	6 42.86 0.87
%=	7.14	%=	7.14	%=	14.29	%=	0.00	D I	S	6 42.86 0.93
I=	0.55	I=	1.19	I=	1.79	I=	0.00	G N	N	8 57.14 1.06
ISTP		ISFP		INFP		INTP		I T	T	6 42.86 0.75
N=	1	N=	0	N=	1	N=	0	N R	F	8 57.14 1.33
%=	7.14	%=	0.00	%=	7.14	%=	0.00	G O	J	8 57.14 0.92
I=	1.19	I=	0.00	I=	1.19	I=	0.00	V	P	6 42.86 1.13
ESTP		ESFP		ENFP		ENTP		P E	IJ	4 28.57 0.87
N=	0	N=	0	N=	3	N=	1	E R	IP	2 14.29 0.89
%=	0.00	%=	0.00	%=	21.43	%=	7.14	R T	EP	4 28.57 1.30
I=	0.00	I=	0.00	I=	1.95	I=	1.02	C S	EJ	4 28.57 0.99
ESTJ		ESFJ		ENFJ		ENTJ		E	ST	5 35.71 1.19
N=	3	N=	0	N=	1	N=	0	P	SF	1 7.14 0.45
%=	21.43	%=	0.00	%=	7.14	%=	0.00	T	NF	7 50.00 1.85
I=	2.14	I=	0.00	I=	3.57	I=	0.00	I E	NT	1 7.14 0.26
								V X	SJ	5 35.71 0.99
								E T	SP	1 7.14 0.71
								S R	NP	5 35.71 1.28
								A	NJ	3 21.43 0.82
								J V	TJ	4 28.57 0.73
								U E	TP	2 14.29 0.79
								D R	FP	4 28.57 1.43
								G T	FJ	4 28.57 1.24
								I S	IN	3 21.43 0.89
								N	EN	5 35.71 1.19
								G	IS	3 21.43 0.86
									ES	3 21.43 1.02

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square >3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

— (underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Total Public Horticulture

Base total N = 100. Sample and base are dependent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

0.6869	1.000	0.5958	0.5910	E	0.2458	IJ	0.7703	SJ	1.000	IN	1.0000
				I	0.2458	IP	1.0000	SP	1.000	EN	0.7540
				S	0.0647	EP	0.7289	NP	0.5275	IS	0.7627
1.000	9999.990	1.000	0.6346	N	0.0647	EJ	1.000	NJ	0.7569	ES	1.0000
				T	1.3285	ST	0.7540	TJ	0.5566		
1.0000	1.000	0.3545	1.000	F	1.3285	SF	0.4577	TP	0.7414		
				J	0.1630	NF	4.3692	FP	0.4706		
0.1446	0.5888	0.2616	0.3491	P	0.1630	NT	0.1042	FJ	0.7322		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Garden #3
Arboretum

N = 26

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types with THINKING		SENSING types with FEELING		INTUITIVE types with FEELING		INTUITIVE types with THINKING		N	%	I
ISTJ		ISFJ		INFJ		INTJ		J	E	14 53.85 1.06
N= 3	N= 0	N= 3	N= 3	U	I	12 46.15 0.94				
%= 11.54	%= 0.00	%= 11.54	%= 11.54	D	S	11 42.31 0.92				
I= 0.89	I= 0.00	I= 1.44	I= 1.92	G	N	15 57.69 1.07				
ISTP		ISFP		INFP		INTP		I	T	16 61.54 1.08
N= 1	N= 0	N= 1	N= 1	N	R	10 38.46 0.89				
%= 3.85	%= 0.00	%= 3.85	%= 3.85	G	O	19 73.08 1.18				
I= 0.64	I= 0.00	I= 0.64	I= 0.96	V	P	7 26.92 0.71				
ESTP		ESFP		ENFP		ENTP		P	E	9 34.62 1.05
N= 0	N= 2	N= 2	N= 0	R	T	4 15.38 0.70				
%= 0.00	%= 7.69	%= 7.69	%= 0.00	C	S	10 38.46 1.33				
I= 0.00	I= 2.56	I= 0.70	I= 0.00	E	ST	7 26.92 0.90				
ESTJ		ESFJ		ENFJ		ENTJ		P	SF	4 15.38 0.96
N= 3	N= 2	N= 0	N= 5	T	NF	6 23.08 0.85				
%= 11.54	%= 7.69	%= 0.00	%= 19.23	I	E	9 34.62 1.28				
I= 1.15	I= 1.10	I= 0.00	I= 1.92	V	X	8 30.77 0.85				
								E	T	3 11.54 1.15
								S	R	4 15.38 0.55
								A	NJ	11 42.31 1.63 "
								J	V	14 53.85 1.38
								U	E	2 7.69 0.43
								D	R	5 19.23 0.96
								G	T	5 19.23 0.84
								I	S	8 30.77 1.28
								N	EN	7 26.92 0.90
								G	IS	4 15.38 0.62
									ES	7 26.92 1.28

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square >3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

(underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Total Public Horticulture

Base total N = 100. Sample and base are dependent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

1.000	0.1936	0.6765	0.3349	E	0.1139	IJ	0.0415	SJ	0.4172	IN	0.8827
0.6863	9999.990	0.6863	1.000	I	0.1139	IP	0.5520	SP	1.000	EN	0.1584
1.000	0.1648	0.7233	0.1852	S	0.1928	EP	0.4193	NP	0.1289	IS	0.2920
1.000	1.000	0.6113	0.1207	N	0.1928	EJ	1.5276	NJ	4.8565	ES	0.7430
				T	0.2953	ST	0.1584	TJ	3.2552		
				F	0.2953	SF	1.0000	TP	0.1441		
				J	1.8298	NF	0.2744	FP	1.000		
				P	1.8298	NT	1.0338	FJ	0.7875		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Garden #4
Arboretum

N = 18

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types		INTUITIVE types		N	%	I
with THINKING	with FEELING	with FEELING	with THINKING			
ISTJ		INFJ		J	E	8 44.44 0.87
ISFJ		INTJ		U	I	10 55.56 1.13
N= 4	N= 1	N= 2	N= 0	D I	S	9 50.00 1.09
%= 22.22	%= 5.56	%= 11.11	%= 0.00	G N	N	9 50.00 0.93
I= 1.71	I= 0.93	I= 1.39	I= 0.00	I T	T	11 61.11 1.07
ISTP		INFP		N R	F	7 38.89 0.90
ISFP		INTP		G O	J	11 61.11 0.99
N= 2	N= 0	N= 0	N= 1	V	P	7 38.89 1.02
%= 11.11	%= 0.00	%= 0.00	%= 5.56	P E	IJ	7 38.89 1.18
I= 1.85	I= 0.00	I= 0.00	I= 1.39	E R	IP	3 16.67 1.04
ESTP		ENFP		R T	EP	4 22.22 1.01
ESFP		ENTP		C S	EJ	4 22.22 0.77
N= 0	N= 0	N= 2	N= 2	E	ST	7 38.89 1.30
%= 0.00	%= 0.00	%= 11.11	%= 11.11	P	SF	2 11.11 0.69
I= 0.00	I= 0.00	I= 1.01	I= 1.59	T	NF	5 27.78 1.03
ESTJ		ENFJ		I E	NT	4 22.22 0.82
ESFJ		ENTJ		V X	SJ	7 38.89 1.08
N= 1	N= 1	N= 1	N= 1	E T	SP	2 11.11 1.11
%= 5.56	%= 5.56	%= 5.56	%= 5.56	S R	NP	5 27.78 0.99
I= 0.56	I= 0.79	I= 2.78	I= 0.56	A	NJ	4 22.22 0.85
				J V	TJ	6 33.33 0.85
				U E	TP	5 27.78 1.54
				D R	FP	2 11.11 0.56
				G T	FJ	5 27.78 1.21
				I S	IN	3 16.67 0.69
				N	EN	6 33.33 1.11
				G	IS	7 38.89 1.56
					ES	2 11.11 0.53

Note concerning symbols following the selection ratios:
 " implies significance at the .05 level, i.e., Chi-square > 3.8;
 # implies significance at the .01 level, i.e., Chi-square > 6.6;
 * implies significance at the .001 level, i.e., Chi-square > 10.8.
 _ (underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:
 Total Public Horticulture
 Base total N = 100. Sample and base are dependent.

*** Calculated values of Chi-square or Fisher's exact probability ***

Type table order				E	IJ	SJ	IN
0.2435	1.000	0.6323	0.3635	0.3775	0.3443	0.0795	0.5502
				0.3775	1.0000	1.000	0.1161
				0.1414	1.0000	1.000	2.2584
0.5880	9999.990	0.3635	1.000	0.1414	0.5767	0.7755	0.3482
				0.1514	0.8259	0.2963	
1.0000	0.6303	1.000	0.6063	0.1514	0.7295	0.3071	
				0.0074	1.000	0.3557	
0.6850	1.0000	0.3291	0.6850	0.0074	0.7729	0.7574	

Source of data
 Angela L. Goin
 University of Delaware
 Horticulture Study
 Tables Created 10/31/1993

Group tabulated:
 Total
 Public Horticulture

MBTI Type Table
 Center for Applications
 of Psychological Type

Legend: % = percent of total choosing this group who fall into this type.
 I = Self-selection index: Ratio of percent of type in group to % in sample.

N = 100

SENSING types with THINKING		SENSING types with FEELING		INTUITIVE types with FEELING		INTUITIVE types with THINKING		N	%	I
ISTJ	"	ISFJ		INFJ	*	INTJ	"			
N= 13		N= 6		N= 8		N= 6				
%= 13.00		%= 6.00		%= 8.00		%= 6.00				
I= 1.88		I= 0.88		I= 4.46		I= 2.29				
-----		-----		-----		-----				
ISTP		ISFP	"	INFP		INTP				
N= 6		N= 0		N= 6		N= 4				
%= 6.00		%= 0.00		%= 6.00		%= 4.00				
I= 1.44		I= 0.00		I= 1.54		I= 1.13				
-----		-----		-----		-----				
ESTP	"	ESFP	"	ENFP		ENTP				
N= 1		N= 3		N= 11		N= 7				
%= 1.00		%= 3.00		%= 11.00		%= 7.00				
I= 0.15		I= 0.32		I= 1.45		I= 1.43				
-----		-----		-----		-----				
ESTJ		ESFJ	"	ENFJ		ENTJ	#			
N= 10		N= 7		N= 2		N= 10				
%= 10.00		%= 7.00		%= 2.00		%= 10.00				
I= 0.67		I= 0.50		I= 0.55		I= 2.55				

J	E	51	51.00	0.79	#
U	I	49	49.00	1.39	#
D I	S	46	46.00	0.68	*
G N	N	54	54.00	1.69	*
I T	T	57	57.00	1.20	
N R	F	43	43.00	0.82	
G O	J	62	62.00	1.14	
V	P	38	38.00	0.84	
P E	I J	33	33.00	1.82	*
E R	IP	16	16.00	0.94	
R T	EP	22	22.00	0.78	
C S	EJ	29	29.00	0.80	
E	ST	30	30.00	0.92	
P	SF	16	16.00	0.45	*
T	NF	27	27.00	1.60	#
I E	NT	27	27.00	1.80	*
V X	SJ	36	36.00	0.84	
E T	SP	10	10.00	0.39	*
S R	NP	28	28.00	1.41	"
A	NJ	26	26.00	2.18	*
J V	TJ	39	39.00	1.37	"
U E	TP	18	18.00	0.94	
D R	FP	20	20.00	0.76	
G T	FJ	23	23.00	0.88	
I S	IN	24	24.00	2.03	*
N	EN	30	30.00	1.50	"
G	IS	25	25.00	1.07	
	ES	21	21.00	0.47	*

Note concerning symbols following the selection ratios:
 " implies significance at the .05 level, i.e., Chi-square > 3.8;
 # implies significance at the .01 level, i.e., Chi-square > 6.6;
 * implies significance at the .001 level, i.e., Chi-square > 10.8.
 (underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:
 High School Students from Pennsylvania from CAPT Atlas of Type Tables #8631300
 Base total N = 9320. Sample and base are independent.

*** Calculated values of Chi-square or Fisher's exact probability ***
 Type table order

5.6281	0.1058	20.9145	4.3802	E	8.3097	IJ	14.5767	SJ	1.8067	IN	13.8667
				I	8.3097	IP	0.0696	SP	12.5017	EN	6.1279
0.8330	<u>0.0214</u>	1.1650	<u>1.0000</u>	S	22.2361	EP	1.9841	NP	4.0306	IS	0.1590
				N	22.2361	EJ	2.3850	NJ	18.3952	ES	22.7381
0.0369	<u>0.0350</u>	1.6256	0.9401	T	3.5392	ST	0.2988	TJ	5.4158		
				F	3.5392	SF	16.5597	TP	0.0803		
				J	2.1721	NF	7.1707	FP	2.0028		
1.9241	4.0171	<u>0.4478</u>	9.5218	P	2.1721	NT	11.1493	FJ	0.5216		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Total
Public Horticulture

N = 100

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types		INTUITIVE types		N	%	I
with THINKING	with FEELING	with FEELING	with THINKING			
ISTJ		INFJ		J	E	51 51.00 1.13
ISFJ		INTJ "		U	I	49 49.00 0.89
N= 13	N= 6	N= 8	N= 6	D I	S	46 46.00 1.35
%= 13.00	%= 6.00	%= 8.00	%= 6.00	G N	N	54 54.00 0.82
I= 0.74	I= 3.60	I= 1.60	I= 0.40	I T	T	57 57.00 0.74 #
ISTP		INFP		N R	F	43 43.00 1.84 #
ISFP		INTP		G O	J	62 62.00 0.93
N= 6	N= 0	N= 6	N= 4	V	P	38 38.00 1.14
%= 6.00	%= 0.00	%= 6.00	%= 4.00	P E	IJ	33 33.00 0.84
I= 3.60	I= 0.00	I= 0.80	I= 0.60	E R	IP	16 16.00 1.01
ESTP		ENFP		R T	EP	22 22.00 1.26
ESFP		ENTP		C S	EJ	29 29.00 1.05
N= 1	N= 3	N= 11	N= 7	E	ST	30 30.00 0.95
%= 1.00	%= 3.00	%= 11.00	%= 7.00	P	SF	16 16.00 6.40 *
I= 0.40	I= 0.00	I= 2.64	I= 0.65	T	NF	27 27.00 1.30
ESTJ		ENFJ		I E	NT	27 27.00 0.60 #
ESFJ "		ENTJ		V X	SJ	36 36.00 1.20
N= 10	N= 7	N= 2	N= 10	E T	SP	10 10.00 2.40
%= 10.00	%= 7.00	%= 2.00	%= 10.00	S R	NP	28 28.00 0.96
I= 1.00	I= 8.40	I= 0.48	I= 0.80	A	NJ	26 26.00 0.71
				J V	TJ	39 39.00 0.71 "
				U E	TP	18 18.00 0.83
				D R	FP	20 20.00 1.71
				G T	FJ	23 23.00 1.97 "
				I S	IN	24 24.00 0.70
				N	EN	30 30.00 0.95
				G	IS	25 25.00 1.20
					ES	21 21.00 1.57

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square >3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

(underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Landscape Architects from Potier-Brown Dissertation 1993

Base total N = 120. Sample and base are independent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

0.8454	<u>0.1455</u>	0.8239	4.5459	E	0.7871	IJ	0.8964	SJ	0.8919	IN	2.7084
				I	0.7871	IP	0.0011	SP	<u>0.1093</u>	EN	0.0709
				S	3.1948	EP	0.7024	NP	0.0363	IS	0.5392
<u>0.1455</u>	9999.990	0.1932	<u>0.5533</u>	N	3.1948	EJ	0.0606	NJ	2.8607	ES	2.2917
				T	9.6521	ST	0.0709	TJ	5.5970		
<u>0.6278</u>	<u>0.0924</u>	<u>0.0680</u>	0.9698	F	9.6521	SF	<u>0.0005</u>	TP	0.4583		
				J	0.5191	NF	<u>1.1492</u>	FP	2.8990		
0.0000	<u>0.0246</u>	<u>0.4594</u>	0.3385	P	0.5191	NT	7.5971	FJ	5.0080		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Total
Public Horticulture

N = 100

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types		INTUITIVE types		N	%	I
with THINKING	with FEELING	with FEELING	with THINKING			
ISTJ	ISFJ	INFJ	INTJ	J	E	51 51.00 0.99
N= 13	N= 6	N= 8	N= 6	U	I	49 49.00 1.01
%= 13.00	%= 6.00	%= 8.00	%= 6.00	D I	S	46 46.00 0.60 *
I= 0.85	I= 0.72	I= 0.00	I= 2.16	G N	N	54 54.00 2.29 *
-----				I T	T	57 57.00 0.80
ISTP	ISFP	INFP	INTP	N R	F	43 43.00 1.47
N= 6	N= 0	N= 6	N= 4	G O	J	62 62.00 1.06
%= 6.00	%= 0.00	%= 6.00	%= 4.00	V	P	38 38.00 0.91
I= 0.62	I= 0.00	I= 1.44	I= 0.96	P E	IJ	33 33.00 1.25
-----				E R	IP	16 16.00 0.72
ESTP	ESFP	ENFP	ENTP	R T	EP	22 22.00 1.13
N= 1	N= 3	N= 11	N= 7	C S	EJ	29 29.00 0.91
%= 1.00	%= 3.00	%= 11.00	%= 7.00	E	ST	30 30.00 0.58 #
I= 0.14	I= 0.54	I= 0.00	I= 1.01	P	SF	16 16.00 0.64
-----				T	NF	27 27.00 6.48 *
ESTJ	ESFJ	ENFJ	ENTJ	I E	NT	27 27.00 1.39
N= 10	N= 7	N= 2	N= 10	V X	SJ	36 36.00 0.72
%= 10.00	%= 7.00	%= 2.00	%= 10.00	E T	SP	10 10.00 0.38 #
I= 0.51	I= 1.01	I= 0.00	I= 1.80	S R	NP	28 28.00 1.83 "
-----				A	NJ	26 26.00 3.12 #
ISTJ	ISFJ	INFJ	INTJ	J V	TJ	39 39.00 0.91
N= 13	N= 6	N= 8	N= 6	U E	TP	18 18.00 0.65
%= 13.00	%= 6.00	%= 8.00	%= 6.00	D R	FP	20 20.00 1.44
I= 0.85	I= 0.72	I= 0.00	I= 2.16	G T	FJ	23 23.00 1.51
-----				I S	IN	24 24.00 2.16 "
ISTP	ISFP	INFP	INTP	N	EN	30 30.00 2.40 #
N= 6	N= 0	N= 6	N= 4	G	IS	25 25.00 0.67
%= 6.00	%= 0.00	%= 6.00	%= 4.00		ES	21 21.00 0.54 "
I= 0.62	I= 0.00	I= 1.44	I= 0.96			

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square > 3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

(underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

FARMERS from CAPT Atlas of Type Tables #8629385

Base total N = 72. Sample and base are independent.

*** Calculated values of Chi-square or Fisher's exact probability ***

Type table order							
0.1809	0.3512	0.0214	0.4707	E 0.0025	IJ 0.8674	SJ 3.3712	IN 4.5921
				I 0.0025	IP 1.0702	SP 8.0210	EN 7.3117
				S 15.9482	EP 0.1652	NP 3.8643	IS 3.1010
0.8301	0.0716	0.7361	1.000	N 15.9482	EJ 0.1721	NJ 8.6276	ES 6.5755
				T 3.4286	ST 8.0533	TJ 0.2853	
0.0834	0.4541	0.0028	1.0000	F 3.4286	SF 2.1379	TP 2.3252	
				J 0.2354	NF 0.0001	FP 1.0857	
3.1099	1.0000	0.5104	0.4000	P 0.2354	NT 1.3163	FJ 1.5739	

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Total
Public Horticulture

N = 100

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types		INTUITIVE types		N	%	I
with THINKING	with FEELING	with FEELING	with THINKING			
ISTJ	ISFJ	INFJ	INTJ	J	E	51 51.00 0.90
N= 13	N= 6	N= 8	N= 6	U	I	49 49.00 1.13
%= 13.00	%= 6.00	%= 8.00	%= 6.00	D I	S	46 46.00 0.85
I= 0.96	I= 0.79	I= 2.50	I= 2.14	G N	N	54 54.00 1.17
-----				I T	T	57 57.00 0.98
ISTP	ISFP	INFP	INTP	N R	F	43 43.00 1.03
N= 6	N= 0	N= 6	N= 4	G O	J	62 62.00 1.03
%= 6.00	%= 0.00	%= 6.00	%= 4.00	V	P	38 38.00 0.95
I= 1.88	I= 0.00	I= 1.36	I= 0.59	P E	I J	33 33.00 1.21
-----				E R	IP	16 16.00 1.00
ESTP	ESFP	ENFP	ENTP	R T	EP	22 22.00 0.92
N= 1	N= 3	N= 11	N= 7	C S	EJ	29 29.00 0.88
%= 1.00	%= 3.00	%= 11.00	%= 7.00	E	ST	30 30.00 0.87
I= 0.21	I= 0.62	I= 1.06	I= 1.75	P	SF	16 16.00 0.82
-----				T	NF	27 27.00 1.23
ESTJ	ESFJ	ENFJ	ENTJ	I E	NT	27 27.00 1.12
N= 10	N= 7	N= 2	N= 10	V X	SJ	36 36.00 0.91
%= 10.00	%= 7.00	%= 2.00	%= 10.00	E T	SP	10 10.00 0.69
I= 0.78	I= 1.25	I= 0.50	I= 0.96	S R	NP	28 28.00 1.09
-----				A	NJ	26 26.00 1.27
				J V	TJ	39 39.00 0.98
				U E	TP	18 18.00 0.96
				D R	FP	20 20.00 0.94
				G T	FJ	23 23.00 1.13
				I S	IN	24 24.00 1.40
				N	EN	30 30.00 1.04
				G	IS	25 25.00 0.96
					ES	21 21.00 0.75

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square > 3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

(underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Business: General, Self-employed from CAPT Atlas of Type Tables #8629307

Base total N = 250. Sample and base are independent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

0.0221	0.2757	3.7725	2.0452	E 0.9714	IJ 1.1704	SJ 0.3907	IN 2.1339
				I 0.9714	IP 0.0000	SP 1.2114	EN 0.0498
				S 1.8307	EP 0.1593	NP 0.2123	IS 0.0374
1.4583	<u>0.3307</u>	0.3957	<u>0.4557</u>	N 1.8307	EJ 0.4763	NJ 1.3054	ES 1.8191
				T 0.0575	ST 0.6241	TJ 0.0108	
<u>0.1199</u>	<u>0.5690</u>	0.0272	1.3911	F 0.0575	SF 0.6121	TP 0.0302	
				J 0.1196	NF 0.9954	FP 0.0623	
0.5303	0.2482	<u>0.5206</u>	0.0124	P 0.1196	NT 0.3442	FJ 0.2896	

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group tabulated:

Directors

N = 4

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of total choosing this group who fall into this type.
I = Self-selection index: Ratio of percent of type in group to % in sample.

SENSING types		INTUITIVE types		N	%	I																	
with THINKING	with FEELING	with FEELING	with THINKING																				
ISTJ		ISFJ		INFJ		INTJ		J	E	4	100.00	1.86											
N= 0	N= 0	N= 0	N= 0	U	I	0	0.00	0.00	D I	S	1	25.00	0.44										
%= 0.00	%= 0.00	%= 0.00	%= 0.00	G N	N	3	75.00	1.76	I T	T	4	100.00	1.11										
I= 0.00	I= 0.00	I= 0.00	I= 0.00	N R	F	0	0.00	0.00	G O	J	4	100.00	1.33										
ISTP		ISFP		INFP		INTP		V	P	0	0.00	0.00	P E	I J	0	0.00	0.00						
N= 0	N= 0	N= 0	N= 0	E R	IP	0	0.00	0.00	R T	EP	0	0.00	0.00	C S	E J	4	100.00	2.57					
%= 0.00	%= 0.00	%= 0.00	%= 0.00	E	ST	1	25.00	0.49	P	SF	0	0.00	0.00	T	NF	0	0.00	0.00					
I= 0.00	I= 0.00	I= 0.00	I= 0.00	I E	NT	3	75.00	1.96	V X	SJ	1	25.00	0.54	E T	SP	0	0.00	0.00					
ESTP		ESFP		ENFP		ENTP		S R	NP	0	0.00	0.00	J V	TJ	4	100.00	1.40	U E	TP	0	0.00	0.00	
N= 0	N= 0	N= 0	N= 0	D R	FP	0	0.00	0.00	G T	FJ	0	0.00	0.00	I S	IN	0	0.00	0.00	N	EN	3	75.00	2.91
%= 0.00	%= 0.00	%= 0.00	%= 0.00	I	ES	1	25.00	0.89	G	IS	0	0.00	0.00	E	0.1271	I J	0.2975	S J	0.6252	I N	0.6097		
I= 0.00	I= 0.00	I= 0.00	I= 0.00	D R	FP	0	0.00	0.00	I	IP	1.000	SP	1.000	E	0.1271	I P	1.000	S P	1.000	E N	0.0609		
ESTJ		ESFJ		ENFJ		ENTJ		S	EP	0.6336	NP	0.6431	I S	0.3262	N	0.3175	E J	0.0258	N J	0.0807	E S	1.000	
N= 1	N= 0	N= 0	N= 3	T	ST	0.3624	T J	0.3319	F	SF	1.0000	T P	0.5973	T	1.000	S T	0.3624	T J	0.3319	F	1.0000	T P	0.5973
%= 25.00	%= 0.00	%= 0.00	%= 75.00	J	NF	1.0000	F P	1.0000	J	NF	1.0000	F P	1.0000	J	0.5721	N F	1.0000	N T	0.2998	F J	1.0000		
I= 1.26	I= 0.00	I= 0.00	I= 4.64	P	NT	0.2998	F J	1.0000	P	NT	0.2998	F J	1.0000	P	0.5721	N T	0.2998	F J	1.0000				

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square >3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

(underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

High Level Corporate Executives from CAPT Atlas of Type Tables #8623114

Base total N = 136. Sample and base are independent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

0.5727	9999.990	1.000	1.000	E	0.1271	I J	0.2975	S J	0.6252	I N	0.6097
1.0000	1.000	1.000	1.000	I	0.1271	I P	1.000	S P	1.000	E N	0.0609
1.000	1.000	1.000	1.000	S	0.3175	E P	0.6336	N P	0.6431	I S	0.3262
1.000	1.000	1.000	1.000	N	0.3175	E J	0.0258	N J	0.0807	E S	1.000
1.000	1.000	1.000	0.0181	T	1.000	S T	0.3624	T J	0.3319		
				F	1.000	S F	1.0000	T P	0.5973		
				J	0.5721	N F	1.0000	F P	1.0000		
				P	0.5721	N T	0.2998	F J	1.0000		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Public Relations

N = 4

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types		INTUITIVE types		N	%	I						
with THINKING	with FEELING	with FEELING	with THINKING									
ISTJ		ISFJ		INFJ		INTJ		J	E	4	100.00	1.51
N= 0	N= 0	N= 0	N= 0					U	I	0	0.00	0.00
%= 0.00	%= 0.00	%= 0.00	%= 0.00					D	S	1	25.00	0.62
I= 0.00	I= 0.00	I= 0.00	I= 0.00					G	N	3	75.00	1.26
ISTP		ISFP		INFP		INTP		I	T	2	50.00	1.03
N= 0	N= 0	N= 0	N= 0					N	R	2	50.00	0.97
%= 0.00	%= 0.00	%= 0.00	%= 0.00					G	O	3	75.00	1.33
I= 0.00	I= 0.00	I= 0.00	I= 0.00					V	P	1	25.00	0.57
ESTP		ESFP		ENFP		ENTP		P	E	0	0.00	0.00
N= 0	N= 0	N= 1	N= 0					E	R	0	0.00	0.00
%= 0.00	%= 0.00	%= 25.00	%= 0.00					R	T	1	25.00	0.79
I= 0.00	I= 0.00	I= 1.59	I= 0.00					C	S	3	75.00	2.15
ESTJ		ESFJ		ENFJ		ENTJ		E	S	0	0.00	0.00
N= 0	N= 1	N= 0	N= 2					P	S	1	25.00	1.39
%= 0.00	%= 25.00	%= 0.00	%= 50.00					T	F	1	25.00	0.74
I= 0.00	I= 3.71	I= 0.00	I= 8.90					I	E	2	50.00	1.93
								V	X	1	25.00	0.82
								E	T	0	0.00	0.00
								S	R	1	25.00	0.74
								A	N	2	50.00	1.93
								J	V	2	50.00	1.71
								U	E	0	0.00	0.00
								D	R	1	25.00	1.01
								G	T	1	25.00	0.93
								I	S	0	0.00	0.00
								N	E	3	75.00	1.96
								G	I	0	0.00	0.00
									S	1	25.00	0.89

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square >3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

(underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Public Relations Workers and Publicity Writers, CAPT Atlas Type Tables #862940

Base total N = 89. Sample and base are independent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

1.000	1.000	1.000	1.000	E	0.3010	IJ	0.5782	SJ	1.000	IN	0.5782
1.000	1.000	1.000	1.000	I	0.3010	IP	1.000	SP	1.000	EN	0.2974
1.000	1.000	1.000	1.000	S	0.6487	EP	1.000	NP	1.000	IS	1.000
1.000	1.000	1.000	1.000	N	0.6487	EJ	0.1368	NJ	0.5709	ES	1.000
1.000	1.000	1.000	1.000	T	1.0000	ST	0.5740	TJ	0.5811		
1.000	1.000	1.000	1.000	F	1.0000	SF	1.000	TP	0.5907		
0.6342	0.2727	1.000	0.0273	J	0.6319	NF	1.000	FP	1.000		
				P	0.6319	NT	0.5709	FJ	1.000		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Gardeners

N = 23

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types with THINKING		SENSING types with FEELING		INTUITIVE types with FEELING		INTUITIVE types with THINKING		N	%	I
ISTJ		ISFJ		INFJ		INTJ				
N= 5	N= 3	N= 3	N= 1							
%= 21.74	%= 13.04	%= 13.04	%= 4.35							
I= 1.42	I= 1.57	I= 0.00	I= 1.57							
ISTP		ISFP		INFP		INTP				
N= 3	N= 0	N= 1	N= 1							
%= 13.04	%= 0.00	%= 4.35	%= 4.35							
I= 1.34	I= 0.00	I= 1.04	I= 1.04							
ESTP		ESFP		ENFP		ENTP				
N= 0	N= 1	N= 1	N= 1							
%= 0.00	%= 4.35	%= 4.35	%= 4.35							
I= 0.00	I= 0.78	I= 0.00	I= 0.63							
ESTJ		ESFJ		ENFJ		ENTJ				
N= 1	N= 1	N= 0	N= 1							
%= 4.35	%= 4.35	%= 0.00	%= 4.35							
I= 0.22	I= 0.63	I= 0.00	I= 0.78							

J	E	6	26.09	0.51	"
U	I	17	73.91	1.52	"
D	S	14	60.87	0.80	
G	N	9	39.13	1.66	
I	T	13	56.52	0.80	
N	R	10	43.48	1.49	
G	O	15	65.22	1.12	
V	P	8	34.78	0.83	
P	E	12	52.17	1.98	"
E	R	5	21.74	0.98	
R	T	3	13.04	0.67	
C	S	3	13.04	0.41	
E	ST	9	39.13	0.76	
P	SF	5	21.74	0.87	
T	NF	5	21.74	5.22	"
I	E	4	17.39	0.89	
V	X	10	43.48	0.87	
E	T	4	17.39	0.66	
S	R	4	17.39	1.14	
A	NJ	5	21.74	2.61	
J	V	8	34.78	0.81	
U	E	5	21.74	0.78	
D	R	3	13.04	0.94	
G	T	7	30.43	1.99	
I	S	6	26.09	2.35	
N	EN	3	13.04	1.04	
G	IS	11	47.83	1.28	
	ES	3	13.04	0.34	"

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square > 3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

(underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

FARMERS from CAPT Atlas of Type Tables #8629385

Base total N = 72. Sample and base are independent.

**** Calculated values of Chi-square or Fisher's exact probability ****
Type table order

<u>0.5259</u>	<u>0.6828</u>	<u>0.0128</u>	<u>1.0000</u>	E 4.5042	IJ 5.2720	SJ 0.2969	IN 3.1114
				I 4.5042	IP 1.0000	SP 0.4219	EN 1.0000
				S 2.1121	EP 0.5536	NP 1.0000	IS 0.7745
<u>0.7003</u>	<u>0.5753</u>	<u>1.0000</u>	<u>1.0000</u>	N 2.1121	EJ 0.1073	NJ 0.1278	ES 0.0230
				T 1.6241	ST 1.0488	TJ 0.4930	
<u>0.3312</u>	<u>1.0000</u>	<u>0.2421</u>	<u>1.0000</u>	F 1.6241	SF 0.7902	TP 0.6035	
				J 0.3442	NF 0.0188	FP 1.0000	
<u>0.1072</u>	<u>1.0000</u>	<u>9999.990</u>	<u>1.0000</u>	P 0.3442	NT 1.0000	FJ 2.6076	

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Business

N = 10

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types		INTUITIVE types		N	%	I
with THINKING	with FEELING	with FEELING	with THINKING			
ISTJ	ISFJ	INFJ	INTJ	J	E	4 40.00 0.70
N= 1	N= 0	N= 2	N= 2	U	I	6 60.00 1.39
%= 10.00	%= 0.00	%= 20.00	%= 20.00	D I	S	5 50.00 0.93
I= 0.74	I= 0.00	I= 6.25	I= 7.14	GN	N	5 50.00 1.09
-----				IT	T	5 50.00 0.86
ISTP	ISFP	INFP	INTP	NR	F	5 50.00 1.20
N= 1	N= 0	N= 0	N= 0	GO	J	7 70.00 1.17
%= 10.00	%= 0.00	%= 0.00	%= 0.00	V	P	3 30.00 0.75
I= 3.12	I= 0.00	I= 0.00	I= 0.00	PE	IJ	5 50.00 1.84
-----				ER	IP	1 10.00 0.62
ESTP	ESFP	ENFP	ENTP	RT	EP	2 20.00 0.83
N= 0	N= 1	N= 1	N= 0	CS	EJ	2 20.00 0.61
%= 0.00	%= 10.00	%= 10.00	%= 0.00	E	ST	3 30.00 0.87
I= 0.00	I= 2.08	I= 0.96	I= 0.00	P	SF	2 20.00 1.02
-----				T	NF	3 30.00 1.36
ESTJ	ESFJ	ENFJ	ENTJ	IE	NT	2 20.00 0.83
N= 1	N= 1	N= 0	N= 0	VX	SJ	3 30.00 0.76
%= 10.00	%= 10.00	%= 0.00	%= 0.00	ET	SP	2 20.00 1.39
I= 0.78	I= 1.79	I= 0.00	I= 0.00	SR	NP	1 10.00 0.39
-----				A	NJ	4 40.00 1.96
ISTJ	ISFJ	INFJ	INTJ	JV	TJ	4 40.00 1.01
N= 1	N= 1	N= 0	N= 0	UE	TP	1 10.00 0.53
%= 10.00	%= 10.00	%= 0.00	%= 0.00	DR	FP	2 20.00 0.94
I= 0.78	I= 1.79	I= 0.00	I= 0.00	GT	FJ	3 30.00 1.47
-----				IS	IN	4 40.00 2.33
ISTP	ISFP	INFP	INTP	N	EN	1 10.00 0.35
N= 1	N= 0	N= 0	N= 0	G	IS	2 20.00 0.77
%= 10.00	%= 0.00	%= 0.00	%= 0.00		ES	3 30.00 1.07
I= 3.12	I= 0.00	I= 0.00	I= 0.00			

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square >3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

— (underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Business: General, Self-employed from CAPT Atlas of Type Tables #8629307

Base total N = 250. Sample and base are independent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

1.000	0.6219	0.0509	0.0416	E	0.3417	IJ	0.1495	SJ	0.7445	IN	0.0854
0.3014	1.0000	1.000	0.6351	I	0.3417	IP	0.7104	SP	0.6436	EN	0.2912
1.000	0.4068	1.000	1.000	S	1.0000	EP	1.000	NP	0.4592	IS	0.7399
1.000	1.0000	1.000	0.6050	N	1.0000	EJ	0.5077	NJ	0.2265	ES	1.000
				T	0.7463	ST	1.000	TJ	1.000		
				F	0.7463	SF	1.000	TP	0.6941		
				J	0.7443	NF	0.6975	FP	1.000		
				P	0.7443	NT	1.000	FJ	0.6928		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Middle Management
(Foreman)

N = 10

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types		INTUITIVE types		N	%	I
with THINKING	with FEELING	with FEELING	with THINKING			
ISTJ		INFJ		J	E	6 60.00 1.11
ISFJ		INTJ		U	I	4 40.00 0.87
N= 3	N= 0	N= 0	N= 0	D I	S	7 70.00 0.83
%= 30.00	%= 0.00	%= 0.00	%= 0.00	G N	N	3 30.00 1.95
I= 1.73	I= 0.00	I= 0.00	I= 0.00	I T	T	9 90.00 1.61
ISTP		INFP		N R	F	1 10.00 0.23
ISFP		INTP		G O	J	7 70.00 1.04
N= 1	N= 0	N= 0	N= 0	V	P	3 30.00 0.92
%= 10.00	%= 0.00	%= 0.00	%= 0.00	P E	IJ	3 30.00 0.97
I= 5.20	I= 0.00	I= 0.00	I= 0.00	E R	IP	1 10.00 0.65
ESTP		ENFP		R T	EP	2 20.00 1.16
ESFP		ENTP		C S	EJ	4 40.00 1.09
N= 0	N= 1	N= 0	N= 1	E	ST	6 60.00 1.25
%= 0.00	%= 10.00	%= 0.00	%= 10.00	P	SF	1 10.00 0.27
I= 0.00	I= 1.04	I= 0.00	I= 0.00	T	NF	0 0.00 0.00
ESTJ		ENFJ		I E	NT	3 30.00 3.90
ESFJ		ENTJ		V X	SJ	5 50.00 0.76
N= 2	N= 0	N= 0	N= 2	E T	SP	2 20.00 1.04
%= 20.00	%= 0.00	%= 0.00	%= 20.00	S R	NP	1 10.00 0.74
I= 0.80	I= 0.00	I= 0.00	I= 0.00	A	NJ	2 20.00 10.40
ESTJ		ENTJ		J V	TJ	7 70.00 1.58
ESFJ		ENTJ		U E	TP	2 20.00 1.73
N= 2	N= 0	N= 0	N= 2	D R	FP	1 10.00 0.47
%= 20.00	%= 0.00	%= 0.00	%= 20.00	G T	FJ	0 0.00 0.00
I= 0.80	I= 0.00	I= 0.00	I= 0.00	I S	IN	0 0.00 0.00
ESTJ		ENTJ		N	EN	3 30.00 7.80
ESFJ		ENTJ		G	IS	4 40.00 1.16
N= 2	N= 0	N= 0	N= 2		ES	3 30.00 0.60
%= 20.00	%= 0.00	%= 0.00	%= 20.00			
I= 0.80	I= 0.00	I= 0.00	I= 0.00			

Note concerning symbols following the selection ratios:

- " implies significance at the .05 level, i.e., Chi-square >3.8;
- # implies significance at the .01 level, i.e., Chi-square > 6.6;
- * implies significance at the .001 level, i.e., Chi-square > 10.8.

— (underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Factory and Site Supervisors (Foreman) from CAPT Atlas of Type Tables #8629368
Base total N = 52. Sample and base are independent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

0.3908	0.5772	9999.990	1.000	E	0.7457	IJ	1.0000	SJ	0.4780	IN	0.5772
				I	0.7457	IP	1.0000	SP	1.0000	EN	0.0263
				S	0.3630	EP	1.0000	NP	1.0000	IS	1.0000
0.2988	1.0000	1.0000	1.0000	N	0.3630	EJ	1.0000	NJ	0.0650	ES	0.3124
				T	0.0732	ST	0.7315	TJ	0.1764		
1.0000	1.0000	1.0000	0.1613	F	0.0732	SF	0.1463	TP	0.6043		
				J	1.0000	NF	0.6038	FP	0.6704		
1.0000	0.5772	9999.990	0.0238	P	1.0000	NT	0.0762	FJ	0.1864		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Maintenance

N = 9

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types		INTUITIVE types		N	%	I							
with THINKING	with FEELING	with FEELING	with THINKING										
ISTJ		ISFJ		INFJ		INTJ		J	E	3	33.33	0.67	
N= 0	N= 1	N= 0	N= 2	U	I	6	66.67	1.34	D	S	5	55.56	0.85
%= 0.00	%= 11.11	%= 0.00	%= 22.22	G	N	4	44.44	1.28	I	T	8	88.89	1.69
I= 0.00	I= 1.18	I= 0.00	I= 6.76	N	R	1	11.11	0.23	G	O	5	55.56	1.02
ISTP		ISFP		INFP		INTP		V	P	4	44.44	0.97	
N= 1	N= 0	N= 0	N= 2	P	E	3	33.33	1.23	E	R	3	33.33	1.46
%= 11.11	%= 0.00	%= 0.00	%= 22.22	R	T	1	11.11	0.49	R	T	2	22.22	0.82
I= 1.40	I= 0.00	I= 0.00	I= 8.26	C	S	4	44.44	1.18	E	S	1	11.11	0.40
ESTP		ESFP		ENFP		ENTP		T	NF	0	0.00	0.00	
N= 1	N= 0	N= 0	N= 0	I	E	4	44.44	2.94	V	X	3	33.33	0.79
%= 11.11	%= 0.00	%= 0.00	%= 0.00	E	T	2	22.22	0.97	S	R	2	22.22	0.97
I= 2.75	I= 0.00	I= 0.00	I= 0.00	J	A	2	22.22	1.88	J	V	4	44.44	1.36
ESTJ		ESFJ		ENFJ		ENTJ		U	TP	4	44.44	2.24	
N= 2	N= 0	N= 0	N= 0	D	R	0	0.00	0.00	G	T	1	11.11	0.52
%= 22.22	%= 0.00	%= 0.00	%= 0.00	I	S	4	44.44	3.03	N	S	0	0.00	0.00
I= 1.69	I= 0.00	I= 0.00	I= 0.00	G	IS	2	22.22	0.63	G	ES	3	33.33	1.11

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square > 3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

(underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

MECHANICS from CAPT Atlas of Type Tables #8629388

Base total N = 669. Sample and base are independent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

0.3925	1.0000	1.0000	0.0372	E	0.5049	IJ	0.7095	SJ	0.7402	IN	0.0333
1.0000	1.0000	0.6521	0.0263	I	0.5049	IP	0.6924	SP	1.0000	EN	0.2172
0.3174	1.0000	0.6259	1.0000	S	0.7263	EP	0.4812	NP	1.0000	IS	0.5054
0.6156	0.6373	1.0000	1.0000	N	0.7263	EJ	1.0000	NJ	0.6090	ES	1.0000
				T	0.0410	ST	0.7349	TJ	0.4858		
				F	0.0410	SF	0.4566	TP	0.0870		
				J	1.0000	NF	0.2186	FP	0.1211		
				P	1.0000	NT	0.0367	FJ	0.6924		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group tabulated:

Secretarial

N = 8

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of total choosing this group who fall into this type.
I = Self-selection index: Ratio of percent of type in group to % in sample.

SENSING types		INTUITIVE types		N	%	I							
with THINKING	with FEELING	with FEELING	with THINKING										
ISTJ		ISFJ		INFJ		INTJ		J	E	6	75.00	1.52	
N= 0	N= 1	N= 1	N= 0	U	I	2	25.00	0.49	D	S	4	50.00	0.83
%= 0.00	%= 12.50	%= 12.50	%= 0.00	G	N	4	50.00	1.26	I	T	2	25.00	0.74
I= 0.00	I= 0.91	I= 2.71	I= 0.00	N	R	6	75.00	1.13	G	O	6	75.00	1.23
ISTP		ISFP		INFP		INTP		V	P	2	25.00	0.64	
N= 0	N= 0	N= 0	N= 0	P	E	I	J	2	25.00	0.80			
%= 0.00	%= 0.00	%= 0.00	%= 0.00	E	R	I	P	0	0.00	0.00			
I= 0.00	I= 0.00	I= 0.00	I= 0.00	R	T	E	P	2	25.00	1.26			
ESTP		ESFP		ENFP		ENTP		C	S	4	50.00	1.69	
N= 0	N= 0	N= 2	N= 0	E	S	T	1	12.50	0.56				
%= 0.00	%= 0.00	%= 25.00	%= 0.00	P	S	F	3	37.50	0.99				
I= 0.00	I= 0.00	I= 2.46	I= 0.00	T	N	F	3	37.50	1.33				
ESTJ		ESFJ		ENFJ		ENTJ		I	E	1	12.50	1.10	
N= 1	N= 2	N= 0	N= 1	V	X	S	J	4	50.00	1.15			
%= 12.50	%= 25.00	%= 0.00	%= 12.50	E	T	S	P	0	0.00	0.00			
I= 1.64	I= 2.00	I= 0.00	I= 3.18	S	R	N	P	2	25.00	1.13			
								J	V	2	25.00	1.03	
								U	E	0	0.00	0.00	
								D	R	2	25.00	0.84	
								G	T	4	50.00	1.37	
								I	S	1	12.50	0.70	
								N	E	3	37.50	1.73	
								G	I	1	12.50	0.38	
									S	3	37.50	1.35	

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square > 3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

(underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

SECRETARIES from CAPT Atlas of Type Tables #8629325

Base total N = 1604. Sample and base are independent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

0.6217	1.0000	0.3175	1.0000	E	0.1740	IJ	1.0000	SJ	0.7336	IN	1.0000
1.0000	0.6753	0.6429	1.0000	I	0.1740	IP	0.2283	SP	0.3653	EN	0.3820
1.0000	1.0000	0.1937	1.0000	S	0.7199	EP	1.0000	NP	1.0000	IS	0.2866
1.0000	0.6063	1.0000	0.2773	N	0.7199	EJ	0.2469	NJ	0.6346	ES	0.6925
				T	0.7246	ST	0.6924	TJ	1.0000		
				F	0.7246	SF	1.0000	TP	0.6224		
				J	0.4932	NF	0.6946	FP	1.0000		
				P	0.4932	NT	1.0000	FJ	0.4731		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Research/Curatorial

N = 5

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

SENSING types		INTUITIVE types		N	%	I	
with THINKING	with FEELING	with FEELING	with THINKING				
ISTJ "		ISFJ	INFJ	INTJ	J	E	2 40.00 0.79
N= 2	N= 0	N= 0	N= 1	U	I	3 60.00 1.22	
%= 40.00	%= 0.00	%= 0.00	%= 20.00	D I	S	3 60.00 1.87	
I= 8.10	I= 0.00	I= 0.00	I= 1.47	G N	N	2 40.00 0.59	
ISTP		ISFP	INFP	INTP	I T	T	5 100.00 2.08
N= 0	N= 0	N= 0	N= 0	N R	F	0 0.00 0.00	
%= 0.00	%= 0.00	%= 0.00	%= 0.00	G O	J	4 80.00 1.32	
I= 0.00	I= 0.00	I= 0.00	I= 0.00	V	P	1 20.00 0.51	
ESTP		ESFP	ENFP	ENTP	P E	IJ	3 60.00 2.02
N= 0	N= 0	N= 0	N= 1	E R	IP	0 0.00 0.00	
%= 0.00	%= 0.00	%= 0.00	%= 20.00	R T	EP	1 20.00 1.01	
I= 0.00	I= 0.00	I= 0.00	I= 2.31	C S	EJ	1 20.00 0.65	
ESTJ		ESFJ	ENFJ	ENTJ	E	ST	3 60.00 4.05 "
N= 1	N= 0	N= 0	N= 0	P	SF	0 0.00 0.00	
%= 20.00	%= 0.00	%= 0.00	%= 0.00	T	NF	0 0.00 0.00	
I= 2.70	I= 0.00	I= 0.00	I= 0.00	I E	NT	2 40.00 1.20	
				V X	SJ	3 60.00 2.31	
				E T	SP	0 0.00 0.00	
				S R	NP	1 20.00 0.60	
				J A	NJ	1 20.00 0.58	
				J V	TJ	4 80.00 2.40	
				U E	TP	1 20.00 1.35	
				D R	FP	0 0.00 0.00	
				G T	FJ	0 0.00 0.00	
				I S	IN	1 20.00 0.58	
				N	EN	1 20.00 0.60	
				G	IS	2 40.00 2.70	
					ES	1 20.00 1.16	

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square > 3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

— (underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

Research Workers from CAPT Atlas of Type Tables #8629470

Base total N = 81. Sample and base are independent.

*** Calculated values of Chi-square or Fisher's exact probability ***

Type table order

0.0372	1.0000	1.0000	1.0000	E	1.000	IJ	0.3195	SJ	0.1300	IN	0.6589
				I	1.000	IP	0.5788	SP	1.0000	EN	0.6651
				S	0.3300	EP	1.0000	NP	0.6651	IS	0.1847
1.000	1.0000	0.6503	1.0000	N	0.3300	EJ	0.6807	NJ	0.6589	ES	1.0000
				T	0.0556	ST	0.0353	TJ	0.0546		
1.000	9999.990	1.0000	0.3938	F	0.0556	SF	0.5864	TP	1.000		
				J	0.6448	NF	0.1685	FP	0.3365		
0.3529	1.0000	1.0000	1.0000	P	0.6448	NT	1.0000	FJ	0.3223		

Source of data
 Angela L. Goin
 University of Delaware
 Horticulture Study
 Tables Created 10/31/1993

Group tabulated:
 Longwood Graduate
 Fellows

MBTI Type Table
 Center for Applications
 of Psychological Type

Legend: % = percent of total choosing this group who fall into this type.
 I = Self-selection index:
 Ratio of percent of type in group to % in sample.

N = 15

SENSING types				INTUITIVE types				N	%	I
with THINKING		with FEELING		with FEELING		with THINKING				
ISTJ	ISFJ	INFJ	INTJ							
N= 2	N= 0	N= 1	N= 0	J	E	8	53.33	0.80		
%= 13.33	%= 0.00	%= 6.67	%= 0.00	U	I	7	46.67	1.40		
I= 0.00	I= 0.00	I= 0.80	I= 0.00	D I	S	4	26.67	1.60		
-----				GN	N	11	73.33	0.88		
ISTP	ISFP	INFP	INTP	IT	T	7	46.67	2.80		
N= 0	N= 0	N= 3	N= 1	NR	F	8	53.33	0.64		
%= 0.00	%= 0.00	%= 20.00	%= 6.67	GO	J	6	40.00	0.96		
I= 0.00	I= 0.00	I= 1.20	I= 0.00	GV	P	9	60.00	1.03		
-----				PE	IJ	3	20.00	1.20		
ESTP	ESFP	ENFP	ENTP	ER	IP	4	26.67	1.60		
N= 0	N= 0	N= 3	N= 2	RT	EP	5	33.33	0.80		
%= 0.00	%= 0.00	%= 20.00	%= 13.33	CS	EJ	3	20.00	0.80		
I= 0.00	I= 0.00	I= 0.80	I= 0.80	E	ST	3	20.00	0.00		
-----				P	SF	1	6.67	0.40		
ESTJ	ESFJ	ENFJ	ENTJ	T	NF	7	46.67	0.70		
N= 1	N= 1	N= 0	N= 1	IE	NT	4	26.67	1.60		
%= 6.67	%= 6.67	%= 0.00	%= 6.67	VX	SJ	4	26.67	1.60		
I= 0.00	I= 0.80	I= 0.00	I= 0.00	ET	SP	0	0.00	0.00		
-----				SR	NP	9	60.00	1.03		
				A	NJ	2	13.33	0.53		
				JV	TJ	4	26.67	0.00		
				UE	TP	3	20.00	1.20		
				DR	FP	6	40.00	0.96		
				GT	FJ	2	13.33	0.32		
				IS	IN	5	33.33	1.33		
				N	EN	6	40.00	0.69		
				G	IS	2	13.33	1.60		
					ES	2	13.33	1.60		

Note concerning symbols following the selection ratios:
 " implies significance at the .05 level, i.e., Chi-square > 3.8;
 # implies significance at the .01 level, i.e., Chi-square > 6.6;
 * implies significance at the .001 level, i.e., Chi-square > 10.8.
 _ (underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:
 Education Department
 Base total N = 12. Sample and base are independent.

*** Calculated values of Chi-square or Fisher's exact probability ***
 Type table order

0.4872	0.4444	1.0000	9999.990	E	0.6960	IJ	1.0000	SJ	0.6618	IN	0.6957
9999.990	9999.990	1.0000	1.0000	I	0.6960	IP	0.6618	SP	9999.990	EN	0.4495
9999.990	9999.990	1.0000	1.0000	S	0.6618	EP	0.7063	NP	1.0000	IS	1.0000
9999.990	9999.990	1.0000	1.0000	N	0.6618	EJ	1.0000	NJ	0.6280	ES	1.0000
1.0000	1.0000	0.1880	1.0000	T	0.1275	ST	0.2308	TJ	0.1060		
				F	0.2172	SF	0.5692	TP	1.0000		
				J	1.0000	NF	0.4408	FP	1.0000		
				P	1.0000	NT	0.6618	FJ	0.1850		

Source of data

Angela L. Goin
University of Delaware
Horticulture Study
Tables Created 10/31/1993

Group
tabulated:

Longwood Graduate
Fellows

MBTI Type Table
Center for Applications
of Psychological Type

Legend: % = percent of
total choosing this group
who fall into this type.
I = Self-selection index:
Ratio of percent of type
in group to % in sample.

N = 15

SENSING types		INTUITIVE types		N	%	I						
with THINKING	with FEELING	with FEELING	with THINKING									
ISTJ		ISFJ		INFJ		INTJ		J	E	8	53.33	0.53
N= 2	N= 0	N= 1	N= 0					D	I	7	46.67	0.00
%= 13.33	%= 0.00	%= 6.67	%= 0.00					U	S	4	26.67	1.07
I= 0.00	I= 0.00	I= 0.00	I= 0.00					G	N	11	73.33	0.98
ISTP		ISFP		INFP		INTP		I	T	7	46.67	0.93
N= 0	N= 0	N= 3	N= 1					N	R	8	53.33	1.07
%= 0.00	%= 0.00	%= 20.00	%= 6.67					G	O	6	40.00	0.53
I= 0.00	I= 0.00	I= 0.00	I= 0.00					V	P	9	60.00	2.40
ESTP		ESFP		ENFP		ENTP		P	E	3	20.00	0.00
N= 0	N= 0	N= 3	N= 2					E	R	4	26.67	0.00
%= 0.00	%= 0.00	%= 20.00	%= 13.33					R	T	5	33.33	1.33
I= 0.00	I= 0.00	I= 0.80	I= 0.00					C	S	3	20.00	0.27
ESTJ		ESFJ		ENFJ		ENTJ		E	S	3	20.00	0.00
N= 1	N= 1	N= 0	N= 1					P	S	1	6.67	0.27
%= 6.67	%= 6.67	%= 0.00	%= 6.67					T	N	7	46.67	1.87
I= 0.00	I= 0.27	I= 0.00	I= 0.13					I	E	4	26.67	0.53
								V	X	4	26.67	1.07
								E	T	0	0.00	0.00
								S	R	9	60.00	2.40
								A	N	2	13.33	0.27
								J	V	4	26.67	0.53
								U	E	3	20.00	0.00
								D	R	6	40.00	1.60
								G	T	2	13.33	0.53
								I	S	5	33.33	0.00
								N	E	6	40.00	0.53
								G	I	2	13.33	0.00
									S	2	13.33	0.53

Note concerning symbols following the selection ratios:

" implies significance at the .05 level, i.e., Chi-square > 3.8;

implies significance at the .01 level, i.e., Chi-square > 6.6;

* implies significance at the .001 level, i.e., Chi-square > 10.8.

(underscore) indicates Fisher's exact probability used instead Chi-square.

Base population used in calculating selection ratios:

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Base total N = 4. Sample and base are independent.

*** Calculated values of Chi-square or Fisher's exact probability ***
Type table order

				E	0.2451	IJ	0.5666	SJ	1.0000	IN	0.2957
1.0000	9999.990	1.000	9999.990	I	0.2451	IP	0.5304	SP	9999.990	EN	0.3034
				S	1.0000	EP	1.0000	NP	0.3034	IS	1.0000
9999.990	9999.990	0.5666	1.000	N	1.0000	EJ	0.0709	NJ	0.1783	ES	1.0000
				T	1.0000	ST	0.5666	TJ	0.5573		
9999.990	9999.990	1.0000	1.0000	F	1.0000	SF	0.3860	TP	0.5666		
				J	0.3034	NF	0.6027	FP	1.0000		
1.000	0.3860	9999.990	0.0970	P	0.3034	NT	0.5573	FJ	1.0000		