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Personality Differences of First-Year Law Students Using the Theory of Mental Self-Government

A Thesis
Presented for the
Masters of Arts Degree
The University of Tennessee, Knoxville

Charles Angelo Licata
December, 2001

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DEDICATION

The following thesis is dedicated to all those who have been involved in my live. For good or bad, you have contributed to who I am today.

ABSTRACT

Thinking styles are described as ones conscious attempt to develop an awareness of stimuli within the surrounding environment. They reflect on the way we perceive, interpret, and integrate information, as well as influence the quality of information we supply to others. At the same time, personality traits have become important factors in understanding the preferences people may feel towards their careers, lifestyles, and quality of life. Furthermore, Myers and Briggs (1984) linked personality to the way we perceive and think about the environment by developing a new model of personality and thinking, which was based on the research and theories of Carl Jung (1927). However, some researchers view personality and thinking styles as being two separate and unrelated entities. Though both are significant to an individual's ability to thrive, they have often been treated as mutually exclusive.

This study explores the relationship between personality and thinking styles, and to what effect the relationship may have on the individual ability to succeed within an environment. The study examined if significant personality differences exist between subjects who have high usage scores in cognitive attributes when compared to those who do not.

The study used Sternberg's theory of mental self-government to determine the strength of the subject's thinking style functioning and Cattell's 16PF to rate the individual personality factors. The instruments were administered to a 73 first-year law students at the University of Tennessee. For analysis, the subjects were divided into two groups. The low usage group (n=50) contained subjects having a usage score of 5 or greater in one or none of the three different thinking style functions. The high usage

group (n=23) contained subjects having high usage scores in two or more thinking style functioning categories. Analysis was performed on the 16PF primary and global personality factors. The results showed the groups as having significantly different scores the 16PF Factor E, Q1, and independence.

A second series of analysis was performed by creating two new groups from the study population. The low usage group (n=20) contained subjects having usage scores of 4 or lower in all of the thinking style functions. The high usage group (n=53) contained all the subjects who had a usage score of 5 or greater in one or more thinking style functions. The results of the analysis produced no significant differences between 16PF scores. This would imply that the strength of certain personality traits may have a direct influence on an individual's ability to readily and effectively obtain information from the environment around them.

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CHAPTER I: INTRODUCTION

Cognitive styles as defined by Keefe (1979) are the "characteristic cognitive, affective, and physiological behaviors that serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment". Furthermore, Badenoch (1986) states that cognitive styles are a subset of learning style theories, since learning style theories concentrate on the identification of the processes associated with learning and the learning environment.

During the 1950's and early 1970s, numerous researchers introduced large numbers of theories addressing styles (Zhang, 2001). A few of the style theories proposed have been Adult Learning Theory (Cross, 1981), Aptitude-Treatment Interaction (Cronbach and Snow, 1977), Cognitive Dissonance Theory (Festinger, 1957), Cognitive Flexibility Theory (Spiro and Jeng, 1990), Information Pickup Theory (Gibson, 1977), Information Processing Theory (Miller, 1957), Structural Learning Theory (Scandura, 1984), Structure of Intellect (Guilford, 1967), and the Triarchic Theory of Intelligence (Sternberg, 1983). By 1984, Messick had identified 19 different style constructs underlying the existing theories of the time, with this number increasing to 30 by 1991 (Riding and Cheema, 1991). In 1997, Sternberg proposed that all style theories could be categorized into one of three different approaches: cognitive-center, personality-centered, and activity-centered.

The cognitive-centered approach deals with the investigation of "the characteristic, self-consistent modes of functioning, which individuals show in their perceptual and intellectual activities" (Witkin and associates, 1971). An example is Field Dependence-Independence (Witkin and associates, 1971). Personality-centered

approaches use personality types (or factors) to identify an individual's desired way of processing information (Zhang, 2000). Myers and Myers (1980) proposed one of the most recognized personality-centered theories, resulting in the widely used Myers-Briggs Type Indicator. The last approach, activity-centered, focuses on the tasks and environmental factors associated with the processing of information. Kolb (1984) developed the theory of experiential learning which identifies two tasks: the processing continuum and perception continuum. Dunn and Dunn (1978) used preferred elements in a learning situation, such as environment, to identify the individuals preferred ways of learning.

Field Dependence - Independence

According to Witkin, individual cognitive styles can be identified as field-dependent or field independent. Witkin and associates (1977) define field independence as "the extent to which a person perceives part of a field as being discrete from the surrounding field as a whole, rather than embedded in the field". Field-dependent individuals are those who rely on external cues and find difficulty in identifying a hidden figure in a surrounding field (Reiff, 1992). The two types are viewed as end points on a continuum, with an individual falling somewhere between the two.

Four paper-and-pencil tests have been developed to identify a persons field-dependence/independence: the Adult Embedded Figure Test (Witkin, Moore, Goodenough, and Cox, 1977); a Preschool Embedded Figure Test (Coates, 1972); the Children's Embedded Figure Test designed for children between the age of 5 to 10 (Karp and Konstadt, 1971); and the Group Embedded figure test (Oltman, Raskin, and Witkin, 1971).

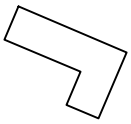
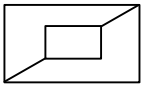
Can you find this shape  in this design? 

Figure 1: Example of an embedded figure question.

Source: Reiff, 1992

An embedded figure test asks the subject to identify a simple figure located in a more complex image field (figure 1). The field-dependent person will have difficultly locating the figure due to the distraction of the larger field, while the field-independent is able to separate the figure from the items around it.

Another test used is called the Rod-and-Frame (Witkin and associates, 1971). With this test the subject is placed in a darken room and asked to orientate a rod so it is in a vertical position. Some distance away, an individual holds a lighted frame at an angle. The subject is field dependent if they align the rod's vertical position based on the angle of the frame. If the rod is aligned based on the subject's body position they are considered field-independent.

The similarity of results obtained from orientation tasks and embedded tests are stated by Witkin and associates (1971): "Reflecting in each case the strong influence of the immediately surrounding field upon the way in which one of its parts is perceived, the person who takes very long to discover the simple figure in the complex EFT design is also likely to tilt the rod far toward the tilted frame …".

A positive aspect of the rod-and-frame and embedded figure tests are the non-verbal design allowing the instruments to be used cross-culturally (Ramirez, Castaneda,

and Herold, 1974). Furthermore, field-dependence/independence has also been associated with social and personality factors (Long, 1974; Saracho, 1988; Messick and associates, 1976; Witkin and Goodenough, 1981). The field-dependent person learns material more easily if it has a human or social context, and is influenced by expressions of confidence or doubt from those they view as authority figures. Contrary, the field-independent person learns better from materials that are inanimate and impersonal, and are not often affected by the opinions of others (Anderson and Maurianne, 1992).

Experiential Learning Model

Kolb (1984) describes his Experiential Learning Model as the way individuals are influenced when engaged in different steps of a learning cycle (figure 2). A person's style is based on the perception and processing tasks used in learning. Each task lies along a continuum with the anchors for perception being concrete and abstract, and processing being active experimentation and reflective observation.

Sims and Sims (1995) described concrete perception as one getting fully involved with a new experience without the affect of bias. Reflective observation is the reflection on new experiences while interpreting them with different perspectives. Abstract conceptualization allows for concepts used in the integration of observations into logically theories. Lastly, active experimentation will use the theories for decision-making and problem solving, which ultimately leads to new experiences.

The four ends represent preferred ways of dealing with information. Depending on where the individual lands on the two separate bisecting continuums, the person will lean towards one of four separate learning types: divergers, convergers, accommodators, and assimilators.

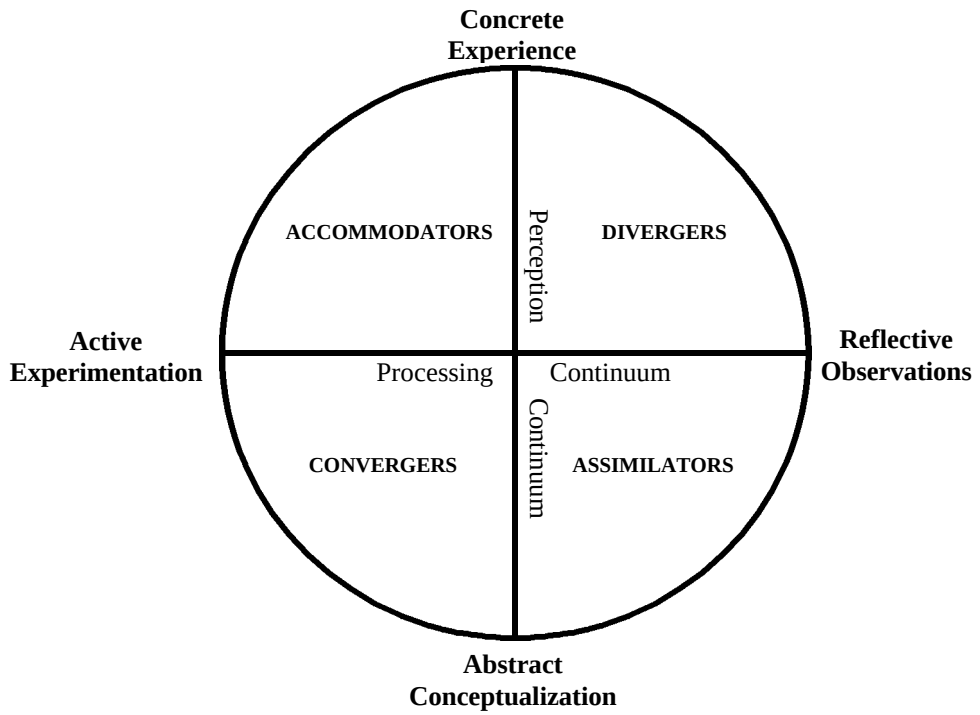


Figure 2: Kolb's Experential Learning Model

Source: Kolb, 1984

Claxton and Murrell (1987) describe divergers as those who "grasp the experience through concrete experience and transform it through reflective observation. Assimilators are described as those "grasp the experience through abstract conceptualization and transform it through reflective observation." Convergers will "grasp the experience through abstract conceptualization and transform it through active experimentation.", while accommodators "grasp the experience through concrete experience and transform it through active experimentation."

Dunn and Dunn Learning Style Model

Dunn and Dunn (1978) proposed a theory containing five categories of stimuli containing various elements influencing the way individuals perceive, interact, and

respond to a learning environment. The elements are environmental, emotional, sociological, physiological, and psychological.

The stimuli and associated elements are:

- Environmental Factors:

  Sound, Light, Temperature, Room design (example: furniture or seating).

- Emotional Factors:

  Motivation, Persistence (whether the student works on one task until completion as opposed to working on several tasks simultaneously), Responsibility (conformity v. nonconformity), Structure (Need for either externally imposed structure or the opportunity to do things in their own way).

- Sociological Factors (Learning best when):

  Alone, paired, in a peer group, part of a team, learning from an adult who is authoritative or collegial, using a variety rather then consistent pattern of learning.

- Physiological Factors:

  Perceptual strengths (auditory, visual, tactual, and/or kinesthetic preferences), Time (Time-of-day energy levels), Intake (Food or liquid intake), Mobility needs.

- Psychological Factors:

  Global versus analytic processing (determined through correlations among sound, light, design, persistence, sociological preferences,

and intake), Right/left brain hemisphericity, Impulsive versus reflective.

Dunn and Dunn suggests that learning will be more successful for a larger number of people if the learning environment is designed to account for varying individual styles. In support of this argument, Dunn and associates (1995) performed a meta-analysis of thirty-six studies using the Dunn and Dunn Learning Style Model between. The studies were conducted between 1980 and 1990, and included data from 3,181 participants. The results indicated students whose learning style characteristics were accommodated could be expected to achieve a grade 75 percent of a standard deviation higher than students whose styles were not accommodated.

Dunn and associates (1995) summarized the results as:

1. Students with strong learning-style preferences showed greater academic gains as a result of congruent instructional interventions than those students who had mixed preferences or moderate preferences.
2. Studies conducted with small sample sizes showed greater academic gains than those with large or medium sample sizes.
3. College and adult learners showed greater gains than elementary school learners or secondary school learners.
4. Examination of socioeconomic status indicated that middle-class students were more responsive to learning-style accommodations than were lower middle-class or upper middle-class or lower class students.
5. Academic-level moderators indicated that average students were more responsive to learning-style accommodations than were high, low, or

Table 1. MBTI Dimensions and Functioning.

Dimension	Functioning	
Attitude	Extroversion (E)	Introversion (I)
Perceptual	Intuition (N)	Sensing (S)
Judgment	Thinking (T)	Feeling (F)
Approach	Judgment (J)	Perception (P)

Source: Myers and Briggs, 1986

mixed groups of students.

6. Instructional interventions that were conducted for more than one year showed stronger results than those conducted for several days, weeks, or months.
7. The content area most responsive to learning-style accommodation was mathematics, followed by other subjects and language arts.

Myers-Briggs Type Indicators

Jung's (1927) theory of personality types is considered one of the earliest attempts in defining cognitive styles in a modern way. His theory of Psychological Types laid the groundwork for his studies where he noted the differences in the way students perceived, formulated decisions, and interacted with the information they obtained.

In its most basic form, Jung's theory states an individual's personality lies within the domain of three separate continuums composed of attitudes, perceptual functions, and judgment functions (table1). The attitude continuum is comprised of introversion and extroversion and it describes a person's way of relating to others. The perceptual function continuum is whether one perceives the world more through sensing or by

Table 2. Myers-Briggs Type Orientation of the Dominant Functions.

IS**TJ**	IS**FJ**	IN**FJ**	IN**TJ**
I**S**T**P**	I**S**F**P**	I**N**F**P**	I**N**T**P**
ES**TP**	ES**FP**	EN**FP**	EN**TP**
E**S**T**J**	E**S**F**J**	E**N**F**J**	E**N**T**J**

Source: Campbell and Davis, 1990.

Table 3. Thinking & MBTI Preferences

Thinking and Learning Strategies	**Preferred**	**Not Preferred**
Abstract Thinking	NT	ST
Analytical Thinking	T	F
Critical Thinking	NT	SF
Metacognition and Introspective Self-Analysis	ITP	EFJ
Reading Articles With Opposing Views	P	J
Tolerating Ambiguity	NP	SJ

Source: Alexander and Kelly, 1996.

intuition. Lastly, the judgment continuum refers to either thinking or feeling as the preferred way for individuals to reach conclusions.

Myers and Myers (1980) expanded on Jung's work by developing the Myers-Briggs Type Indicator (MBTI), which included the addition of a fourth dimension: attitude toward the outer world. The dimension is divided into either perceiving or judging as the individual's way of approaching the world.

Furthermore, Myers and Briggs changed the familiar dimensions from continuums into dichotomies. In each dimension a person will prefer one approach to the other, and from the combining of these preferences a person can identify their personality as being one of 16 types (table 2). Out of the four approaches identified as a person's

style, there are 2 approaches will that will dominate. The resulting dominant functions are used to identify the thinking methods associated with the individual's personality type (table 3).

Theory of Mental Self-Government

According to Sternberg's (1997) theory, everyone's cognitive thinking processes are a combination of 13 different styles, which reflect the natural way humans facilitate social governments. Each style falls into one of 5 separate dimensions called functions, forms, levels, scopes, and leanings (table 4). A person will have a varying degree of each style and by determining the combination of styles used by an individual, one can recognize under what situations an individual learns and performs best.

In the theory there are three functions of governing used to accomplish a cognitive task. The legislative function is what defines a task, with the executive taking action based upon the definitions. Lastly, once the task is completed the outcome is critically reviewed by the judicial function. By using the functions of government as a

Table 4: Dimensions and Styles of the Theory of Mental Self-Government.

	Dimensions				
	Functions	**Forms**	**Levels**	**Scopes**	**Leanings**
Styles	Legislative	Monarchic	Local	Internal	Liberal
	Executive	Hierarchic	Global	External	Conservative
	Judicial	Oligarchic			
		Anarchic			

Source: Sternberg, 1997.

model of thinking, individuals who have legislative leanings tend to be creative, idea driven people. Executives would be the rule-oriented people who enjoy having a structured way of getting a task done, while judicial people would be those who find satisfaction in being critical of the final outcome.

The next dimension of the theory is based on the forms a government can take. The monarchic form focuses on one task at a time, while the hierarchic form is able to distribute attention to various prioritized tasks. Similarly, the oligarchic form can also focus on more than one task, however there exists difficulty with prioritizing them. Lastly, the anarchic form prefers to approach a task in a flexible way in regards to how it will be performed.

The third dimension is level and it reflects whether a government treats the elements of a task at a local or global level. The local level will direct attention to the specific details of the task, while a global will view the task's structure in a large, abstract way.

The fourth dimension a government will utilizes when performing a task is the scope used to reach a final outcome. The internal scope will attempt to perform the task independently of everyone else, while an external scope will have a desire to interact with people in order to get the task done.

The final dimension is the leaning of a government towards being liberal or conservative. The liberal will lean towards tasks involving ambiguity in an attempt to have the opportunity to perform beyond any existing rules. The conservative is the exact opposite, wishing primarily to adhere to the rules, minimize any change, and avoid as much ambiguity as possible.

Sternberg (1995) claims an individual's thinking is comprised of varying levels of each style with some being highly utilized, while others not. By assessing the specific styles of a person, one can determine how well they may respond to a given task. Sternberg (1997) argues how essential this is to learning, since students of equal ability will perform differently based on how information is delivered to them.

The theory of mental self-government has been operationalized through inventories, including the Thinking Styles Inventory (TSI; Sternberg & Wagner, 1992), which have been shown to be reliable and valid for U.S. and Hong Kong samples (Zhang, 1999; Grigorenko and Sternberg, 1995).

Sternberg and Grigorenko (1995) reported that there are significant relationships between students' thinking styles and demographic data. In 1997, Grigorenko and Sternberg performed a study showing thinking styles as contributing significantly to the prediction of academic performance. The results indicated the TSI as being a better predictor of academic success then using scores from ability test. A further study by Zhang and Sternberg (1998) of 622 Hong Kong university students found thinking styles could be used as accurate predictors of academic achievement.

Sternberg (1994) performed a study to determine the correlates of the TSI with the Myers-Briggs Type Indicator. He reported that 30 of 128 correlation coefficients were statistically significant, which is higher than what would be expected by chance. In 2001, Zhang administered the TSI and the Short-version Self-directed Search (based on Holland's theory of vocational/personality types) to 600 Hong Kong university students and found two constructs from both theories overlapped one another.

Hypothesis

The following study examines the differences in individual personality factors and the usage of thinking style functions as described in the theory of mental self-government (table 5). The primary and global factors of the 16PF are examined for significant differences between students who are grouped based on their function usage scores. The study had two separate analysis performed, with each analysis containing all participants divided into low and high function usage groups. The criteria for the high function usage in the first analysis was any student with two or more function usage scores above a score 4. For the second analysis, any student with one or more function usage scores above a score 4 were placed into the high function usage group.

Hypothesis 1: High function usage group of the first analysis will show significantly higher scores then the low function usage group in 16PF Factor E.

Hypothesis 2: High function usage group of the first analysis will show significantly lower scores then the low function usage group in 16PF Factor O.

Hypothesis 3: High function usage group of the first analysis will show significantly higher scores then the low function usage group in 16PF Factor Q1.

Hypothesis 4: High function usage group of the first analysis will show no significant difference in scores of 16PF secondary factors when compared to the low function usage group.

Hypothesis 5: High function usage group of the second analysis will show no

significant difference in any 16PF primary and global factors when compared to the low function usage group.

Summary of 16PF Instrument

In 1946, Cattell introduced a model containing the underlying dimensions of personality. The model was derived using the research of Allport and Odbert's (1936) collection of 17,953 English trait words for personality. The collection of words were further reduced by Cattell to derive a group of 171 descriptor words.

Cattell then obtained data on subjects who rated themselves based on the descriptor words and ratings from informants who knew the subjects well. The self-

Table 5. 16PF Primary Factors

Low Score Description	Factor	High Score Description
Reserved	A*	Outgoing
Less Intelligent	B*	More Intelligent
Affected by Feelings	C*	Emotional Stability
Humble	E*	Assertive
Sober	F*	Happy-Go-Lucky
Expedient	G*	Conscientious
Shy	H*	Venturesome
Tough-Minded	I*	Tender-Minded
Trusting	L*	Suspicious
Practical	M*	Imaginative
Forthright	N*	Astute
Self-Assured	O*	Apprehensive
Conservative	Q1**	Experimenting
Group-Dependent	Q2**	Self-Sufficient
Undisciplined Self-Conflicted	Q3**	Controlled
Relaxed	Q4**	Tense

*** Original 12 primary factors.**
**** 4 primary factors added later.**

Source: Adapted from Cattell, 1989

reported information collected was called Q-data and the information reported information was referred to as L-data. Through a series of factor analysis Cattell found that the descriptors fell into 12 specific personality traits (table 5). However, through continuing research, Cattell was able to identify 4 more personality traits which were eventually added to the model, giving the familiar total of 16 (Cattell, 1989).

In 1949, Cattell released the 16PF questionnaire for the determination of an individual's primary personality factors. Currently in its 5th edition, the questionnaire is comprised of 185 questions that when scored result in "standardized ten" (STEN) scores for each primary factor (Conn and associates, 1994). The STEN scores are valued from 1 to 10, with a mean of 5.5 and a SD of 2. A score between 1 and 3 is considered in the low range, 4 and 7 in the average range, while 8 and 10 is high.

During the scales development the 16 primary factors were also intercorrelated to uncover small clusters of the primary scales. These eight clusters became referred to as second-order factors of personality (Conn and Reich, 1994) which consists of Extraversion, Anxiety, Tough Poise, Independence, Control, Adjustment, Leadership,

Table 6. 16PF (5th edition) Global Factors.

Low Score Description		High Score Description
Introversion	↔	Extroversion
Low Anxiety	↔	High Anxiety
Emotional	↔	Tough Minded
Sensitivity	↔	Independence
Low Control	↔	High Control

Source: Adapted from Cattell, 1989

and Creativity.

However, with the introduction of the 16PF 5th edition the second-order factors are referred to as "global factors" in order to reflect the broad personality domains they are comprised of (Conn and Reich, 1994). Furthermore, the 5th edition concentrates only on the largest five of the second-order factors, which are Extraversion, Anxiety, Tough Minded, Independence, and Self-Control (table 6).

CHAPTER II: METHODS AND RESULTS

Participants

In 1999, 177 students who had accepted offers to attend law school at the University of Tennessee were asked to participate in the study and sent study packets to complete at home. Thirty of the packets were completed and returned. In 2000, 182 packets were sent out to students who had accepted offers. Ultimately, 163 of the students enrolled in the law program, with 51 of the students returning completed packets. Seventy-three of the completed and returned packets were included in the study, while 8 were removed due to instruments not being filled out completely (1 from 1999, and 7 from 2000).

Setting

Participants were mailed a study packet for them to complete at their convenience. Once completed the student was requested to enclose the information into a provided metered envelope and mail it to the University of Tennessee's Law School Administration Office.

Materials

The study packet mailed to each participant included the following surveys and inventories: biographical information form, lawyer sentence completion survey, cognitive thinking styles survey, 16PF, lawyer career survey, and an informed consent form (Appendix XII). For the purpose of this study only the biographical information form, the cognitive thinking styles survey, and the 16PF was used. Also included in the packet was a metered return envelope addressed to the Law School's Admission's office.

The biographical information page (Appendix X, Subsection I) contained

questions designed to collect a wide variety of demographic information including a brief academic history, however only gender, age, and ethnicity was reported in the study.

The cognitive thinking styles inventory (Appendix X, Subsection II) was a modified version of Sternberg's Thinking Style inventory (TSI). The original inventory contained 13 categories with 8 questions in each, for a total of 104 questions. The inventory was reduced to ask questions that strongly related to the law career. For the purpose of this study only the function categories were used: Legislative, Executive, and Judicial. Each was represented with 5 questions from the original inventory. A reliability analysis was performed on the function categories (Appendix I), and the alphas for executive items were found to be 0.78. The alpha for executive items was found to be 0.66 and judicial items were 0.68. The alphas for executive and judicial functions are low, but still considered high enough for the current study.

The 16PF was administered in its entirety (Appendix X, Subsection III). The participants were asked to answer all of the inventory's 185 standard questions. Each survey was used to obtain scores for the instruments primary factors and four of the global factors: A, B, C, E, F, G, H, I, M, N, O, Q1, Q2, Q3, Q4, Anxiety, Tough Minded, Self Control, and Independent.

Procedure

All individuals who had accepted offers to attend law school at the University of Tennessee for academic year 1999 and 2000 were sent survey packets. The individuals were identified by the law school's admissions office, which assigned and recorded a unique identifier to each individual in order to maintain student confidentiality. The packets were mailed out to an individual's home 3 months prior to their expected

attendance at the law school, with instructions to fully fill out each inventory at their earliest convenience and mail the completed package to the admissions office. Once received by the admissions office, the package was sent to the law clinic for data entry and analysis.

For the purpose of this study a partial part of the TSI and full version of the 16 PF was scored. The responses for each inventory were entered and scored in separate SPSS 9.0 files, with the final results merged into a single file for analysis.

The TSI functions were scored using the method given by Sternberg (1997) in his book "Thinking Styles". Each item has a value numbered 1 to 7 based on how strongly the subject believes the item reflects the way they are. A response of 1 = "Not at all well"; 2 = "Not very well"; 3 = "Slightly well"; 4 = "Somewhat Well"; 5 = "Well"; 6 = "Very Well"; and 7 = "Extremely Well". The response to the items were totaled for each function and then divided by 5 to obtain a raw score for each function category.

Once the raw scores were obtained the subjects were further classified by placing each function score into a usage category rated 1 thru 6 (Category 1 = "very low"; 2 = "Low"; 3 = "Low Middle"; 4 = "High Middle"; 5 = "High"; and 6 = "Very High"). The cutoffs used convert a function score to a usage category was defined by using information provided by Sternberg (Appendix XI). The cutoff tables used were based on a subject being a student and by their gender.

The 16PF factors were scored using the standard algorithms provided by Cattell.

Before analysis of the SPSS main data file (containing the final scored inventories) two extra variables were created: analys1 and analys2 (table 7). Both were used to divide the students into two groups represented by values of 1 or 2. Analys1 had

a strict criterion, which divides students who had high usage scores in at least two TSI functions from those who had high usage scores in one or less TSI function. Analys2 criterion differs by dividing the subjects into two groups by means of one group containing any students with one function having a high usage score and those with no high usage scores into the other group.

The variable Analys1 was created by categorizing the subjects based on the TSI function usage scores. Any individual who had at least two TSI function usage scores of 4 or less were given a value of 1. Any individual who had at least two TSI function usage scores of 5 or more were given a value of 2.

The variable Analys2 was also created by categorizing the subjects based on the TSI function usage scores. Any individual who had all three TSI function usage scores of 4 or less were given a value of 1. Any individual who had at least one TSI function usage score of 5 or more were given a value of 2.

Using the analys1 variable, an independent t-test was used to compare the 16PF factor scores for each group. The same was done for the 16PF factor scores using the analys2 variable.

Determination of Normal Distributions

For the purpose of this study, normal distribution is considered true if the skewness and kurtosis is between ±2.00. However, any distribution between with a skewness and kurtosis above ±1.00 is also mentioned.

Demographics for Subject Population

The 73 participants consisted of 37 males (16 from 1999 and 21 from 2000) and 36 females (13 from 1999 and 23 from 2000).

The age of the participants were not distributed normally (=24.67, SD=6.21, skewness=3.014, kurtosis=8.473, range=30). Male participants also had distributions that were not normal (=24.59, SD=5.24, skewness=3.207, kurtosis=10.579, range=24), as well as the female participants (=24.75 SD=7.16, skewness=2.869, kurtosis=7.359, range=30).

The 1999 participant ages were not distributed normally (=25.55, SD=7.57, skewness=2.52, kurtosis=5.358, range=29). Male participants also had distributions that were not normal (=24.44, SD=5.73, skewness=3.474, kurtosis=12.893, range=24), as well as the female participants (=26.92, SD=9.44, skewness=2.014, kurtosis=2.945, range: 21-50, quartiles: 22, 22, and 27.5).

The 2000 participant ages were not distributed normally (=24.09, SD=5.14, skewness=3.552, kurtosis=13.398, range=27). Male participants also had distributions that were not normal (=24.71, SD=4.97, skewness=3.224, kurtosis=11.939, range=22), as well as the female participants (=23.52, SD=4.19, skewness=4.187, kurtosis=18.870, range=27).

The ethnicity of the participants was 67 Caucasian (35 males, 32 females), 2 African American (1 male, 1 females), 1 Hispanic (1 male), and 2 who responded as "other" (2 females). One female participant did not disclose their ethnic background.

The 1999 participants consisted of 27 Caucasian (15 males, 12 females), 1 Hispanics (1 male), and 1 who responded as "other" (1 female). The 2000 participants had 40 Caucasian (20 males, 26 females), 2 African American (1 male, 1 females), and 1 who responded as "other" (1 females), with one female participant not disclosing their ethnic background.

Results of TSI Raw Scores for Subject Population

All of the analysis results for the TSI raw scores found distributions to be normal using the criterion of skewness and kurtosis being between ±2.00 (Appendix II). The following function raw scores are not normally distributed if the criterion of skewness and kurtosis being between ±1.00 is used:

All Male Participants:

Legislative (=5.34, SD=0.79, skewness=-.227, kurtosis=-1.018).

All Male Participant Enrolled in 1999:

Judicial (=4.28, SD=0.66, skewness=-.188, kurtosis=-1.257).

All Female Participant Enrolled in 1999:

Legislative (=4.77, SD=1.08, skewness=-.088, kurtosis=-1.062).

All Male Participant Enrolled in 2000:

Legislative (=5.36, SD=0.89, skewness=-.084, kurtosis=-1.378).

Results of TSI Usage Scores for Subject Population

TSI usage scores are ordinal and the frequencies of the each TSI function usage score are reported in the Appendix III.

Normality of 16PF scores for Subject Population

All 16PF scores had normal distribution (skewness and kurtosis between ±2.00) except the following (Appendix IV):

All Male Participants Enrolled in 1999:

Extroversion (=5.65, SD=1.482, skewness=-1.863,

kurtosis=4.825)

All Female Participants Enrolled in 1999:

Factor C (=5.31, SD=1.378, skewness=-1.56, kurtosis=2.120).

Factor Q3 (=6.62, SD=1.85, skewness=-1.102, kurtosis=2.347).

All Male Participants Enrolled in 2000:

Factor M (=5.10, SD=1.70, skewness=0.916, kurtosis=2.505).

16PF scores with a skewness or kurtosis falling out of the ±1.00 range, but within the ±2.00 range are:

All Male Participants:

Extroversion (=5.60, SD=1.59, skewness=-.971, kurtosis=1.039).

All Participants Enrolled in 1999:

Factor Q3 (=5.83, SD=2.12, skewness=0.002,

kurtosis=-1.133).

Extroversion (=5.91, SD=1.99, skewness=0.366, kurtosis=1.191).

Tough Minded (=4.92, SD=1.94, skewness=0.154,

kurtosis=1.066).

All Male Participants Enrolled in 1999:

Factor F (=6.19, SD=1.17, skewness=0.450, kurtosis=1.316).

Factor I (=5.69, SD=1.78, skewness=0.704, kurtosis=1.212).

Tough Minded (=5.21, SD=2.06, skewness=0.288,

kurtosis=1.825).

All Female Participants Enrolled in 1999:

Factor A (=5.92, SD=2.75, skewness=0.463, kurtosis=-1.194).

Factor I (=6.62, SD=2.29, skewness=-.028, kurtosis=-1.156).

Factor M (=5.92, SD=1.93, skewness=-.036,
kurtosis=-1.383).

Factor N (=5.15, SD=2.67, skewness=-.132,
kurtosis=-1.479).

All Male Participants Enrolled in 2000:

Factor B (=8.62, SD=1.16, skewness=-1.061, kurtosis=0.817).

All Female Participants Enrolled in 2000:

Factor M (=6.00, SD=2.26, skewness=-.390,
kurtosis=-1.069).

Factor O (=6.35, SD=1.70, skewness=0.379, kurtosis=-1.083).

Factor Q2 (=5.74, SD=1.81, skewness=0.076, kurtosis=
-1.111).

Factor Q3 (=5.74, SD=1.81, skewness=-.074, kurtosis=-1.148).

Independent T-test for Subject Population based on Gender

Independent t-tests were conducted on the TSI and 16PF raw scores to determine if any significant differences existed between male and female subjects (Appendix V). Males to have a significantly higher score then females in Factor J score (α=0.05, t=2.021, p=0.047), legislative function raw scores (α=0.05, t=3.555, p=0.001), and judicial function raw scores (α=0.05, t=2.865, p=0.005).

Pearson's Correlation Between 16PF Factors and TSI Scores

Correlations were performed using all 80-study participants (Appendix VIII). Significant correlations were found between the Legislative raw scores and 16PF Factor

C (α=0.01, r=0.384, p=0.001), O (α=0.05, r=-.298, p=0.011), Q1(α=0.05, r=0.276, p=0.018), Anxiety (α=0.05, r=-.254, p=0.030), and Independence (α=0.05, r=0.246, p=0.036). Executive raw scores significantly correlated with 16PF Factor Q3 (α=0.01, r=0.386, p=1.000) and Self Control (α=0.01, r=0.326, p=0.005). Judicial raw scores significantly correlated with 16PF Factor E (α=0.01, r=0.380, p=0.001), G (α=0.05, r=-.234, p=0.046), Q1G (α=0.05, r=0.289, p=0.013), and Independence (α=0.01, r=0.445, p<.000).

Correlations were also performed for the 16PF Factors using the TSI Usage categories. Legislative raw scores correlated significantly with 16PF Factor C (α=0.01, r=0.432, p<.000), O (α=0.01, r=-.331, p=0.004), Q1(α=0.05, r=0.294, p=0.012), Anxiety (α=0.05, r=-.296, p=0.011), and Independence (α=0.05, r=0.272, p=0.020). Executive raw scores significantly correlated with 16PF Factor Q3 (α=0.01, r=0.361, p=0.002) and Self Control (α=0.05, r=0.272, p=0.020). Judicial raw scores significantly correlated with 16PF Factor E (α=0.05, r=0.297, p=0.011), G (α=0.05, r=-.280, p=0.017), Q1 (α=0.05, r=0.290, p=0.013), and Independence (α=0.01, r=0.391, p=0.002).

Results for Variable Analys1, Group 1 (Low Function Usage)

Out of the 73 participants, 50 were placed into the group containing one or less TSI function usage category scores of 5 or greater (low function usage). The mean age was 24.52 and was highly skewed by an outlier (skewness=3.241, kurtosis= 10.374). The group consisted of 46 Caucasians, 1 Hispanic, 2 who identified “other”, and 1 who chose not to answer. Twenty of the participants were male and 30 were female.

Running a test on normality for the group’s 16PF scores it was found that Factor J

(=6.16, SD=1.72, skewness=0.094, kurtosis=-1.063) and Factor O (=6.26, SD=1.72, skewness=0.152, kurtosis=-1.083) were not normal, however the values were well within the ±2.00 range.

Tables for the group can be found in Appendix V, Subsection I.

Results for Variable Analys1, Group 2 (High Function Usage)

Out of the 73 participants, 23 were placed into the group containing two or more TSI function usage category scores of 5 or greater (high function usage). The mean age was 25.00 and was highly skewed by an outlier (skewness=2.774, kurtosis=7.012). The group consisted of 21 Caucasians and 2 African Americans. Seventeen of the participants were male and 6 were female.

Running a test on normality for the group's 16PF scores it was found that Factor B (=7.91, SD=1.41, skewness=0.061, kurtosis=-1.181), Factor Q3 (=5.87, SD=2.03, skewness=-0.128, kurtosis=-1.053), and Extroversion (=6.19, SD=1.88, skewness=-0.275, kurtosis=1.490) were not normal, however the values were well within the ±2.00 range.

Tables for the group can be found in Appendix V, Subsection II.

Independent t-Test for 16PF Factors Grouped by Variable Analys1

A 2-tailed independent t-Test was performed on each 16PF factor with the participants grouped by variable "analys1" (as described in the methods section). Significant differences were found with E (α=0.05, t=-2.408, p=0.019), Q1 (α=0.05, t=-2.392, p=0.019), and Independence (α=0.05, t=-3.164, p=0.002). Results are listed in Appendix IX, Subsection I.

Results for Variable Analys2, Group 1 (Low Function Usage)

Out of the 73 participants, 20 were placed into the group containing no TSI function usage category scores of 5 or greater (low function usage). The mean age was 24.35 and was highly skewed by an outlier (skewness=3.463, kurtosis= 13.489). The group consisted of 17 Caucasians, 2 who identified "other", and 1 who chose not to answer. Five of the participants were male and 15 were female.

Running a test on normality for the group's 16PF scores it was found that all scores were had a normal distribution.

Tables for the group can be found in Appendix VI, Subsection I.

Results for Variable Analys2, Group 2 (High Function Usage)

Out of the 73 participants, 53 were placed into the group containing one or more TSI function usage category scores of 5 or greater (high function usage). The mean age was 25.79 and was highly skewed by an outlier (skewness=2.950, kurtosis=7.982). The group consisted of 50 Caucasians, 2 African American, and 1 Hispanic. Thirty-two of the participants were male and 6 were female.

Running a test on normality for the group's 16PF scores it was found that Factor F (=6.20, SD=1.24, skewness=-0.972, kurtosis=1.241), Factor J (=5.85, SD=1.93, skewness=0.186, kurtosis=-1.096), Factor N (=5.85, SD=2.30, skewness=-1.036, kurtosis=0.407), and Factor O (=6.20, SD=1.93, skewness=0.174, kurtosis=-1.161) was not normal, however the values were well within the ±2.00 range.

Tables for the group can be found in Appendix VI, Subsection II.

Independent t-Test for 16PF Factors Grouped by Variable Analys2

A 2-tailed independent t-Test was performed on each 16PF factor with the

participants grouped by variable “analys2” (as described in the methods section). No significant differences were found. Results are listed in Appendix IX, Subsection II.

CHAPTER III: DISCUSSION

Through various theories and research personality has been shown to be one of the key factors when analyzing styles (Dunn and Dunn, 1979; Jung, 1927; Myers and Myers, 1980; Zhang, 1999; Sternberg, 1997; Gregorc, 1984; Miller, 1987). However, in the development of the TSI, Sternberg and Wagner (1992) chose to concentrate on a cognitive-centered approach in identifying styles. A number of studies have been conducted to show the value of the TSI in determining educational outcomes, however recent research has also focused on identifying the TSI's connection with personality-centered theories (Sternberg, 1994; Zhang, 2001).

The results of the current study showed participants who highly utilized more than one TSI function had significantly different scores in certain personality factors when

Table 7: Hypothesis

	First Analysis Function Usage Grouping		**Second Analysis Function Usage Grouping**	
	Low (LUG)	**High (HUG)**	**Low (LUG)**	**High (HUG)**
	None or 1 function usage scores of 5 or 6	2 or more function usage scores of 5 or 6	No function usage scores of 5 or 6	1 or more function usage scores of 5 or 6
Hypothesis 1	H_0: HUG Factor E <= LUG Factor E H_1: HUG Factor E > LUG Factor E			
Hypothesis 2	H_0: HUG Factor O <= LUG Factor O H_1: HUG Factor O > LUG Factor O			
Hypothesis 3	H_0: HUG Factor Q1 <= LUG Factor Q1 H_1: HUG Factor Q1 > LUG Factor Q1			
Hypothesis 4	H_0: HUG Global Factors <> LUG Global Factors H_1: HUG Global Factors = LUG Global Factors			
Hypothesis 5			H_0: HUG of any Factor <> LUG of any Factor H_1: HUG of any Factor = LUG of any Factor	

compared to participants who highly utilized one or less functions (Table 7). To further support the findings a second set of analyses were performed which showed no significantly different personality scores when comparing students with one or more highly utilized functions to participants with no highly utilized functions

As expected, students with two or more highly utilized functions had significantly higher scores in the 16PF primary factors E (α=0.05, t=-2.408, p=0.019) and Q1 (α=0.05, t=-2.392, p=0.019), which confirms hypothesis 1 and 3. Hypothesis 2 was not confirmed since no significant difference was found for Factor O (α=0.05, t=-1.616, p=0.110). Unexpected was the significant difference found in the 16PF global factor of Independence (α=0.05, t=-3.164, p=0.002), which means hypothesis 4 was incorrect. The indication is that students with high usage in more then one function tend to be more dominant, self-assured, open to change, and independent when compared to students who do not highly utilize more then one TSI function. Lastly, when 16PF scores were compared in the second analysis, it was found that no significant differences existed between groups, supporting hypothesis 5 (Appendix VII, Subsection II).

In 1975, Pandey studied student dropout rates be administering the 16PF to 350 college freshman. The researcher found dropouts, as well as those on probation, to have the high Factor E and independence scores. Though not being viewed as a direct predictor of whether a student will dropout, it does present the personality trait as being a potential underlying aspect. Other research has shown how high Factor E scores can be associated with academic achievement (Odom and Shaughnessy, 1984). Odom and Shaughnessy reported that advanced placement high school math students showed a significantly high rating in Factor E.

In studies using the NEO-PI, "Openness" has been shown to be a recurring predictor of academic success (Dollinger and Orf, 1991: Musgrave, Bromley, and Dalley, 1997: Stewart and associate, 1999). In a 1991 study of 90 undergraduate students Dollinger and Orf found openness was a contributing factor in explaining course grades, as well as performance on objective tests. Musgrave and associates (1997) reported openness as one of a number of predictors for determining a students GPA. The importance of openness to academic success was further display through research performed on Asian and Western students. Stewart and associates (1999) found that academic achievement could be predicted based on students valuing openness to change.

The current study suggests that the importance of particular 16PF factors to academic success may be in part due to certain traits acting as driving forces for an individuals increased ability in utilizing multiple thinking style dimensions within a learning environment.

However, two issues remain unclear. Sternberg (1997) claims an individual's thinking style may change over time and situation, and a style is neither good nor bad, but instead a preferred way of processing information. No studies to date have been performed to determine the consistency of thinking styles over time or situation, however if Sternberg's assumption is true, then the association of certain personality factors are in question since they are considered to remain mostly stable over time. If thinking styles are stable over time and the personality factors associated with high function usage do potentially affect academic outcome, then certain combinations of styles within the TSI may be more desirable then others.

The current study has limitations due to the small sample size used. The dividing

of the participants into 2 different groups for analysis created small comparison groups. Furthermore, the entire TSI was not used for the study. To fully understand the association between thinking style and 16PF scores, it would be necessary to administer the complete TSI. However, for this study, function scores were used since they are the foundation styles of the TSI. Finally, the sample population was limited to first year law students. As seen by the demographics of the study population, the students were very homogenous and most likely poorly reflected a normal student body at the University of Tennessee and most other universities.

Future research on the association of thinking styles and personality factors needs to address the following issues: increase sample population size, administer the instrument to a more general population of the student body, use the complete TSI inventory, correlate academic performance with the varying factors and styles, and obtain completed TSI during follow-up administrations to determine if the student's thinking styles change over time.

Lastly, future research may explore the significant correlations found between certain function usage scores and 16PF factors (Appendix IV). Specifically, legislative usage scores significantly correlated with factor C (α=0.01, r=0.432), O (α=0.01, r=0.-.331), Q1 (α=0.05, r=0.294.), anxiety (α=0.05, r=-.296), and independence (α=0.05, r=0.272). This would suggest that participants with higher legislative usage scores tend to have greater emotional stability, self-worth, openness to change, lower anxiety, and independence. The question to be asked is if this is related to an individual using a thinking style requiring creative design as part of its primary action.

Executive usage scores correlate significantly with factor Q3 (α=0.01, r=0.361)

and self-control (α=0.05, r=0.299). Participants with higher executive usage scores tend to have more self-control and a need for social approval. Since people who highly utilize executive functions take actions based upon given definitions they may have a greater desire for approval from peers or colleagues.

Finally, the judicial usage scores correlate with factor E (α=0.05, r=0.297), G (α=0.05, r=-.280), Q1 (α=0.05, r=0.290), and independence (α=0.01, r=0.390). Participants with higher judicial usage scores tend to be more dominant, expedient, open to change, and independent. These personality factors may be necessary for an individual who likes to utilize the critical nature of the judicial function.

The TSI offers an interesting insight into our cognitive processes. Its use, combined with different personality tests, gives us an opportunity to understand how one's personality may influence the way they choose to perceive and process information from their environment.

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APPENDICIES

Appendix I: Reliability Analysis of TSI Function Items

Subsection I: Reliability Analysis of Legislative Items

		Mean	Std Dev	Cases
1.	Q1	5.1781	1.0586	73.0
2.	Q4	5.0959	1.0296	73.0
3.	Q7	4.6301	1.5768	73.0
4.	Q10	5.0274	1.3842	73.0
5.	Q13	4.9726	1.2130	73.0

N of Cases = 73.0

Statistics for Scale	Mean	Variance	Std Dev	N of Variables
	24.9041	21.6435	4.6523	5

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.9808	4.6301	5.1781	.5479	1.1183	.0443

Item Variances	Mean	Minimum	Maximum	Range	Max/Min	Variance
	1.6109	1.0601	2.4863	1.4262	2.3453	.3556

Inter-item Covariances	Mean	Minimum	Maximum	Range	Max/Min	Variance
	.6795	.1779	1.1908	1.0129	6.6941	.0947

Inter-item Correlations	Mean	Minimum	Maximum	Range	Max/Min	Variance
	.4416	.1066	.6457	.5391	6.0584	.0303

Reliability Coefficients 5 items

Alpha = .7848 Standardized item alpha = .7981

Subsection II: Reliability Analysis of Executive Items

		Mean	Std Dev	Cases
1.	Q2	3.9863	1.5410	73.0
2.	Q5	3.8493	1.3403	73.0
3.	Q8	5.5342	1.3446	73.0
4.	Q11	4.6575	1.3665	73.0
5.	Q14	5.4795	1.2922	73.0

Covariance Matrix

N of Cases = 73.0

Statistics for Scale	Mean	Variance	Std Dev	N of Variables
	23.5068	20.1423	4.4880	5

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.7014	3.8493	5.5342	1.6849	1.4377	.6346

Item Variances	Mean	Minimum	Maximum	Range	Max/Min	Variance
	1.9032	1.6697	2.3748	.7051	1.4223	.0747

Inter-item Covariances	Mean	Minimum	Maximum	Range	Max/Min	Variance
	.5313	.0883	1.2757	1.1874	14.4504	.1225

Inter-item Correlations	Mean	Minimum	Maximum	Range	Max/Min	Variance
	.2784	.0480	.6176	.5696	12.8540	.0311

Reliability Coefficients 5 items

Alpha = .6595 Standardized item alpha = .6586

Subsection III: Reliability Analysis of Judicial Items

		Mean	Std Dev	Cases
1.	Q3	2.7534	1.4980	73.0
2.	Q6	5.1096	1.2423	73.0
3.	Q9	4.9452	1.3217	73.0
4.	Q12	4.7671	1.2858	73.0
5.	Q15	3.5753	1.4134	73.0

N of Cases = 73.0

Statistics for Scale	Mean	Variance	Std Dev	N of Variables
	21.1507	20.1853	4.4928	5

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.2301	2.7534	5.1096	2.3562	1.8557	1.0456

Item Variances	Mean	Minimum	Maximum	Range	Max/Min	Variance
	1.8371	1.5434	2.2439	.7005	1.4539	.0799

Inter-item Covariances	Mean	Minimum	Maximum	Range	Max/Min	Variance
	.5500	.1589	1.2549	1.0961	7.8994	.1335

Inter-item Correlations	Mean	Minimum	Maximum	Range	Max/Min	Variance
	.2953	.0968	.6298	.5331	6.5098	.0352

Reliability Coefficients 5 items

Alpha = .6812 Standardized item alpha = .6769

Appendix II: TSI Raw Score Statistics

Subsection I: TSI Raw Scores for All Participants

All Participants

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Legislative	73	2.80	6.80	4.9808	.9305	-.154	.281	-.805	.555
Executive	73	2.20	6.40	4.7014	.8976	-.317	.281	-.096	.555
Judicial	73	2.40	6.00	4.2301	.8986	.018	.281	-.532	.555

All Male Participants

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Legislative	37	3.80	6.80	5.3351	.7945	-.227	.388	-1.018	.759
Executive	37	2.80	6.40	4.7405	.8992	-.156	.388	-.376	.759
Judicial	37	3.20	6.00	4.5135	.7173	.271	.388	-.520	.759

All Female Participants

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Legislative	36	2.80	6.40	4.6167	.9287	.154	.393	-.669	.768
Executive	36	2.20	6.20	4.6611	.9069	-.493	.393	.282	.768
Judicial	36	2.40	5.80	3.9389	.9796	.359	.393	-.600	.768

Subsection II: TSI Raw Scores for All Participants Enrolled in 1999

All 1999 Participants

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Legislative	29	3.00	6.40	5.0621	.9073	-.498	.434	-.664	.845
Executive	29	3.20	6.40	4.7517	.7721	.077	.434	-.447	.845
Judicial	29	2.80	5.80	4.2759	.7586	.089	.434	-.356	.845

All 1999 Male Participants

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Legislative	16	3.80	6.00	5.3000	.6812	-.804	.564	-.319	1.091
Executive	16	3.20	6.40	4.8750	.8323	-.113	.564	-.260	1.091
Judicial	16	3.20	5.20	4.2750	.6608	-.188	.564	-1.257	1.091

All 1999 Female Participants

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Legislative	13	3.00	6.40	4.7692	1.0827	.088	.616	-1.062	1.191
Executive	13	3.40	5.80	4.6000	.6928	.171	.616	-.503	1.191
Judicial	13	2.80	5.80	4.2769	.8927	.237	.616	-.085	1.191

Subsection III: TSI Raw Scores for All Participants Enrolled in 2000

All 2000 Participants

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Legislative	44	2.80	6.80	4.9273	.9520	.046	.357	-.740	.702
Executive	44	2.20	6.40	4.6682	.9788	-.401	.357	-.181	.702
Judicial	44	2.40	6.00	4.2000	.9874	.038	.357	-.708	.702

All 2000 Male Participants

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Legislative	21	4.00	6.80	5.3619	.8868	-.084	.501	-1.378	.972
Executive	21	2.80	6.40	4.6381	.9542	-.103	.501	-.371	.972
Judicial	21	3.80	6.00	4.6952	.7201	.480	.501	-.980	.972

All 2000 Female Participants

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Legislative	23	2.80	6.20	4.5304	.8434	.043	.481	-.454	.935
Executive	23	2.20	6.20	4.6957	1.0214	-.657	.481	.221	.935
Judicial	23	2.40	5.80	3.7478	.9931	.602	.481	-.376	.935

Appendix III: TSI Usage Scores

Subsection I: TSI Usage Scores for All Participants

All Participants

		Legislative	Executive	Judicial
N		73	73	73
Median		5.0000	4.6000	4.2000
Range		4.00	4.20	3.60
Minimum		2.80	2.20	2.40
Maximum		6.80	6.40	6.00
Percentiles	25	4.2000	4.1000	3.6000
	50	5.0000	4.6000	4.2000
	75	5.7000	5.4000	4.8000

All Male Participants

		Legislative	Executive	Judicial
N		37	37	37
Median		5.6000	4.8000	4.4000
Range		3.00	3.60	2.80
Minimum		3.80	2.80	3.20
Maximum		6.80	6.40	6.00
Percentiles	25	4.7000	4.1000	3.9000
	50	5.6000	4.8000	4.4000
	75	6.0000	5.4000	5.0000

All Female Participants

		Legislative	Executive	Judicial
N		36	36	36
Median		4.6000	4.6000	3.8000
Range		3.60	4.00	3.40
Minimum		2.80	2.20	2.40
Maximum		6.40	6.20	5.80
Percentiles	25	3.8500	4.0500	3.2500
	50	4.6000	4.6000	3.8000
	75	5.4000	5.4000	4.5500

Subsection II: TSI Usage Scores for All Participants Enrolled in 1999

All Participants Enrolled in 1999

		Legislative	Executive	Judicial
N		29	29	29
Median		5.4000	4.8000	4.4000
Range		3.40	3.20	3.00
Minimum		3.00	3.20	2.80
Maximum		6.40	6.40	5.80
Percentiles	25	4.4000	4.1000	3.6000
	50	5.4000	4.8000	4.4000
	75	5.7000	5.3000	4.7000

All Male Participants Enrolled in 1999

		Legislative	Executive	Judicial
N		16	16	16
Median		5.6000	4.9000	4.4000
Range		2.20	3.20	2.00
Minimum		3.80	3.20	3.20
Maximum		6.00	6.40	5.20
Percentiles	25	4.6500	4.2500	3.6500
	50	5.6000	4.9000	4.4000
	75	5.9500	5.5500	4.8000

All Female Participants Enrolled in 1999

		Legislative	Executive	Judicial
N		13	13	13
Median		4.6000	4.6000	4.4000
Range		3.40	2.40	3.00
Minimum		3.00	3.40	2.80
Maximum		6.40	5.80	5.80
Percentiles	25	3.9000	4.0000	3.5000
	50	4.6000	4.6000	4.4000
	75	5.6000	5.1000	4.6000

Subsection III: TSI Usage Scores for All Participants Enrolled in 2000

All Participants Enrolled in 2000

		Legislative	Executive	Judicial
N		**44**	**44**	**44**
Median		4.8000	4.6000	4.2000
Range		4.00	4.20	3.60
Minimum		2.80	2.20	2.40
Maximum		6.80	6.40	6.00
Percentiles	25	4.0500	4.0500	3.6000
	50	4.8000	4.6000	4.2000
	75	5.7500	5.4000	4.9500

All Male Participants Enrolled in 2000

		Legislative	Executive	Judicial
N		21	21	21
Median		5.2000	4.6000	4.6000
Range		2.80	3.60	2.20
Minimum		4.00	2.80	3.80
Maximum		6.80	6.40	6.00
Percentiles	25	4.6000	4.0000	4.2000
	50	5.2000	4.6000	4.6000
	75	6.2000	5.3000	5.4000

All Female Participants Enrolled in 2000

		Legislative	Executive	Judicial
N		23	23	23
Median		4.6000	4.6000	3.6000
Range		3.40	4.00	3.40
Minimum		2.80	2.20	2.40
Maximum		6.20	6.20	5.80
Percentiles	25	3.8000	4.2000	2.8000
	50	4.6000	4.6000	3.6000
	75	5.0000	5.4000	4.4000

Appendix IV: 16PF Frequencies Statistics

Subsection I: 16PF Frequencies for All Participants

All Participants

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Factor A	73	1.00	10.00	5.8219	2.2751	.219	.281	-.607	.555
Factor B	73	5.00	10.00	8.2055	1.3224	-.391	.281	-.736	.555
Factor C	73	2.00	9.00	5.7945	1.7556	-.231	.281	.056	.555
Factor E	73	1.00	10.00	6.1233	2.1791	-.220	.281	-.449	.555
Factor F	73	2.00	9.00	6.1918	1.4968	-.414	.281	.188	.555
Factor G	73	1.00	9.00	5.6438	1.7189	-.083	.281	-.174	.555
Factor H	73	2.00	9.00	5.9589	1.9325	-.190	.281	-.767	.555
Factor I	73	2.00	10.00	6.0959	2.0961	.205	.281	-.663	.555
Factor L	73	3.00	10.00	6.2603	1.6999	.137	.281	-.904	.555
Factor M	73	2.00	10.00	5.3425	1.9309	.342	.281	-.072	.555
Factor N	73	1.00	9.00	5.5753	2.0407	-.601	.281	-.254	.555
Factor O	73	1.00	9.00	6.0274	1.8331	-.125	.281	-.361	.555
Factor Q1	73	1.00	10.00	5.7808	2.0699	-.297	.281	.000	.555
Factor Q2	73	2.00	9.00	5.6027	1.7539	-.065	.281	-.553	.555
Factor Q3	73	1.00	9.00	5.7123	1.9684	-.125	.281	-.815	.555
Factor Q4	73	2.00	9.00	5.9863	1.5942	-.548	.281	-.001	.555
Extroversion	73	1.20	10.40	5.8425	1.8591	.085	.281	.425	.555
Anxiety	73	1.40	10.70	5.9658	1.7915	-.097	.281	.101	.555
Tough Minded	73	.80	10.20	5.0945	2.0767	.057	.281	-.351	.555
Self Control	73	1.40	9.10	5.5014	1.6604	-.190	.281	-.197	.555
Independent	73	2.20	10.20	6.2479	1.8409	.028	.281	-.383	.555

All Male Participants

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Factor A	37	1.00	10.00	5.5405	2.1291	.096	.388	-.359	.759
Factor B	37	6.00	10.00	8.2432	1.2781	-.400	.388	-.812	.759
Factor C	37	2.00	9.00	6.0811	1.8912	-.357	.388	-.202	.759
Factor E	37	2.00	9.00	6.1892	1.8080	-.567	.388	-.024	.759
Factor F	37	2.00	9.00	6.1892	1.5958	-.457	.388	.200	.759
Factor G	37	3.00	9.00	5.5946	1.6576	.192	.388	-.473	.759
Factor H	37	2.00	9.00	5.6757	1.6676	-.097	.388	-.481	.759
Factor I	37	2.00	10.00	5.7297	1.9242	.284	.388	-.347	.759
Factor L	37	4.00	10.00	6.6486	1.6024	.057	.388	-.742	.759
Factor M	37	2.00	10.00	5.4865	1.8046	.563	.388	.639	.759
Factor N	37	2.00	9.00	5.9189	1.6730	-.241	.388	-.600	.759
Factor O	37	1.00	9.00	5.7297	1.9098	-.172	.388	-.079	.759
Factor Q1	37	2.00	10.00	5.8649	1.8732	-.034	.388	-.066	.759
Factor Q2	37	2.00	9.00	5.5946	1.6908	.174	.388	-.260	.759
Factor Q3	37	1.00	9.00	5.3784	2.0460	.133	.388	-.745	.759
Factor Q4	37	2.00	9.00	5.9730	1.6913	-.720	.388	.029	.759
Extroversion	37	1.20	8.10	5.6000	1.5944	-.971	.388	1.039	.759
Anxiety	37	1.40	10.70	5.8432	1.9724	.216	.388	.393	.759
Tough Minded	37	1.10	10.20	5.2486	2.0520	.039	.388	-.022	.759
Self Control	37	1.40	8.50	5.3054	1.6847	-.202	.388	-.336	.759
Independent	37	3.60	9.50	6.3054	1.4819	.010	.388	-.694	.759

All Female Participants

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Factor A	36	2.00	10.00	6.1111	2.4116	.237	.393	-.885	.768
Factor B	36	5.00	10.00	8.1667	1.3836	-.385	.393	-.654	.768
Factor C	36	2.00	9.00	5.5000	1.5766	-.301	.393	.838	.768
Factor E	36	1.00	10.00	6.0556	2.5292	-.044	.393	-.821	.768
Factor F	36	3.00	9.00	6.1944	1.4106	-.365	.393	.302	.768
Factor G	36	1.00	9.00	5.6944	1.8019	-.320	.393	.204	.768
Factor H	36	2.00	9.00	6.2500	2.1564	-.415	.393	-.864	.768
Factor I	36	2.00	10.00	6.4722	2.2231	.039	.393	-.835	.768
Factor L	36	3.00	9.00	5.8611	1.7263	.333	.393	-.922	.768
Factor M	36	2.00	10.00	5.1944	2.0677	.258	.393	-.495	.768
Factor N	36	1.00	9.00	5.2222	2.3313	-.528	.393	-.758	.768
Factor O	36	3.00	9.00	6.3333	1.7238	.051	.393	-1.006	.768
Factor Q1	36	1.00	10.00	5.6944	2.2781	-.413	.393	-.080	.768
Factor Q2	36	2.00	9.00	5.6111	1.8405	-.260	.393	-.709	.768
Factor Q3	36	2.00	9.00	6.0556	1.8508	-.372	.393	-.595	.768
Factor Q4	36	2.00	9.00	6.0000	1.5119	-.315	.393	.049	.768
Extroversion	36	2.10	10.40	6.0917	2.0902	.413	.393	-.396	.768
Anxiety	36	2.40	8.60	6.0917	1.6027	-.573	.393	-.388	.768
Tough Minded	36	.80	9.10	4.9361	2.1189	.093	.393	-.524	.768
Self Control	36	1.70	9.10	5.7028	1.6338	-.170	.393	.075	.768
Independent	36	2.20	10.20	6.1889	2.1692	.079	.393	-.653	.768

Subsection II: 16PF Frequencies for All Participants Enrolled in 1999

All Participants Enrolled in 1999

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Factor A	29	1.00	10.00	5.7931	2.4983	.341	.434	-.726	.845
Factor B	29	5.00	10.00	7.6552	1.2894	-.047	.434	-.649	.845
Factor C	29	2.00	9.00	5.6207	1.6128	-.316	.434	.164	.845
Factor E	29	2.00	10.00	6.6897	1.9292	-.166	.434	.126	.845
Factor F	29	3.00	9.00	6.2069	1.3727	-.312	.434	.512	.845
Factor G	29	1.00	9.00	5.3103	1.8918	.231	.434	.403	.845
Factor H	29	2.00	9.00	5.9310	1.9260	-.121	.434	-.536	.845
Factor I	29	3.00	10.00	6.1034	2.0414	.391	.434	-.533	.845
Factor L	29	3.00	10.00	6.7241	1.7504	-.317	.434	-.523	.845
Factor M	29	3.00	10.00	5.9655	1.8609	.089	.434	-.640	.845
Factor N	29	1.00	9.00	5.5862	2.1961	-.298	.434	-.777	.845
Factor O	29	2.00	9.00	5.8276	1.8140	.044	.434	-.664	.845
Factor Q1	29	2.00	10.00	5.7586	2.0815	.014	.434	-.012	.845
Factor Q2	29	2.00	9.00	5.3448	1.8570	-.258	.434	-.424	.845
Factor Q3	29	2.00	9.00	5.8276	2.1225	.002	.434	-1.133	.845
Factor Q4	29	2.00	8.00	6.1034	1.6112	-.950	.434	.375	.845
Extroversion	29	1.20	10.40	5.9069	1.9869	.366	.434	1.191	.845
Anxiety	29	3.10	9.80	6.1414	1.5688	.148	.434	-.300	.845
Tough Minded	29	.90	10.20	4.9207	1.9423	.154	.434	1.066	.845
Self Control	29	1.40	8.50	5.2241	1.8079	.025	.434	-.181	.845
Independent	29	3.60	10.20	6.6655	1.5787	.292	.434	-.410	.845

All Male Participants Enrolled in 1999

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Factor A	16	1.00	10.00	5.6875	2.3585	.184	.564	-.104	1.091
Factor B	16	6.00	10.00	7.7500	1.2910	.319	.564	-.640	1.091
Factor C	16	3.00	9.00	5.8750	1.7842	-.108	.564	-.725	1.091
Factor E	16	2.00	9.00	6.2500	1.9494	-.463	.564	-.082	1.091
Factor F	16	4.00	9.00	6.1875	1.1673	.450	.564	1.316	1.091
Factor G	16	3.00	9.00	5.5625	1.6721	.903	.564	.691	1.091
Factor H	16	2.00	8.00	5.3125	1.7017	-.374	.564	-.552	1.091
Factor I	16	3.00	10.00	5.6875	1.7783	.704	.564	1.212	1.091
Factor L	16	4.00	10.00	6.8750	1.6683	-.169	.564	-.199	1.091
Factor M	16	3.00	10.00	6.0000	1.8619	.212	.564	.204	1.091
Factor N	16	3.00	9.00	5.9375	1.7308	.109	.564	-.802	1.091
Factor O	16	2.00	9.00	5.4375	1.7500	.417	.564	.543	1.091
Factor Q1	16	2.00	10.00	5.6250	2.0290	.039	.564	.771	1.091
Factor Q2	16	2.00	9.00	5.3125	1.8518	.195	.564	-.029	1.091
Factor Q3	16	3.00	9.00	5.1875	2.1670	.803	.564	-.782	1.091
Factor Q4	16	2.00	8.00	5.6875	1.7783	-.759	.564	-.132	1.091
Extroversion	16	1.20	7.30	5.6500	1.4823	-1.863	.564	4.825	1.091
Anxiety	16	3.10	9.80	5.7625	1.7806	.744	.564	.239	1.091
Tough Minded	16	1.10	10.20	5.2063	2.0557	.288	.564	1.825	1.091
Self Control	16	1.40	8.50	5.0625	1.7316	.043	.564	.432	1.091
Independent	16	3.60	8.50	6.2063	1.4946	.164	.564	-.992	1.091

All Female Participants Enrolled in 1999

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Factor A	13	3.00	10.00	5.9231	2.7526	.463	.616	-1.194	1.191
Factor B	13	5.00	9.00	7.5385	1.3301	-.474	.616	-.784	1.191
Factor C	13	2.00	7.00	5.3077	1.3775	-1.560	.616	2.120	1.191
Factor E	13	4.00	10.00	7.2308	1.8328	.367	.616	-.323	1.191
Factor F	13	3.00	9.00	6.2308	1.6408	-.703	.616	.253	1.191
Factor G	13	1.00	9.00	5.0000	2.1602	.059	.616	.150	1.191
Factor H	13	3.00	9.00	6.6923	1.9742	-.339	.616	-.653	1.191
Factor I	13	3.00	10.00	6.6154	2.2927	-.028	.616	-1.156	1.191
Factor L	13	3.00	9.00	6.5385	1.8980	-.416	.616	-.773	1.191
Factor M	13	3.00	9.00	5.9231	1.9348	-.036	.616	-1.383	1.191
Factor N	13	1.00	9.00	5.1538	2.6723	-.132	.616	-1.479	1.191
Factor O	13	3.00	9.00	6.3077	1.8432	-.441	.616	-.855	1.191
Factor Q1	13	2.00	10.00	5.9231	2.2159	-.049	.616	-.249	1.191
Factor Q2	13	2.00	8.00	5.3846	1.9381	-.808	.616	-.384	1.191
Factor Q3	13	2.00	9.00	6.6154	1.8502	-1.102	.616	2.347	1.191
Factor Q4	13	4.00	8.00	6.6154	1.2609	-.897	.616	-.015	1.191
Extroversion	13	2.60	10.40	6.2231	2.5037	.680	.616	-.740	1.191
Anxiety	13	4.50	8.60	6.6077	1.1629	-.585	.616	.372	1.191
Tough Minded	13	.90	7.40	4.5692	1.8103	-.266	.616	.022	1.191
Self Control	13	1.70	8.40	5.4231	1.9494	-.060	.616	-.311	1.191
Independent	13	5.00	10.20	7.2308	1.5478	.513	.616	-.407	1.191

Subsection III: 16PF Frequencies for All Participants Enrolled in 2000

All Participants Enrolled in 2000

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Factor A	44	2.00	10.00	5.8409	2.1452	.113	.357	-.471	.702
Factor B	44	6.00	10.00	8.5682	1.2275	-.679	.357	-.324	.702
Factor C	44	2.00	9.00	5.9091	1.8529	-.252	.357	.065	.702
Factor E	44	1.00	10.00	5.7500	2.2735	-.124	.357	-.713	.702
Factor F	44	2.00	9.00	6.1818	1.5888	-.458	.357	.099	.702
Factor G	44	3.00	9.00	5.8636	1.5788	-.248	.357	-.578	.702
Factor H	44	2.00	9.00	5.9773	1.9587	-.239	.357	-.842	.702
Factor I	44	2.00	10.00	6.0909	2.1547	.111	.357	-.684	.702
Factor L	44	3.00	9.00	5.9545	1.6132	.425	.357	-.742	.702
Factor M	44	2.00	10.00	4.9318	1.8850	.583	.357	.846	.702
Factor N	44	1.00	8.00	5.5682	1.9577	-.896	.357	.322	.702
Factor O	44	1.00	9.00	6.1591	1.8545	-.244	.357	-.022	.702
Factor Q1	44	1.00	9.00	5.7955	2.0863	-.504	.357	.167	.702
Factor Q2	44	3.00	9.00	5.7727	1.6825	.161	.357	-.876	.702
Factor Q3	44	1.00	9.00	5.6364	1.8813	-.278	.357	-.561	.702
Factor Q4	44	2.00	9.00	5.9091	1.5968	-.312	.357	.043	.702
Extroversion	44	1.90	9.30	5.8000	1.7921	-.170	.357	-.156	.702
Anxiety	44	1.40	10.70	5.8500	1.9331	-.117	.357	.099	.702
Tough Minded	44	.80	9.10	5.2091	2.1751	-.020	.357	-.842	.702
Self Control	44	2.00	9.10	5.6841	1.5498	-.295	.357	-.045	.702
Independent	44	2.20	10.20	5.9727	1.9638	.099	.357	-.505	.702

All Male Participants Enrolled in 2000

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Factor A	21	2.00	9.00	5.4286	1.9893	-.073	.501	-.658	.972
Factor B	21	6.00	10.00	8.6190	1.1609	-1.061	.501	.817	.972
Factor C	21	2.00	9.00	6.2381	1.9976	-.570	.501	.360	.972
Factor E	21	2.00	9.00	6.1429	1.7403	-.745	.501	.366	.972
Factor F	21	2.00	9.00	6.1905	1.8873	-.599	.501	-.357	.972
Factor G	21	3.00	8.00	5.6190	1.6875	-.296	.501	-.954	.972
Factor H	21	3.00	9.00	5.9524	1.6272	.161	.501	-.785	.972
Factor I	21	2.00	9.00	5.7619	2.0713	.091	.501	-.824	.972
Factor L	21	4.00	9.00	6.4762	1.5690	.220	.501	-.917	.972
Factor M	21	2.00	10.00	5.0952	1.7001	.916	.501	2.505	.972
Factor N	21	2.00	8.00	5.9048	1.6705	-.546	.501	-.287	.972
Factor O	21	1.00	9.00	5.9524	2.0366	-.557	.501	.236	.972
Factor Q1	21	3.00	9.00	6.0476	1.7742	-.020	.501	-.710	.972
Factor Q2	21	3.00	9.00	5.8095	1.5690	.347	.501	-.458	.972
Factor Q3	21	1.00	9.00	5.5238	1.9905	-.438	.501	-.101	.972
Factor Q4	21	3.00	9.00	6.1905	1.6315	-.720	.501	.395	.972
Extroversion	21	1.90	8.10	5.5619	1.7101	-.582	.501	-.023	.972
Anxiety	21	1.40	10.70	5.9048	2.1484	-.024	.501	.627	.972
Tough Minded	21	1.50	8.50	5.2810	2.0994	-.131	.501	-.837	.972
Self Control	21	2.00	8.20	5.4905	1.6664	-.404	.501	-.475	.972
Independent	21	3.70	9.50	6.3810	1.5045	-.103	.501	-.301	.972

All Female Participants Enrolled in 2000

	N	Min	Max	Mean	Std. Dev,	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Factor A	23	2.00	10.00	6.2174	2.2554	.121	.481	-.500	.935
Factor B	23	67.00	10.00	8.5217	1.3097	-.451	.481	-.796	.935
Factor C	23	2.00	9.00	5.6087	1.6986	-.052	.481	.505	.935
Factor E	23	1.00	10.00	5.3913	2.6584	.284	.481	-.984	.935
Factor F	23	3.00	9.00	6.1739	1.3022	-.081	.481	.734	.935
Factor G	23	3.00	9.00	6.0870	1.4744	-.070	.481	-.279	.935
Factor H	23	2.00	9.00	6.0000	2.2563	-.390	.481	-1.069	.935
Factor I	23	2.00	10.00	6.3913	2.2308	.077	.481	-.569	.935
Factor L	23	3.00	9.00	5.4783	1.5336	.749	.481	-.076	.935
Factor M	23	2.00	10.00	4.7826	2.0661	.522	.481	.335	.935
Factor N	23	1.00	8.00	5.2609	2.1788	-.915	.481	.004	.935
Factor O	23	4.00	9.00	6.3478	1.6951	.379	.481	-1.083	.935
Factor Q1	23	1.00	9.00	5.5652	2.3515	-.572	.481	.043	.935
Factor Q2	23	3.00	9.00	5.7391	1.8145	.076	.481	-1.111	.935
Factor Q3	23	3.00	9.00	5.7391	1.8145	-.074	.481	-1.148	.935
Factor Q4	23	2.00	9.00	5.6522	1.5553	.007	.481	.644	.935
Extroversion	23	2.10	9.30	6.0174	1.8749	.029	.481	-.336	.935
Anxiety	23	2.40	8.60	5.8000	1.7615	-.322	.481	-.845	.935
Tough Minded	23	.80	9.10	5.1435	2.2871	.072	.481	-.776	.935
Self Control	23	2.80	9.10	5.8609	1.4497	-.056	.481	.517	.935
Independent	23	2.20	10.20	5.6000	2.2750	.460	.481	-.560	.935

Appendix V: Descriptive Statistics for Groups from Analysis 1

Subsection I: Low Function Usage Groups

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	20	40.0	40.0	40.0
	Female	30	60.0	60.0	100.0
	Total	50	100.0	100.0	

Ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	2.0	2.0	2.0
	1	46	92.0	92.0	94.0
	3	1	2.0	2.0	96.0
	5	2	4.0	4.0	100.0
	Total	50	100.0	100.0	

Age

	N	Min	Max	Mean		Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Err	Statistic	Statistic	Std. Err	Statistic	Std. Err
AGE	50	20	50	24.52	.87	6.119	3.241	.337	10.374	.662

TSI Function Raw Scores

	N	Min	Max	Mean		Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Err	Statistic	Statistic	Std. Err	Statistic	Std. Err
Legislative	50	2.80	6.40	4.6760	.1182	.83582	-.045	.337	-.574	.662
Executive	50	2.80	6.00	4.5080	.1114	.78788	-.105	.337	-.246	.662
Judicial	50	2.40	5.80	3.8640	.1106	.78188	.319	.337	.229	.662

TSI Function Usage Scores

		LEGISLATIVE USAGE CATEGORY	EXECUITVE USAGE CATEGORY	JUDICIAL USAGE CATEOGRY
N	Valid	50	50	50
	Missing	0	0	0
Median		3.0000	4.0000	2.0000
Skewness		.277	-.232	.801
Std. Error of Skewness		.337	.337	.337
Kurtosis		-1.022	-.124	-.289
Std. Error of Kurtosis		.662	.662	.662

16PF Factors

	N	Min	Max	Mean		Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Err	Statistic	Statistic	Std. Err	Statistic	Std. Err
Factor A	50	2.00	10.00	5.7200	.3258	2.30386	.347	.337	-.723	.662
Factor B	50	5.00	10.00	8.3400	.1798	1.27151	-.618	.337	-.204	.662
Factor C	50	2.00	9.00	5.5400	.2494	1.76369	-.022	.337	.337	.662
Factor E	50	1.00	10.00	5.7200	.2886	2.04081	-.204	.337	-.197	.662
Factor F	50	2.00	9.00	6.0200	.2090	1.47759	-.668	.337	.383	.662
Factor G	50	1.00	9.00	5.7600	.2500	1.76774	-.150	.337	.108	.662
Factor H	50	2.00	9.00	5.7600	.2778	1.96458	-.070	.337	-.860	.662
Factor I	50	2.00	10.00	6.2000	.3090	2.18529	.210	.337	-.898	.662
Factor J	50	3.00	9.00	6.1600	.2430	1.71857	.094	.337	-1.063	.662
Factor M	50	2.00	10.00	5.3200	.2747	1.94244	.310	.337	-.005	.662
Factor N	50	1.00	9.00	5.6800	.2892	2.04480	-.680	.337	-.251	.662
Factor O	50	3.00	9.00	6.2600	.2438	1.72390	.152	.337	-1.083	.662
Factor Q1	50	1.00	9.00	5.4000	.2828	2.00000	-.469	.337	-.118	.662
Factor Q2	50	2.00	9.00	5.6200	.2423	1.71298	.092	.337	-.625	.662
Factor Q3	50	1.00	9.00	5.6400	.2767	1.95626	-.134	.337	-.674	.662
Factor Q4	50	2.00	9.00	5.9200	.2265	1.60153	-.548	.337	.059	.662
Anxiety	50	2.40	10.70	6.1040	.2522	1.78359	-.132	.337	-.090	.662
Tough Minded	50	.80	9.10	5.2600	.2874	2.03249	-.313	.337	-.379	.662
Self Confident	50	1.70	9.10	5.5600	.2331	1.64800	-.200	.337	-.182	.662
Independent	50	2.20	9.30	5.8120	.2330	1.64759	-.133	.337	-.357	.662
Extroversion	50	1.90	10.40	5.6840	.2613	1.84738	.248	.337	.366	.662

Subsection II: High Function Usage Groups

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	17	73.9	73.9	73.9
	Female	6	26.1	26.1	100.0
	Total	23	100.0	100.0	

Ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	21	91.3	91.3	91.3
	2	2	8.7	8.7	100.0
	Total	23	100.0	100.0	

Age

	N	Min	Max	Mean		Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Err	Statistic	Statistic	Std. Err	Statistic	Std. Err
AGE	23	21	45	25.00	1.36	6.544	2.774	.481	7.012	.935

TSI Function Raw Scores

	N	Min	Max	Mean		Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Err	Statistic	Statistic	Std. Err	Statistic	Std. Err
Legislative	23	3.80	6.80	5.6435	.1625	.77918	-.841	.481	-.129	.935
Executive	23	2.20	6.40	5.1217	.2069	.99222	-1.258	.481	2.108	.935
Judicial	23	4.20	6.00	5.0261	.1168	.56021	.289	.481	-1.321	.935

TSI Function Usage Scores

		LEGISLATIVE USAGE CATEGORY	EXECUITVE USAGE CATEGORY	JUDICIAL USAGE CATEOGRY
N	Valid	23	23	23
	Missing	0	0	0
Median		5.0000	5.0000	5.0000
Skewness		-1.047	-1.410	-.482
Std. Err of Skewness		.481	.481	.481
Kurtosis		.497	1.910	-.295
Std. Error of Kurtosis		.935	.935	.935

16PF Factors

	N	Min	Max	Mean		Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Err	Statistic	Statistic	Std. Err	Statistic	Std. Err
Factor A	23	1.00	10.00	6.0435	.4683	2.24577	-.059	.481	.075	.935
Factor B	23	6.00	10.00	7.9130	.2943	1.41142	.061	.481	-1.181	.935
Factor C	23	3.00	9.00	6.3478	.3421	1.64064	-.753	.481	.629	.935
Factor E	23	2.00	10.00	7.0000	.4705	2.25630	-.598	.481	-.295	.935
Factor F	23	4.00	9.00	6.5652	.3133	1.50230	.039	.481	-.766	.935
Factor G	23	3.00	8.00	5.3913	.3370	1.61637	.002	.481	-.872	.935
Factor H	23	2.00	9.00	6.3913	.3811	1.82755	-.446	.481	-.124	.935
Factor I	23	2.00	10.00	5.8696	.3991	1.91417	.075	.481	.149	.935
Factor J	23	4.00	10.00	6.4783	.3493	1.67521	.295	.481	-.547	.935
Factor M	23	2.00	10.00	5.3913	.4062	1.94794	.442	.481	.041	.935
Factor N	23	1.00	9.00	5.3478	.4292	2.05843	-.481	.481	.101	.935
Factor O	23	1.00	9.00	5.5217	.4164	1.99703	-.354	.481	.040	.935
Factor Q1	23	2.00	10.00	6.6087	.4205	2.01673	-.101	.481	-.177	.935
Factor Q2	23	2.00	9.00	5.5652	.3917	1.87873	-.337	.481	-.354	.935
Factor Q3	23	3.00	9.00	5.8696	.4232	2.02943	-.128	.481	-1.053	.935
Factor Q4	23	3.00	9.00	6.1304	.3345	1.60410	-.593	.481	.160	.935
Anxiety	23	1.40	9.80	5.6652	.3777	1.81123	-.025	.481	.991	.935
Tough Minded	23	1.10	10.20	4.7348	.4528	2.17164	.836	.481	.722	.935
Self Confident	23	1.40	8.50	5.3739	.3580	1.71708	-.172	.481	.014	.935
Independent	23	3.60	10.20	7.1957	.3997	1.91679	-.219	.481	-.606	.935
Extroversion	23	1.20	10.10	6.1870	.3917	1.87842	-.275	.481	1.490	.935

Appendix VI: Descriptive Statistics for Groups from Analysis 2

Subsection I: Low Function Usage Groups

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	5	25.0	25.0	25.0
	Female	15	75.0	75.0	100.0
	Total	20	100.0	100.0	

Ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	5.0	5.0	5.0
	1	17	85.0	85.0	90.0
	5	2	10.0	10.0	100.0
	Total	20	100.0	100.0	

Age

	N	Min	Max	Mean		Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Err	Statistic	Statistic	Std. Err	Statistic	Std. Err
AGE	20	20	47	24.35	1.29	5.788	3.463	.512	13.489	.992

TSI Function Raw Scores

	N	Min	Max	Mean		Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Err	Statistic	Statistic	Std. Err	Statistic	Std. Err
Legislative	20	2.80	5.40	4.2700	.1598	.71458	-.111	.512	-.014	.992
Executive	20	3.00	4.80	4.1300	.1190	.53222	-.586	.512	-.339	.992
Judicial	20	2.40	4.60	3.5000	.1518	.67901	-.067	.512	-1.134	.992

TSI Function Usage Scores

		LEGISLATIVE USAGE CATEGORY	EXECUITVE USAGE CATEGORY	JUDICIAL USAGE CATEOGRY
N	Valid	20	20	20
	Missing	0	0	0
Median		2.0000	4.0000	2.0000
Skewness		.394	-1.321	.801
Std. Error of Skewness		.512	.512	.512
Kurtosis		-1.300	1.289	-.360
Std. Error of Kurtosis		.992	.992	.992

16PF Factors

	N	Min	Max	Mean		Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Err	Statistic	Statistic	Std. Err	Statistic	Std. Err
Factor A	20	2.00	10.00	6.6000	.5400	2.41487	-.198	.512	-.602	.992
Factor B	20	6.00	10.00	8.4500	.2945	1.31689	-.494	.512	-.779	.992
Factor C	20	2.00	9.00	5.6500	.4661	2.08440	-.216	.512	.001	.992
Factor E	20	1.00	10.00	5.7500	.4860	2.17340	-.464	.512	.268	.992
Factor F	20	3.00	8.00	6.2000	.2772	1.23969	-.972	.512	1.241	.992
Factor G	20	3.00	9.00	5.5500	.4134	1.84890	.079	.512	-.989	.992
Factor H	20	2.00	9.00	6.1000	.4915	2.19809	-.405	.512	-.952	.992
Factor I	20	2.00	10.00	6.5000	.5596	2.50263	-.123	.512	-1.200	.992
Factor J	20	3.00	9.00	5.8500	.4309	1.92696	.186	.512	-1.196	.992
Factor M	20	2.00	10.00	5.2000	.4735	2.11760	.596	.512	.298	.992
Factor N	20	1.00	9.00	5.8500	.5144	2.30046	-1.036	.512	.407	.992
Factor O	20	4.00	9.00	6.2000	.3742	1.67332	.174	.512	-1.161	.992
Factor Q1	20	1.00	9.00	5.4500	.4321	1.93241	-.621	.512	.594	.992
Factor Q2	20	2.00	9.00	5.4500	.4197	1.87715	.007	.512	-.541	.992
Factor Q3	20	1.00	9.00	5.3000	.4979	2.22663	-.071	.512	-.786	.992
Factor Q4	20	2.00	9.00	6.0000	.3907	1.74718	-.329	.512	-.020	.992
Anxiety	20	2.40	10.70	5.9750	.4686	2.09583	.155	.512	-.047	.992
Tough Minded	20	.80	9.10	4.9450	.5329	2.38316	.050	.512	-.467	.992
Self Confident	20	1.70	8.00	5.3400	.3977	1.77865	-.636	.512	-.158	.992
Independent	20	2.20	9.00	5.8850	.3798	1.69869	-.287	.512	-.207	.992
Extroversion	20	2.60	10.40	6.0700	.4110	1.83793	.452	.512	.791	.992

Subsection II: High Function Usage Groups

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	32	60.4	60.4	60.4
	Female	21	39.6	39.6	100.0
	Total	53	100.0	100.0	

Ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	50	94.3	94.3	94.3
	2	2	3.8	3.8	98.1
	3	1	1.9	1.9	100.0
	Total	53	100.0	100.0	

Age

	N	Min	Max	Mean		Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Err	Statistic	Statistic	Std. Err	Statistic	Std. Err
AGE	53	21	50	24.79	.88	6.416	2.950	.327	7.982	.644

TSI Function Raw Scores

	N	Min	Max	Mean		Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Err	Statistic	Statistic	Std. Err	Statistic	Std. Err
Legislative	53	3.40	6.80	5.2491	.1185	.86283	-.383	.327	-.750	.644
Executive	53	2.20	6.40	4.9170	.1258	.91604	-.789	.327	.640	.644
Judicial	53	2.60	6.00	4.5057	.1122	.81675	-.056	.327	-.470	.644

TSI Function Usage Scores

		LEGISLATIVE USAGE CATEGORY	EXECUITVE USAGE CATEGORY	JUDICIAL USAGE CATEOGRY
N	Valid	53	53	53
	Missing	0	0	0
Median		4.0000	5.0000	4.0000
Skewness		-.444	-.976	-.288
Std. Error of Skewness		.327	.327	.327
Kurtosis		-.933	.492	-1.232
Std. Error of Kurtosis		.644	.644	.644

16PF Factors

	N	Min	Max	Mean		Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Err	Statistic	Statistic	Std. Err	Statistic	Std. Err
Factor A	53	1.00	10.00	5.5283	.2983	2.17153	.347	.327	-.353	.644
Factor B	53	5.00	10.00	8.1132	.1820	1.32521	-.370	.327	-.686	.644
Factor C	53	2.00	9.00	5.8491	.2244	1.63373	-.188	.327	.019	.644
Factor E	53	2.00	10.00	6.2642	.3002	2.18519	-.157	.327	-.676	.644
Factor F	53	2.00	9.00	6.1887	.2189	1.59394	-.321	.327	-.015	.644
Factor G	53	1.00	9.00	5.6792	.2314	1.68447	-.147	.327	.304	.644
Factor H	53	2.00	9.00	5.9057	.2531	1.84249	-.105	.327	-.621	.644
Factor I	53	2.00	10.00	5.9434	.2645	1.92569	.302	.327	-.265	.644
Factor J	53	4.00	10.00	6.4151	.2196	1.59848	.248	.327	-.871	.644
Factor M	53	2.00	10.00	5.3962	.2575	1.87432	.251	.327	-.084	.644
Factor N	53	1.00	9.00	5.4717	.2675	1.94742	-.443	.327	-.354	.644
Factor O	53	1.00	9.00	5.9623	.2611	1.90103	-.171	.327	-.250	.644
Factor Q1	53	1.00	10.00	5.9057	.2917	2.12371	-.260	.327	-.105	.644
Factor Q2	53	2.00	9.00	5.6604	.2363	1.72028	-.083	.327	-.490	.644
Factor Q3	53	3.00	9.00	5.8679	.2556	1.86091	-.061	.327	-.964	.644
Factor Q4	53	2.00	9.00	5.9811	.2130	1.55032	-.675	.327	.119	.644
Anxiety	53	1.40	9.80	5.9623	.2314	1.68491	-.269	.327	.218	.644
Tough Minded	53	1.10	10.20	5.1509	.2707	1.97091	.100	.327	-.277	.644
Self Confident	53	1.40	9.10	5.5623	.2235	1.62708	.019	.327	-.242	.644
Independent	53	2.50	10.20	6.3849	.2595	1.88898	.062	.327	-.479	.644
Extroversion	53	1.20	10.10	5.7566	.2578	1.87714	-.020	.327	.389	.644

Appendix VII: Independent T-Test for TSI Raw Scores

And 16PF Factors Grouped by Gender

Subsection I: Independent T-Test for TSI Raw Scores

Group Statistics

	GENDER	N	Mean	Std. Deviation	Std. Error Mean
Legislative	Male	37	5.3351	.79450	.13062
	Female	36	4.6167	.92875	.15479
Executive	Male	37	4.7405	.89922	.14783
	Female	36	4.6611	.90689	.15115
Judicial	Male	37	4.5135	.71731	.11793
	Female	36	3.9389	.97959	.16326

Independent Samples Test

		Levene's Test for Equality of Var.		t-test for Equality of Means					95% CI of the Diff	
		F	Sig.	t	df	Sig. (2-tailed)	Mean DIff	Std. Error DIff	Lower	Upper
Legislative	EV	.699	.406	3.555	71	.001	.7185	.20210	.31549	1.12144
	UV			3.547	68.716	.001	.7185	.20254	.31439	1.12255
Executive	EV	.008	.927	.376	71	.708	.0794	.21140	-.34209	.50094
	UV			.376	70.907	.708	.0794	.21142	-.34214	.50100
Judicial	EV	3.590	.062	2.865	71	.005	.5746	.20056	.17473	.97452
	UV			2.853	64.087	.006	.5746	.20140	.17229	.97695

Subsection II: Independent T-Test for 16PF Factors Grouped by Gender

Group Statistics

	GENDER	N	Mean	Std. Deviation	Std. Error Mean
Factor A	Male	37	5.5405	2.1291	.3500
	Female	36	6.1111	2.4116	.4019
Factor B	Male	37	8.2432	1.2781	.2101
	Female	36	8.1667	1.3836	.2306
Factor C	Male	37	6.0811	1.8912	.3109
	Female	36	5.5000	1.5766	.2628
Factor E	Male	37	6.1892	1.8080	.2972
	Female	36	6.0556	2.5292	.4215
Factor F	Male	37	6.1892	1.5958	.2623
	Female	36	6.1944	1.4106	.2351
Factor G	Male	37	5.5946	1.6576	.2725
	Female	36	5.6944	1.8019	.3003
Factor H	Male	37	5.6757	1.6676	.2741
	Female	36	6.2500	2.1564	.3594
Factor I	Male	37	5.7297	1.9242	.3163
	Female	36	6.4722	2.2231	.3705
Factor J	Male	37	6.6486	1.6024	.2634
	Female	36	5.8611	1.7263	.2877
Factor M	Male	37	5.4865	1.8046	.2967
	Female	36	5.1944	2.0677	.3446
Factor N	Male	37	5.9189	1.6730	.2750
	Female	36	5.2222	2.3313	.3885
Factor O	Male	37	5.7297	1.9098	.3140
	Female	36	6.3333	1.7238	.2873
Factor Q1	Male	37	5.8649	1.8732	.3080
	Female	36	5.6944	2.2781	.3797
Factor Q2	Male	37	5.5946	1.6908	.2780
	Female	36	5.6111	1.8405	.3067
Factor Q3	Male	37	5.3784	2.0460	.3364
	Female	36	6.0556	1.8508	.3085
Factor Q4	Male	37	5.9730	1.6913	.2780
	Female	36	6.0000	1.5119	.2520
Extroversion	Male	37	5.6000	1.5944	.2621
	Female	36	6.0917	2.0902	.3484
Anxiety	Male	37	5.8432	1.9724	.3243
	Female	36	6.0917	1.6027	.2671
Tough Minded	Male	37	5.2486	2.0520	.3374
	Female	36	4.9361	2.1189	.3532
Self Control	Male	37	5.3054	1.6847	.2770
	Female	36	5.7028	1.6338	.2723
Independent	Male	37	6.3054	1.4819	.2436
	Female	36	6.1889	2.1692	.3615

Independent Samples Test

		Levene's Test for Equality of Var.		t-test for Equality of Means					95% CI of the Diff	
		F	Sig.	t	df	Sig. (2-tailed)	Mean DIff	Std. Error DIff	Lower	Upper
Factor A	EV	.389	.535	-1.072	71	.287	-.5706	.5321	-1.6315	.4903
	UV			-1.071	69.406	.288	-.5706	.5330	-1.6337	.4926
Factor B	EV	.161	.689	.246	71	.807	7.658	.3116	-.5448	.6979
	UV			.245	70.199	.807	7.658	.3120	-.5456	.6988
Factor C	EV	1.106	.296	1.424	71	.159	.5811	.4081	-.2326	1.3948
	UV			1.427	69.385	.158	.5811	.4071	-.2309	1.3931
Factor E	EV	4.441	.039	.260	71	.795	.1336	.5135	-.8902	1.1575
	UV			.259	63.253	.796	.1336	.5158	-.8970	1.1643
Factor F	EV	.462	.499	-.015	71	.988	-5.2553	.3529	-.7089	.6984
	UV			-.015	70.363	.988	-5.2553	.3523	-.7078	.6973
Factor G	EV	.061	.806	-.247	71	.806	-9.9850	.4051	-.9075	.7078
	UV			-.246	70.137	.806	-9.9850	.4055	-.9086	.7089
Factor H	EV	3.060	.085	-1.275	71	.206	-.5743	.4504	-1.4725	.3238
	UV			-1.271	65.891	.208	-.5743	.4520	-1.4768	.3282
Factor I	EV	1.563	.215	-1.527	71	.131	-.7425	.4862	-1.7120	.2270
	UV			-1.524	68.986	.132	-.7425	.4872	-1.7144	.2294
Factor J	EV	.412	.523	2.021	71	.047	.7875	.3897	1.0510	1.5646
	UV			2.019	70.268	.047	.7875	.3901	9.5650	1.5655
Factor M	EV	1.413	.238	.643	71	.522	.2920	.4539	-.6130	1.1971
	UV			.642	69.168	.523	.2920	.4547	-.6151	1.1992
Factor N	EV	4.695	.034	1.470	71	.146	.6967	.4739	-.2483	1.6417
	UV			1.464	63.388	.148	.6967	.4760	-.2545	1.6479
Factor O	EV	.101	.751	-1.416	71	.161	-.6036	.4262	-1.4534	.2462
	UV			-1.418	70.609	.160	-.6036	.4256	-1.4523	.2450
Factor Q1	EV	1.245	.268	.350	71	.728	.1704	.4876	-.8017	1.1426
	UV			.349	67.709	.728	.1704	.4889	-.8052	1.1460
Factor Q2	EV	.565	.455	-.040	71	.968	-1.6517	.4135	-.8409	.8079
	UV			-.040	70.116	.968	-1.6517	.4140	-.8421	.8091
Factor Q3	EV	.973	.327	-1.482	71	.143	-.6772	.4570	-1.5885	.2341
	UV			-1.484	70.631	.142	-.6772	.4564	-1.5873	.2329
Factor Q4	EV	.064	.802	-.072	71	.943	-2.7027	.3758	-.7764	.7223
	UV			-.072	70.502	.943	-2.7027	.3752	-.7753	.7213
Extroversion	EV	2.893	.093	-1.132	71	.261	-.4917	.4344	-1.3578	.3744
	UV			-1.128	65.453	.264	-.4917	.4360	-1.3622	.3789
Anxiety	EV	.490	.486	-.590	71	.557	-.2484	.4213	-1.0885	.5917
	UV			-.591	68.834	.556	-.2484	.4201	-1.0866	.5897
Tough Minded	EV	.450	.504	.640	71	.524	.3125	.4882	-.6609	1.2859
	UV			.640	70.747	.524	.3125	.4884	-.6613	1.2864
Self Control	EV	.496	.484	-1.023	71	.310	-.3974	.3886	-1.1722	.3774
	UV			-1.023	70.999	.310	-.3974	.3884	-1.1718	.3771
Independent	EV	4.226	.043	.269	71	.789	.1165	.4338	-.7484	.9814
	UV			.267	61.645	.790	.1165	.4360	-.7551	.9881

Appendix VIII: Pearson's Correlation Between 16PF Factors and TSI Scores

Pearson's Correlation Between 16PF Factors and TSI Scores

		Legislative Raw Score	Executive Raw Score	Judicial Raw Score	Legislative Function Usage	Executive Function Usage	Judicial Function Usage
Factor A	Pearson Corr	-.031	-.093	-.139	-.043	-.101	-.091
	Sig. (2-tailed)	.798	.434	.242	.717	.396	.443
Factor B	Pearson Corr	.051	.041	-.064	.014	.013	-.041
	Sig. (2-tailed)	.670	.732	.592	.909	.916	.732
Factor C	Pearson Corr	.384	-.084	.083	.432	-.066	.049
	Sig. (2-tailed)	.001	.482	.484	.000	.581	.678
Factor E	Pearson Corr	.185	-.056	.380	.211	-.102	.297
	Sig. (2-tailed)	.118	.637	.001	.073	.390	.011
Factor F	Pearson Corr	.100	-.077	.051	.079	-.073	.065
	Sig. (2-tailed)	.398	.519	.666	.505	.542	.585
Factor G	Pearson Corr	.030	.161	-.234	-.020	.117	-.280
	Sig. (2-tailed)	.798	.175	.046	.867	.322	.017
Factor H	Pearson Corr	.066	-.017	.114	.085	.025	.124
	Sig. (2-tailed)	.579	.888	.336	.473	.835	.296
Factor I	Pearson Corr	-.072	.011	-.078	-.124	.014	-.042
	Sig. (2-tailed)	.547	.926	.511	.295	.906	.727
Factor J	Pearson Corr	.003	.130	.229	-.022	.107	.227
	Sig. (2-tailed)	.979	.273	.051	.854	.365	.053
Factor M	Pearson Corr	.174	-.181	.023	.150	-.190	.025
	Sig. (2-tailed)	.141	.126	.848	.206	.108	.837
Factor N	Pearson Corr	-.098	.121	-.104	-.079	.106	-.075
	Sig. (2-tailed)	.410	.308	.384	.505	.373	.530
Factor O	Pearson Corr	-.298	.100	-.063	-.331	.072	-.066
	Sig. (2-tailed)	.011	.402	.597	.004	.544	.578
Factor Q1	Pearson Corr	.276	-.190	.289	.294	-.202	.290
	Sig. (2-tailed)	.018	.108	.013	.012	.087	.013
Factor Q2	Pearson Corr	.021	.095	-.020	.024	.069	-.011
	Sig. (2-tailed)	.861	.425	.863	.843	.560	.929
Factor Q3	Pearson Corr	-.120	.386	-.015	-.121	.361	-.034
	Sig. (2-tailed)	.313	.001	.897	.307	.002	.772
Factor Q4	Pearson Corr	.049	.042	-.017	.043	.008	.007
	Sig. (2-tailed)	.684	.726	.885	.719	.947	.953
Extroversion	Pearson Corr	.053	-.123	.025	.040	-.104	.036
	Sig. (2-tailed)	.655	.301	.833	.734	.382	.765
Anxiety	Pearson Corr	-.254	.125	.001	-.296	.089	.021
	Sig. (2-tailed)	.030	.291	.994	.011	.456	.861
Tough Minded	Pearson Corr	-.143	.160	-.080	-.116	.169	-.110
	Sig. (2-tailed)	.227	.177	.499	.328	.154	.353
Self Control	Pearson Corr	-.123	.326	-.121	-.132	.299	-.152
	Sig. (2-tailed)	.300	.005	.306	.265	.010	.198
Independent	Pearson Corr	.246	-.085	.445	.272	-.113	.390
	Sig. (2-tailed)	.036	.474	.000	.020	.341	.001

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Appendix IX: Independent t-Test for 16PF Factors

Grouped by Variables Analys1 And Analys2

Subsection I: Independent t-Test for 16PF Factors Grouped by Variables Analys1

Group Statistics

		N	Mean	Std. Deviation	Std. Error Mean
Factor A	Low Usage	50	5.7200	2.3039	.3258
	High Usage	23	6.0435	2.2458	.4683
Factor B	Low Usage	50	8.3400	1.2715	.1798
	High Usage	23	7.9130	1.4114	.2943
Factor C	Low Usage	50	5.5400	1.7637	.2494
	High Usage	23	6.3478	1.6406	.3421
Factor E	Low Usage	50	5.7200	2.0408	.2886
	High Usage	23	7.0000	2.2563	.4705
Factor F	Low Usage	50	6.0200	1.4776	.2090
	High Usage	23	6.5652	1.5023	.3133
Factor G	Low Usage	50	5.7600	1.7677	.2500
	High Usage	23	5.3913	1.6164	.3370
Factor H	Low Usage	50	5.7600	1.9646	.2778
	High Usage	23	6.3913	1.8275	.3811
Factor I	Low Usage	50	6.2000	2.1853	.3090
	High Usage	23	5.8696	1.9142	.3991
Factor J	Low Usage	50	6.1600	1.7186	.2430
	High Usage	23	6.4783	1.6752	.3493
Factor M	Low Usage	50	5.3200	1.9424	.2747
	High Usage	23	5.3913	1.9479	.4062
Factor N	Low Usage	50	5.6800	2.0448	.2892
	High Usage	23	5.3478	2.0584	.4292
Factor O	Low Usage	50	6.2600	1.7239	.2438
	High Usage	23	5.5217	1.9970	.4164
Factor Q1	Low Usage	50	5.4000	2.0000	.2828
	High Usage	23	6.6087	2.0167	.4205
Factor Q2	Low Usage	50	5.6200	1.7130	.2423
	High Usage	23	5.5652	1.8787	.3917
Factor Q3	Low Usage	50	5.6400	1.9563	.2767
	High Usage	23	5.8696	2.0294	.4232
Factor Q4	Low Usage	50	5.9200	1.6015	.2265
	High Usage	23	6.1304	1.6041	.3345
Extroversion	Low Usage	50	5.6840	1.8474	.2613
	High Usage	23	6.1870	1.8784	.3917
Anxiety	Low Usage	50	6.1040	1.7836	.2522
	High Usage	23	5.6652	1.8112	.3777
Tough Minded	Low Usage	50	5.2600	2.0325	.2874
	High Usage	23	4.7348	2.1716	.4528
Self Control	Low Usage	50	5.5600	1.6480	.2331
	High Usage	23	5.3739	1.7171	.3580
Independent	Low Usage	50	5.8120	1.6476	.2330
	High Usage	23	7.1957	1.9168	.3997

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% CI of the Diff	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff	Std. Error Diff	Lower	Upper
Factor A	EV	.309	.580	-.562	71	.576	-.3235	.5760	-1.4719	.8250
	UV			-.567	43.843	.574	-.3235	.5705	-1.4733	.8263
Factor B	EV	.313	.578	1.287	71	.202	.4270	.3317	-.2344	1.0883
	UV			1.238	39.049	.223	.4270	.3449	-.2706	1.1245
Factor C	EV	.155	.695	-1.857	71	.067	-.8078	.4350	-1.6752	5.9520
	UV			-1.908	45.796	.063	-.8078	.4234	-1.6601	4.4480
Factor E	EV	.089	.766	-2.408	71	.019	-1.2800	.5316	-2.3400	-.2200
	UV			-2.319	39.183	.026	-1.2800	.5519	-2.3962	-.1638
Factor F	EV	.327	.569	-1.457	71	.150	-.5452	.3742	-1.2914	.2010
	UV			-1.448	42.185	.155	-.5452	.3766	-1.3050	.2146
Factor G	EV	.035	.852	.850	71	.398	.3687	.4339	-.4965	1.2339
	UV			.879	46.542	.384	.3687	.4196	-.4757	1.2131
Factor H	EV	.221	.640	-1.303	71	.197	-.6313	.4845	-1.5974	.3348
	UV			-1.339	45.796	.187	-.6313	.4716	-1.5807	.3181
Factor I	EV	1.644	.204	.623	71	.535	.3304	.5304	-.7271	1.3879
	UV			.655	48.466	.516	.3304	.5048	-.6843	1.3451
Factor J	EV	.188	.666	-.741	71	.461	-.3183	.4296	-1.1749	.5384
	UV			-.748	43.844	.459	-.3183	.4255	-1.1760	.5394
Factor M	EV	.001	.981	-.146	71	.885	-7.1304	.4898	-1.0480	.9054
	UV			-.145	42.716	.885	-7.1304	.4903	-1.0604	.9178
Factor N	EV	.000	.999	.643	71	.522	.3322	.5163	-.6972	1.3616
	UV			.642	42.568	.524	.3322	.5175	-.7119	1.3762
Factor O	EV	.102	.750	1.616	71	.110	.7383	.4568	-.1725	1.6490
	UV			1.530	37.679	.134	.7383	.4825	-.2388	1.7154
Factor Q1	EV	.020	.889	-2.392	71	.019	-1.2087	.5052	-2.2161	-.2013
	UV			-2.385	42.503	.022	-1.2087	.5068	-2.2311	-.1863
Factor Q2	EV	.134	.715	.123	71	.902	5.4780	.4449	-.8324	.9420
	UV			.119	39.453	.906	5.4780	.4606	-.8765	.9861
Factor Q3	EV	.005	.943	-.460	71	.647	-.2296	.4987	-1.2239	.7647
	UV			-.454	41.428	.652	-.2296	.5056	-1.2503	.7911
Factor Q4	EV	.018	.894	-.521	71	.604	-.2104	.4037	-1.0154	.5945
	UV			-.521	42.764	.605	-.2104	.4039	-1.0252	.6043
Extroversion	EV	.125	.725	-1.075	71	.286	-.5030	.4679	-1.4359	.4300
	UV			-1.068	42.182	.291	-.5030	.4708	-1.4530	.4471
Anxiety	EV	.300	.585	.972	71	.334	.4388	.4515	-.4616	1.3391
	UV			.966	42.232	.339	.4388	.4542	-.4776	1.3552
Tough Minded	EV	.040	.842	1.004	71	.319	.5252	.5232	-.5180	1.5684
	UV			.979	40.359	.333	.5252	.5363	-.5585	1.6089
Self Control	EV	.190	.664	.442	71	.660	.1861	.4207	-.6527	1.0249
	UV			.436	41.268	.665	.1861	.4272	-.6765	1.0487
Independent	EV	.648	.424	-3.164	71	.002	-1.3837	.4373	-2.2555	-.5118
	UV			-2.991	37.548	.005	-1.3837	.4626	-2.3206	-.4467

Subsection II: Independent t-Test for 16PF Factors Grouped by Variables Analys2

Group Statistics

		N	Mean	Std. Deviation	Std. Error Mean
Factor A	Low Usage	20	6.6000	2.4149	.5400
	High Usage	53	5.5283	2.1715	.2983
Factor B	Low Usage	20	8.4500	1.3169	.2945
	High Usage	53	8.1132	1.3252	.1820
Factor C	Low Usage	20	5.6500	2.0844	.4661
	High Usage	53	5.8491	1.6337	.2244
Factor E	Low Usage	20	5.7500	2.1734	.4860
	High Usage	53	6.2642	2.1852	.3002
Factor F	Low Usage	20	6.2000	1.2397	.2772
	High Usage	53	6.1887	1.5939	.2189
Factor G	Low Usage	20	5.5500	1.8489	.4134
	High Usage	53	5.6792	1.6845	.2314
Factor H	Low Usage	20	6.1000	2.1981	.4915
	High Usage	53	5.9057	1.8425	.2531
Factor I	Low Usage	20	6.5000	2.5026	.5596
	High Usage	53	5.9434	1.9257	.2645
Factor J	Low Usage	20	5.8500	1.9270	.4309
	High Usage	53	6.4151	1.5985	.2196
Factor M	Low Usage	20	5.2000	2.1176	.4735
	High Usage	53	5.3962	1.8743	.2575
Factor N	Low Usage	20	5.8500	2.3005	.5144
	High Usage	53	5.4717	1.9474	.2675
Factor O	Low Usage	20	6.2000	1.6733	.3742
	High Usage	53	5.9623	1.9010	.2611
Factor Q1	Low Usage	20	5.4500	1.9324	.4321
	High Usage	53	5.9057	2.1237	.2917
Factor Q2	Low Usage	20	5.4500	1.8771	.4197
	High Usage	53	5.6604	1.7203	.2363
Factor Q3	Low Usage	20	5.3000	2.2266	.4979
	High Usage	53	5.8679	1.8609	.2556
Factor Q4	Low Usage	20	6.0000	1.7472	.3907
	High Usage	53	5.9811	1.5503	.2130
Extroversion	Low Usage	20	6.0700	1.8379	.4110
	High Usage	53	5.7566	1.8771	.2578
Anxiety	Low Usage	20	5.9750	2.0958	.4686
	High Usage	53	5.9623	1.6849	.2314
Tough Minded	Low Usage	20	4.9450	2.3832	.5329
	High Usage	53	5.1509	1.9709	.2707
Self Control	Low Usage	20	5.3400	1.7786	.3977
	High Usage	53	5.5623	1.6271	.2235
Independent	Low Usage	20	5.8850	1.6987	.3798
	High Usage	53	6.3849	1.8890	.2595

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% CI of the Diff	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff	Std. Error Diff	Lower	Upper
Factor A	EV	.196	.660	1.824	71	.072	1.0717	.5876	-.1000	2.2434
	UV			1.737	31.300	.092	1.0717	.6169	-.1860	2.3294
Factor B	EV	.030	.864	.970	71	.335	.3368	.3472	-.3555	1.0291
	UV			.973	34.457	.337	.3368	.3462	-.3664	1.0400
Factor C	EV	.973	.327	-.430	71	.669	-.1991	.4634	-1.1230	.7248
	UV			-.385	28.275	.703	-.1991	.5173	-1.2582	.8601
Factor E	EV	.057	.813	-.898	71	.372	-.5142	.5726	-1.6559	.6276
	UV			-.900	34.430	.374	-.5142	.5712	-1.6745	.6462
Factor F	EV	2.028	.159	.029	71	.977	1.1320	.3956	-.7774	.8000
	UV			.032	43.863	.975	1.1320	.3532	-.7007	.7233
Factor G	EV	.890	.349	-.285	71	.777	-.1292	.4540	-1.0345	.7760
	UV			-.273	31.633	.787	-.1292	.4738	-1.0947	.8362
Factor H	EV	1.085	.301	.381	71	.704	.1943	.5102	-.8229	1.2116
	UV			.352	29.649	.728	.1943	.5528	-.9353	1.3239
Factor I	EV	4.377	.040	1.012	71	.315	.5566	.5500	-.5400	1.6532
	UV			.899	27.929	.376	.5566	.6190	-.7114	1.8247
Factor J	EV	1.703	.196	-1.272	71	.207	-.5651	.4442	-1.4508	.3206
	UV			-1.169	29.424	.252	-.5651	.4836	-1.5535	.4234
Factor M	EV	.125	.724	-.385	71	.701	-.1962	.5097	-1.2126	.8202
	UV			-.364	30.908	.718	-.1962	.5390	-1.2956	.9032
Factor N	EV	.126	.723	.704	71	.484	.3783	.5374	-.6933	1.4499
	UV			.652	29.868	.519	.3783	.5798	-.8060	1.5626
Factor O	EV	.041	.840	.492	71	.625	.2377	.4836	-.7266	1.2020
	UV			.521	38.664	.605	.2377	.4563	-.6854	1.1609
Factor Q1	EV	.480	.491	-.837	71	.405	-.4557	.5443	-1.5410	.6297
	UV			-.874	37.426	.388	-.4557	.5214	-1.5116	.6003
Factor Q2	EV	.122	.727	-.455	71	.651	-.2104	.4628	-1.1332	.7125
	UV			-.437	31.785	.665	-.2104	.4817	-1.1918	.7710
Factor Q3	EV	1.152	.287	-1.101	71	.275	-.5679	.5158	-1.5964	.4605
	UV			-1.015	29.585	.318	-.5679	.5597	-1.7116	.5758
Factor Q4	EV	.265	.608	.045	71	.964	1.8870	.4213	-.8212	.8589
	UV			.042	30.969	.966	1.8870	.4449	-.8887	.9264
Extroversion	EV	.078	.781	.640	71	.524	.3134	.4899	-.6634	1.2902
	UV			.646	34.925	.523	.3134	.4852	-.6716	1.2984
Anxiety	EV	1.473	.229	.027	71	.979	1.2740	.4734	-.9313	.9567
	UV			.024	28.773	.981	1.2740	.5227	-1.0566	1.0821
Tough Minded	EV	.758	.387	-.376	71	.708	-.2059	.5483	-1.2992	.8873
	UV			-.345	29.359	.733	-.2059	.5977	-1.4278	1.0159
Self Control	EV	.058	.810	-.507	71	.613	-.2223	.4380	-1.0956	.6511
	UV			-.487	31.738	.629	-.2223	.4562	-1.1518	.7073
Independent	EV	.246	.622	-1.035	71	.304	-.4999	.4829	-1.4627	.4629
	UV			-1.087	37.857	.284	-.4999	.4600	-1.4312	.4314

Appendix X: Instruments

Subsection I – Biographical Information Questions

1. Gender.
2. Ethnicity.
3. Age.
4. College GPA.
5. Graduate GPA.
6. College Major.
7. Best College Subject.
8. Worst College Subject.
9. Favorite College Subject.
10. Best Law School Subject.
11. Worst Law School Subject.
12. Favorite Law School Subject.
13. Describe your strengths.
14. Describe areas that you would like to improve.
15. Leisure time interests/hobbies.
16. Memberships.

17. Offices held.

18. Volunteer Activities.

19. Honors and Awards.

20. In the past what type of employment have you primarily had?

21. Are any of your family members of friends lawyers?

22. Why did you decide to go to law school?

23. Ideally, where would you like to see your career go in the next 5 to 10 years?

24. Realistically, where would you like to see your career go in the next 5 to 10 years?

25. What type of law do you plan to practice after law school?

Subsection II – Thinking Styles Questions (TSI)

Rate yourself by selecting the following answers that corresponds to how well the statement describes you:

1. Not at all well.
2. Not very well.
3. Slightly well.
4. Somewhat well.
5. Well.
6. Very well.
7. Extremely well.

1. When making decisions, I tend to rely on my own ideas and ways of doing things.

2. When discussing or writing down ideas, I follow formal rules of presentation.

3. When discussing or writing down ideas, I like criticizing others' ways of doing things.

4. When faced with a problem, I use my own ideas and strategies to solve problems.

5. I am careful to use the proper method to solve any problem.

6. When faced with opposing ideas, I like to decide which is the right way of doing something.

7. I like to play with my ideas and see how far they go.

8. I like projects that have a clear structure and a set plan and goal.

9. I like to check and rate opposing points of view or conflicting ideas.

10. I like problems where I can try my own way of solving them.

11. Before starting a task or project, I check to see what method or procedure should be used.

12. I like projects where I can study and rate different views and ideas.

13. When working on a task, I like to start with my own ideas.

14. I like situations in which my role or the way I participate is clearly defined.

15. I prefer tasks or problems where I can grade the design or methods of others.

16. When talking or writing about ideas, I stick to one main idea.

17. I like to set priorities for the things I need to do before I start doing them.

18. When I undertake some task, I am usually equally open to starting by working on any of several things.

19. When I have many things to do, I do whatever occurs to me first.

20. I like to deal with major issues or themes, rather than details or facts.

21. In talking or writing down ideas, I like to have the issues organized in order of importance.

22. When there are competing issues of importance to address in my work, I somehow try to address them simultaneously.

23. I can switch from one task to another easily, because all tasks seem to me to be equally important.

24. When trying to finsh a task, I tend to ignore problems that come up.

25. Before starting a project, I like to know the things I have to do and in what order.

26. I like to tackle all kinds of problems, even seemingly trivial ones.

27. I use any means to reach my goal.

28. In dealing with difficulties, I have a good sense of how important each of them is and what order to tackle them in.

29. Usually when I have things to do, I split my time and attention equally among them.

30. When discussing or writing down ideas, I use whatever comes to mind.

31. I try to have several things going at once, so that I can shift back and forth between them.

32. If there are several important things to do, I do the one most important to me.

33. I sometimes have trouble setting priorities for multiple things that I need to get done.

34. When trying to make a decision, I take all points of view into account.

35. When there are many things to do, I have a clear sense of the order in which to do them.

36. I like situations and tasks in which I am not concerned with details.

37. I prefer to deal with specific problems rather than general questions.

38. I like to control all phases of a project, without having to consult others.

39. When starting a task, I like to brainstorm ideas with friends or peers.

40. I enjoy working on projects that allow me to try novel ways of doing things.

41. I like to do things in ways that have been used in the past.

42. I care more about the general effect than about the details of a task I have to do.

43. I like problems where I need to pay attention to detail.

44. When trying to make a decision, I rely on my own judgement of the situation.

45. I like projects in which I can work together with others.

46. I like tasks and problems that have fixed rules to follow in order to complete them.

Subsection III – 16PF

1. I'd enjoy more being a counselor than being an architect.
    a. true
    b. ?
    c. false

2. When something upsets me, I usually get over it quite soon.

    a. true
    b. ?
    c. false.

3. When people do something that bothers me, I usually:
    a. let it go
    b. ?
    c. mention it to them.

4. I believe more in:
    a. being properly serious in everyday life
    b. ?
    c. the saying " laugh and be merry" most of the time.

5. I'd rather see a home that:
    a. has strict standards of behavior
    b. ?
    c. doesn't have too many rules.

6. I usually enjoy spending time talking with friends about social events of parties.
    a. true
    b. ?
    c. false

7. I admire more:
    a. a person who has average abilities, but strict morals
    b. ?
    c. a person who is very talented, but is sometimes not very responsible.

8. When I was a child, I spent more free time:
    a. making or building something
    b. ?
    c. reading or daydreaming.

9. In joining a new group, I usually seem to fit in right away.
    a. true
    b. ?
    c. false

10. I get excited about good plays or novels.
    a. true
    b. ?
    c. false.

11. There's usually a big difference between what people will say they will do and what they actually do.
    a. true
    b. ?
    c. false.

12. My friends think I'm slightly absentminded and not always practical.
    a. true
    b. ?
    c. false.

13. A lot of people will stab you in the back in order to get ahead of themselves.
    a. true
    b. ?
    c. false

14. I get into trouble because I sometimes pursue my own ideas without talking them over with the people involved.
    a. true
    b. ?
    c. false

15. I find it easy to talk about my life, even about the things that others might consider quite personal.
    a. true
    b. ?
    c. false

16. I am willing to help people.
    a. always
    b. ?
    c. sometimes.

17. My thoughts are too deep and complicated for many people to understand
    a. hardly ever
    b. ?
    c. sometimes

18. I prefer to:
    a. talk about my problems with my friends
    b. ?
    c. keep them to myself.

19. I tend to be too sensitive and worry too much about something I've ever done.
    a. hardly ever
    b. ?
    c. often

20. I'd prefer to deal with people who are:
    a. conventional and polite in what they say.
    b. ?
    c. direct and speak up about the problems they see.

21. If people act as if they dislike me:
    a. it doesn't upset me
    b. ?
    c. I usually feel hurt

22. I like to think up better ways of doing things rather than follow well-tried ways.
    a. true
    b. ?
    c. false

23. I have said things that hurt other's feelings.
    a. true
    b. ?
    c. false.

24. If I had to cook or build something, I'd follow the directions exactly.
    a. true, why take chances
    b. ?
    c. false, I'd probably try to make it more interesting.

25. I like it best when I have people around me.
    a. true
    b. ?
    c. false

26. I feel that:
    a. some jobs just don't have to be done as carefully as others
    b. ?
    c. any job should be done thoroughly if you do it at all.

27. I usually like to do my planning alone, without interruptions and suggestions from others.
    a. true
    b. ?
    c. false

28. It's hard to be patient when people criticize me
    a. true
    b. ?
    c. false

29. I can be quite comfortable even in a disorganized setting.
    a. true
    b. ?
    c. false

30. If my carefully made plans have to be changed because of other people:
    a. it annoys me
    b. ?
    c. I'm happy to change plans.

31. I would rather be:
    a. in a business office, organizing and seeing people
    b. ?
    c. an architect, drawing plans in a small room

32. When one small thing after another goes wrong, I:
    a. feel as though I can't cope
    b. ?
    c. just go on as usual.

33. I enjoy taking care of people's needs.
    a. true
    b. ?
    c. false

34. I sometimes make foolish remarks in fun, just to surprise people.
    a. true
    b. ?
    c. false.

35. When the time comes for something I have planned and looked forward to, I occasionally do not feel up to going.
    a. true
    b. ?
    c. false

36. In a situation where I'm in charge, I feel comfortable giving people directions.
    a. true
    b. ?
    c. false

37. I'd prefer to spend an evening:
    a. working on a quiet hobby
    b. ?
    c. at a lively party.

38. People think of me as more:
    a. cooperative
    b. ?
    c. assertive.

39. I greatly enjoy the racy and slapstick humor of some television shows.
    a. true
    b. ?
    c. false.

40. I value respect for rules and good manners more than easy living.
    a. true
    b. ?
    c. false.

41. I am shy and cautious about making friends with new people.
    a. true
    b. ?
    c. false

42. If I could, I would rather exercise by:
    a. fencing or dancing
    b. ?
    c. wrestling or baseball.

43. It's always important to pay attention to other people's motives.
    a. true
    b. ?
    c. false

44. It would be more interesting to be a musician than a mechanic.
    a. true
    b. ?
    c. false.

45. People form opinions about me too quickly.
    a. hardly ever
    b. ?
    c. often

46. I'm the type of person who:
    a. is always doing practical things that need to be done
    b. ?
    c. daydreams and thinks up things on my own.

47. Some people think I'm hard to get close to.
    a. true
    b. ?
    c. false

48. I may deceive people by being friendly when I really dislike them.
    a. true
    b. ?
    c. false.

49. My thoughts tend to be about sensible, down-to-earth things.
    a. true
    b. ?
    c. false

50. I tend to be reserved and keep my problems to myself.
    a. true
    b. ?
    c. false

51. After I make up my mind about something, I still keep thinking about whether it's right or wrong.
    a. usually true
    b. ?
    c. usually false

52. I don't really like people who are "different" or unusual.
    a. true, I usually don't
    b. ?
    c. false, I usually find them interesting.

53. I'm more interested in:
    a. seeking personal meaning in life
    b. ?
    c. a secure job that plays well.

54. When people get angry at each other, it usually bothers me more than most people.
    a. true
    b. ?
    c. false

55. What this world needs is:
    a. more steady, solid citizens
    b. ?
    c. more reformers with opinions about how to improve the world.

56. I prefer games where:
    a. you're on a team or have a partner
    b. ?
    c. people are on their own.

57. I usually leave some things to chance rather than make complex plans about every detail.
    a. true
    b. ?
    c. false

58. I frequently have periods where it's hard to stop a mood of self play.
    a. true
    b. ?
    c. false.

59. The best hours of the day are usually when I'm alone with my own thoughts and projects.
    a. true
    b. ?
    c. false

60. If people interrupt me while I'm trying to do something, it doesn't bother me.
    a. true, it doesn't
    b. ?
    c. false, it does

61. I always keep my belongings in tip-top shape.
    a. true
    b. ?
    c. false

62. Sometimes I get frustrated with people too quickly.
    a. true
    b. ?
    c. false

63. I'm not comfortable talking about or showing my feelings of affection or caring.
    a. true, I'm not
    b. ?
    c. false, I am

64. In my personal life I reach the goals I set, almost all of the time.
    a. true
    b. ?
    c. false

65. If the salary were the same I'd rather be a scientist than a sales manager.
    a. true
    b. ?
    c. false

66. If people are doing something wrong, I usually tell them what I think.
    a. true
    b. ?
    c. false

67. I feel that my emotional needs are:
    a. not too satisfied
    b. ?
    c. well satisfied.

68. I usually like being in the middle of a lot of excitement and activity.
    a. true
    b. ?
    c. false

69. People should insist more than they now do that moral standards be strictly followed.
    a. true
    b. ?
    c. false.

70. I'd rather dress:
    a. neatly and quietly
    b. ?
    c. in an eye-catching, stylish way.

71. I tend to get embarrassed if I suddenly become the center of attention in a social group.
    a. true
    b. ?
    c. false

72. I get annoyed when people insist that I follow every single minor safety rule.
    a. true, it's not always necessary
    b. ?
    c. false, it's important to do things right.

73. Starting conversations with strangers:
    a. never gives me any trouble
    b. ?
    c. is hard for me.

74. If I worked on a newspaper, I'd rather deal with.
    a. movie or book reviews
    b. ?
    c. sports of politics

75. I let little things upset me more than they should.
    a. sometimes
    b. ?
    c. never.

76. It's wise to be on guard against smooth talkers because they might take advantage of you.
    a. true
    b. ?
    c. false

77. I'd rather stop in the street to watch an artist painting than a building being constructed.
    a. true
    b. ?
    c. false.

78. People are lazy on a job if they can get away with it.
    a. hardly ever
    b. ?
    c. often

79. I get new ideas about all sorts of things, too many to put into practice.
    a. true
    b. ?
    c. false

80. In talking to someone new, I don't give out any more information than is necessary.
    a. usually true
    b. ?
    c. usually false

81. I pay more attention to:
    a. the practical things around me
    b. ?
    c. thoughts and imagination

82. When people criticize me in front of others, I feel downhearted and hurt.
    a. hardly ever
    b. ?
    c. often

83. I find people more interesting if their views are different from most people's.
    a. true
    b. ?
    c. false

84. In dealing with people it's better to:
    a. "put all your cards on the table"
    b. ?
    c. "play your hand close to your chest".

85. Sometimes, I would like to get even, rather than forgive and forget.
    a. true
    b. ?
    c. false.

86. I like people who:
    a. are stable and conventional in their interests
    b. ?
    c. seriously think through their views about life.

87. I sometimes feel too responsible for things that happen around me.

a. true
b. ?
c. false

88. Work that is familiar and routine makes me feel:

a. bored and sleepy
b. ?
c. secure and confident.

89. I get things done better working alone rather than working with a committee.

a. true
b. ?
c. false

90. I don't usually mind if my room is messy.

a. true
b. ?
c. false

91. Even when someone is slow to understand what I'm explaining, it's easy for me to be patient.

a. true
b. ?
c. false

92. I like to join in with people who are doing something together such as going to a park or a museum.

a. true
b. ?
c. false

93. I'm somewhat of a perfectionist and doing something together such as going to a park or to a museum.

a. true
b. ?
c. false

94. When I have to wait in a long line for something, I don't get as restless and fidgety as most people.

a. true, I don't
b. ?
c. false, I get restless

95. People treat me less reasonably than my good intentions deserve.
    a. sometimes
    b. ?
    c. never

96. I enjoy people who show their emotions openly.
    a. true
    b. ?
    c. false

97. I don't let myself get depressed over little things.
    a. true
    b. ?
    c. false

98. In helping with a useful invention, I'd prefer:
    a. working in a laboratory
    b. ?
    c. showing people how to use it

99. If being polite and pleasant doesn't work, I can be tough and sharp if I need to.
    a. true
    b. ?
    c. false

100. I like to go out to shows or entertainment often.
    a. true
    b. ?
    c. false

101. I feel dissatisfied with myself.
    a. sometimes
    b. ?
    c. never

102. If we were lost in a city and my friends didn't agree with me on the best way to go, I'd:
    a. make no fuss and follow them
    b. ?
    c. let them know that I thought my way was best.

103. People think of me as a happy-go-lucky, carefree person.
    a. true
    b. ?
    c. false.

104. People think of me as a happy-go-lucky, carefree person.
    a. true
    b. ?
    c. false.

105. I have always had to fight against being too shy.
    a. true
    b. ?
    c. false

106. Teachers, ministers, and others spend too much time trying to stop us from doing what we want to do.
    a. true
    b. ?
    c. false.

107. When I'm in a group, I usually sit and listen and let others do most of the talking.
    a. true
    b. ?
    c. false.

108. I'd usually appreciate the beauty of a poem more that as expert football strategy.
    a. true
    b. ?
    c. false.

109. If people are frank and open, others try to get the better of them.
    a. hardly ever
    b. ?
    c. often

110. I'm always interested in mechanical things and am pretty good at fixing them.
    a. true
    b. ?
    c. false

111. Sometimes I get so lost in my thoughts that, unless I watch out, I misplace things, have small mishaps, or lose track of time.

a. true
b. ?
c. false

112. It seems that more than half the people I meet can't really be trusted.

a. true, they can't be trusted
b. ?
c. false, they can be trusted.

113. I usually find that I know other people better than they know me.

a. true
b. ?
c. false

114. People often say that my ideas are realistic and practical.

a. true
b. ?
c. false

115. I make smart, sarcastic remarks to people if I think they deserve it.

a. sometimes
b. ?
c. never

116. Sometimes I feel as if I've done something wrong, even though I really haven't.

a. true
b. ?
c. false

117. I talk about my feelings:

a. readily when people seem interested
b. ?
c. only if I can't avoid it.

118. I like to think out ways in which our world could be changed to improve it.

a. true
b. ?
c. false

119. I think about things that I have said, but didn't.
    a. hardly ever
    b. ?
    c. often

120. In my newspaper, I'd rather read:
    a. articles on current social problems
    b. ?
    c. all the local news.

121. I'd rather spend a free evening:
    a. reading or working alone on a project:
    b. ?
    c. working on a task with friends.

122. If there is a chore to do, I'm more likely to:
    a. put it off until it needs to be done
    b. ?
    c. get started on it right away.

123. I prefer to eat lunch:
    a. with a group of people
    b. ?
    c. by myself.

124. I am patient with people, even when they aren't polite and considerate of my feelings.
    a. true
    b. ?
    c. false

125. When I do something, I usually take time to think of everything I will need for the job first.
    a. true
    b. ?
    c. false

126. I get frustrated when people take too long to explain something.

    a. true
    b. ?
    c. false

127. My friends would probably describe me as:
    a. warm and comforting
    b. ?
    c. objective and formal

128. I usually go to bed at night feeling satisfied with how my day went.
    a. true
    b. ?
    c. false

129. For a pleasant hobby, I'd prefer:
    a. building or making something
    b. ?
    c. working with a community service group

130. I believe in complaining if I receive bad service or poor food in a restaurant.
    a. true
    b. ?
    c. false

131. I have more ups and downs in mood than most people I know.
    a. usually true
    b. ?
    c. usually false

132. When others don't see things my way , I can usually get them to come around.
    a. true
    b. ?
    c. false

133. I think that being free to do what I want is more important than good manners and respect for rules.
    a. true
    b. ?
    c. false.

134. I love to make people laugh with witty stories.
    a. true
    b. ?
    c. false

135. I consider myself a very socially bold, outgoing person.
    a. true
    b. ?
    c. false.

136. If a person is clever enough to get around the rules without seeming to break them, he or she should:
    a. do it if there is a special reason
    b. ?
    c. not do it.

137. I'm usually the one who makes the first step in making friends.
    a. true
    b. ?
    c. false.

138. I prefer reading rough and realistic action stories more than sensitive, imaginative novels.
    a. true
    b. ?
    c. false.

139. I suspect that people who seem friendly to me could be disloyal behind my back.
    a. hardly ever
    b. ?
    c. often.

140. In school I preferred math more than English.
    a. true
    b. ?
    c. false

141. Many people are too fussy and sensitive and should toughen up for their own good.
    a. true
    b. ?
    c. false.

142. I get so interested in thinking about my ideas that I sometimes overlook practical details.
    a. true
    b. ?
    c. false

143. If someone asks me a question that is too personal, I carefully try to avoid answering.
    a. usually true
    b. ?
    c. usually false

144. When asked to do volunteer work, I say I'm too busy.
    a. sometimes
    b. ?
    c. never.

145. Sometimes I don't fit in very well because my ideas are not conventional or ordinary.
    a. true
    b. ?
    c. false

146. I consider myself less of a worrier than most people.
    a. true
    b. ?
    c. false

147. More trouble arises from people:
    a. questioning and changing methods that are already satisfactory
    b. ?
    c. turning down promising, new approaches.

148. I'm very careful when it comes to choosing someone to really "open up" with.
    a. true
    b. ?
    c. false

149. When I find I differ with someone on social views, I prefer to:
    a. discuss what our basic differences mean
    b. ?
    c. discuss something else.

150. People say I tend to be too self-critical.
    a. true
    b. ?
    c. false

151. I most enjoy a meal if it consists of familiar, everyday foods rather then new, unusual foods.
    a. true
    b. ?
    c. false

152. I can easily go a whole morning without wanting to speak to anyone.
    a. true
    b. ?
    c. false

153. I take advantage of people.
    a. sometimes
    b. ?
    c. never

154. I like to plan ahead so that I don't waste time between tasks.
    a. rarely
    b. ?
    c. often

155. When I'm feeling tense, even small things get on my nerves.
    a. true
    b. ?
    c. false

156. In building or making something, I would rather work:
    a. with others
    b. ?
    c. on my own.

157. In carrying out a task, I'm never satisfied unless I give careful attention even to small details.
    a. true
    b. ?
    c. false

158. I've trained myself to be patient with all kinds of people.
    a. true
    b. ?
    c. false

159. I enjoy more listening to people talk about their personal feelings than about other things.
    a. true
    b. ?
    c. false

160. There are times when I don't feel in the right mood to see anyone.
    a. very rarely
    b. ?
    c. quite often

161. In a business it would be more interesting to be in charge of:

    a. machinery
    b. ?
    c. talking to and hiring new people.

162. In my everyday life, I hardly ever meet problems that I can't cope with.
    a. true, I can cope easily
    b. ?
    c. false.

163. If I notice that another person's line of reasoning is wrong, I usually:
    a. point it out
    b. ?
    c. let it pass.

164. I greatly enjoy inviting guests over and amusing them.
    a. true
    b. ?
    c. false.

165. I enjoy having some competition in the things I do.
    a. true
    b. ?
    c. false

166. Most rules are made to be broken when there are good reasons for it.
    a. true
    b. ?
    c. false

167. I find it hard to speak in front of a large group.
    a. true, I usually find it very hard
    b. ?
    c. false it does not bother me.

168. In making a decision, I always think carefully about what's right and proper.
    a. true
    b. ?
    c. false

169. In social groups I tend to feel shy and unsure of myself.
    a. true
    b. ?
    c. false

170. On television, I'd rather watch:
    a. a program on practical new inventions
    b. ?
    c. a famous concert artist.

171. Minute is to hour as second is to:
    a. minute
    b. millisecond
    c. hour.

172. tadpole is to frog as larva is to:
    a. spider
    b. worm
    c. insect.

173. Pork is to pig as veal is to:
    a. calf
    b. chicken
    c. lamb.

174. Ice is to water as rock is to:
    a. lava
    b. sand
    c. oil.

175. Better is to worst as slower is to:
    a. fast
    b. slowest
    c. quickest.

176. Which of the following words does not belong with the others:

    a. terminal
    b. seasonal
    c. cyclical

177. Which word does not belong with the other two?
    a. cat
    b. near
    c. sun

178. The opposite of "right" is the opposite of:
    a. left
    b. wrong
    c. correct.

179. Which of the following words does not belong?
    a. likely
    b. probably
    c. possibly

180. The opposite of the opposite of "inexact" is:
    a. casual
    b. accurate
    c. rough.

181. Which number should come next at the end of this series: 1, 4, 9, 16?
    a. 20
    b. 25
    c. 32.

182. Which should come next at the end of this row of letters: A B D G?
    a. H
    b. K
    c. J

183. Which should come next at the end of this row of letters: E I L?

    a. M
    b. N
    c. P

184. Which number should come next at the end of this series: 1/12, 1/6, 1/3, 2/3?
    a. 3/4
    b. 4/3
    c. 3/2

185. Which should come next at the end of this series of numbers:

a. 5
b. 4
c. -3

Appendix XI: Scoring Tables for TSI Function Usage

Source: Sternberg, 1997

(College Students Adults)

Raw Scores for Legislative Function

Usage Score	Category	Male	Female
Very High = 6	(Top 1%-10%)	6.0-7.0	6.0-7.0
High = 5	(Top 11%-25%)	5.3-5.9	5.6-5.9
Middle High = 4	(Top 26%-50%)	5.1-5.5	5.1-5.5
Middle Low = 3	(Top 51%-75%)	4.4-5.0	4.5-5.0
Low = 2	(Top 76%-90%)	4.0-4.3	4.1-4.4
Very Low = 1	(Top 91%-100%)	1.0-3.9	1.0-4.0

Raw Scores for Executive Function

Usage Score	Category	Male	Female
Very High = 6	(Top 1%-10%)	5.5-7.0	5.1-7.0
High = 5	(Top 11%-25%)	5.0-5.4	4.9-5.0
Middle High = 4	(Top 26%-50%)	4.2-4.9	4.2-4.8
Middle Low = 3	(Top 51%-75%)	3.6-4.1	3.7-4.1
Low = 2	(Top 76%-90%)	3.1-3.5	3.1-3.6
Very Low = 1	(Top 91%-100%)	1.0-3.0	1.0-3.0

Raw Scores for Judicial Function

Usage Score	Category	Male	Female
Very High = 6	(Top 1%-10%)	5.3-7.0	5.6-7.0
High = 5	(Top 11%-25%)	4.6-5.2	5.0-5.5
Middle High = 4	(Top 26%-50%)	4.2-4.5	4.6-4.9
Middle Low = 3	(Top 51%-75%)	3.9-4.1	4.2-4.5
Low = 2	(Top 76%-90%)	3.5-3.8	3.2-4.1
Very Low = 1	(Top 91%-100%)	1.0-3.4	1.0-3.1

Appendix XII: Informed Consent Letter

[Date]

Dear [Particpant's Name]:

We have been authorized by the University of Tennessee College of Law to ask your help in an important research project. The study we are inviting you to participate in is part of a long-term longitudinal investigation into the possible relationship between personal traits or characteristics and a) the attainment of expertise in legal practice, and b) the choice of different areas of professional practice in the law. Our purpose at this point in the investigation is to collect some baseline data, using some standard assessment instruments, and to invite you to become part of our long-term study. Your participation at this time does not obligate you to any future participation, but we hope for, and would welcome, your help in subsequent phases of the project. To the best of our knowledge, this research is unique, and we anticipate that it will make an important contribution to the improvement of legal education and professional development.

In this part of the study, you will be asked to fill out a brief biographical survey, take a standard personality inventory known as the 16-PF, and then respond to an inventory of our own design. This should take no more than one hour of your time.

Although we can't promise any personal benefits in return for your participation, we will keep you informed of the results of our work, which will lead to a better understanding of lawyers and the legal profession.

There is no risks associated with this research, and we have adopted a procedure which will guarantee the complete confidentiality and anonymity of your participation. We have asked the College of Law to provide you with a personal identification code number, which has been placed on the enclosed materials. This is a procedure which is analogous to the assignment of code numbers in law school examinations for purposes of anonymous grading. A list matching your name with the code number will be maintained in the Student Records Office for the duration of this study, which may be several years. This list will <u>never</u> be available to any person involved with the coding and analysis of the data. We may in the future ask the Records Office to supply
us with archival data, such as GAP information, but this will be done in a manner that will ensure complete anonymity. No one in the Records Office will ever have access to coded research data, and no one with access to the research data will ever be able to ascertain your identity. We will also ask the Records Office to assist in contacting you to invite your future participation, or to provide you with feedback based upon your personal or general research results.

If you have any questions about this study, please feel free to contact one of us. Your participation in this research is voluntary, and your return of the enclosed materials constitutes your consent to take part. We would greatly appreciate your assistance in this important endeavor.

[Signature of University of Tennessee personal left off of form].

VITA

Charles Licata was born in Bay Shore, New York in 1964. In 1985 he obtained his Associates Degree in Data Processing from Suffolk Community College, and then his Bachelors of Science in Information Science from Dowling College in 1987. He began his corporate career in 1988 with AT&T, where he remained for 8 years as a system analyst. In 1996, he began to consult privately in the East Tennessee area while beginning a new academic endeavor. Returning to college full-time in 1997 to obtain a degree in Psychology, Carles attended East Tennessee State College to complete courses in undergraduate psychology. His academic career at the University of Tennessee Psychology department began in the fall of 1999. Currently, Charles is enrolled in the Experimental and Comparative Medicine Ph.D. program at the University of Tennessee Medical School. His current research includes the study of fMRI techniques with Alzheimer's subjects, instrument development for anosognosia scales, and treatment compliance of sleep disorder patients.