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To the Graduate Council:

I am submitting herewith a thesis written by Charles Angelo Licata entitled "Personality Differences of First-Year Law Students Using the Theory of Mental Self-Government." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Psychology.

Michael G. Johnson, Major Professor

We have read this thesis and recommend its acceptance:

John W. Lounsbury, Douglas A. Blaze

Accepted for the Council: <u>Carolyn R. Hodges</u>

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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Douglas A. Blaze

Accepted for the Council:

Dr. Anne Mayhew Vice Provost and Dean of Graduate Studies

(Original signatures are on file in the Graduate Student Services office.)

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 fielddependent 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 fielddependence/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).



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 nonverbal 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 decisionmaking 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.



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:

- 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.
- 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

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

mixed groups of students.

- 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.				
ISTJ	ISFJ	IN FJ	IN TJ	
ISTP	ISFP	INFP	INTP	
ESTP	ESFP	ENFP	ENTP	
ESTJ	ESFJ	ENFJ	ENTJ	

Source: Campbell and Davis, 1990.

Table 3. T	Thinking	& MBTI	Preferences
------------	----------	--------	-------------

		Not		
Thinking and Learning Strategies	Preferred	Preferred		
Abstract Thinking	NT	ST		
Analytical Thinking	Т	F		
Critical Thinking	NT	SF		
Metacognition and Introspective Self-Analysis	ITP	EFJ		
Reading Articles With Opposing Views	Р	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

14			Dimensions	Mental Sell-O	
	Functions	Forms	Levels	Scopes	Leanings
	Legislative	Monarchic	Local	Internal	Liberal
yles	Executive	Hierarchic	Global	External	Conservative
St	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	Trusting L* Suspicious			
Practical	Practical M* Imaginative			
Forthright N* Astute		Astute		
Self-Assured O* Apprehensive		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,



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: Hypo	thesis	
	First Ar Function Usa	nalysis ge Grouping	Second A Function Usag	nalysis ge 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 $E \le H_1$: HUG Factor $E > I$	ELUG Factor E LUG Factor E		
Hypothesis 2	H ₀ : HUG Factor O <= H ₁ : HUG Factor O > I	ELUG Factor O LUG Factor O		
Hypothesis 3	H ₀ : HUG Factor Q1 < H ₁ : HUG Factor Q1 >	= LUG Factor Q1 LUG Factor Q1		
Hypothesis 4	H ₀ : HUG Global Fact Factors H ₁ : HUG Global Fact Factors	ors <> LUG Global ors = LUG Global		
Hypothesis 5			H ₀ : HUG of any Factor < H ₁ : HUG of any Factor =	> LUG 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.

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. 07		4.6301	1.5768	73.0		
4 <u>0</u> 10		5.0274	1 3842	73.0		
5. Q13		4.9726	1.2130	73.0		
N of Cas	ses =	73.0				
				N of		
Statistics for	Mean	Variance	Std Dev	Variables		
Scale	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 Coef	ficients	5 items				
Alpha = .7848		Standardized	item alpha	a = .7981		

Subsection II: Reliability Analysis of Executive Items

			Mean	Std Dev	Cases		
1. 2. 3. 4. 5.	Q2 Q5 Q8 Q11 Q14		3.9863 3.8493 5.5342 4.6575 5.4795	1.5410 1.3403 1.3446 1.3665 1.2922	73.0 73.0 73.0 73.0 73.0 73.0		
		Covari	ance Matrix				
	N of Cas	es =	73.0				
Stati	stics for Scale	Mean 23.5068	Variance 20.1423	Std Dev 4.4880	N of Variables 5		
Item	Means	Mean 4.7014	Minimum 3.8493	Maximum 5.5342	Range 1.6849	Max/Min 1.4377	Variance .6346
Item	Variances	Mean 1.9032	Minimum 1.6697	Maximum 2.3748	Range .7051	Max/Min 1.4223	Variance .0747
Inter Covar	-item ciances	Mean .5313	Minimum .0883	Maximum 1.2757	Range 1.1874	Max/Min 14.4504	Variance .1225
Inter Corre	-item elations	Mean .2784	Minimum .0480	Maximum .6176	Range .5696	Max/Min 12.8540	Variance .0311
Relia	bility Coef	ficients	5 items				
Alpha	a = .6595		Standardized	item alpha	a = .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 Cas	ses =	73.0				
				N of		
Statistics for	Mean	Variance	Std Dev	Variables		
Scale	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 Coef	ficients	5 items				
Alpha = .6812		Standardized	l item alpha	a = .6769		

Appendix II: TSI Raw Score Statistics

Subsection I: TSI Raw Scores for All Participants

All Participants

	Ν	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

	Ν	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

	Ν	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

	Ν	Min	Max	Mean	Mean Std. Dev, Skewness Kurtos		Skewness		tosis
/	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

	Ν	Min	Max	Mean	Std. Dev,	Skewness		s 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

	Ν	Min	Max	Max Mean Std. Dev, Skewn		Skewness		tosis	
	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

	Ν	Min	Max	Max Mean Std. Dev, Skewness J		Skewness		Kur	tosis
/	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

	Ν	Min	Max	Mean	Mean Std. Dev, Skewness Kurtos		Skewness		tosis
	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

	Ν	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

	Legislative	Executive	Judicial
Ν	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 Participants

		Legislative	Executive	Judicial
N		37	37	37
Median		5.6000	4.8000	4.4000
Range		3.00	3.60	2.80
Minimu	m	3.80	2.80	3.20
Maximu	Im	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 Male Participants

All Female Participants

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

		Legislative	Executive	Judicial
N		29	29	29
Media	n	5.4000	4.8000	4.4000
Range	•	3.40	3.20	3.00
Minimu	Minimum		3.20	2.80
Maximu	IM	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 Participants Enrolled in 1999

All Male Participants Enrolled in 1999

	Legislative	Executive	Judicial
Ν	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
Media	า	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 50 75	3.9000 4.6000 5.6000	4.0000 4.6000 5.1000	3.5000 4.4000 4.6000

	Legislative	Executive	Judicial	
Ν	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 50 75	4.0500 4.8000 5.7500	4.0500 4.6000 5.4000	3.6000 4.2000 4.9500	

All Participants Enrolled in 2000

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
Ν		23	23	23
Median		4.6000 4.6000		3.6000
Range		3.40	4.00	3.40
Minimu	Minimum		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

	Ν	Min	Max	Mean	Mean Std. Dev,		wness	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 Participants

All Male Participants

	Ν	Min	Max	Mean	Std. Dev,	Ske	wness	Ku	rtosis
	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	Femal	e Par	rticipa	ants
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	Ν	Min	Max	Mean	Std. Dev,	ev, 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

	N Statistic St	Min Statistic	Max Statistic	Mean Statistic	Std. Dev, Statistic	Skewness		Kurtosis	
						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 Participants Enrolled in 1999
	Ν	Min	Max	Mean	Std. Dev,	Ske	wness	Ku	rtosis
	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 Male Participants Enrolled in 1999

	Ν	Min	Max	Mean	Std. Dev,	Ske	wness	Ku	rtosis
	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

All Female Participants Enrolled in 1999

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

	Ν	Min	Max	Mean	Std. Dev,	Ske	wness	Ku	rtosis
	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 Participants Enrolled in 2000

	Ν	Min	Max	Mean	Std. Dev,	Ske	wness	Ku	rtosis
	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 Male Participants Enrolled in 2000

	Ν	Min	Max	Mean	Std. Dev,	Ske	wness	Ku	rtosis
	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

All Female Participants Enrolled in 2000

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									
\sim	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

	Ν	Min	Max	Mea	n	Std. Dev	Ske	wness	Kurt	osis
	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

		,	
	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	.337	.337	.337
Skewness			
Kurtosis	-1.022	124	289
Std. Error of	.662	.662	.662
Kurtosis			

TSI Function Usage Scores

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	Ν	Min	Max	Mea	n	Std. Dev	Ske	wness	Kurt	osis
	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

16PF Factors

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

	Age											
	/	Ν	Min	Max	Mea	n	Std. Dev	Skev	wness	Kurtosis		
		Statistic	Statistic	Statistic	Statistic	Std. Err	Statistic	Statistic	Std. Err	Statistic	Std. Err	
A	GE	23	21	45	25.00	1.36	6.544	2.774	.481	7.012	.935	

TSI Function Raw Scores

N Min Max		Mea	Mean Std. De		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

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

TSI Function Usage Scores

	Ν	Min	Max	Mea	n	Std. Dev	Skev	wness	Kurt	osis
	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

16PF Factors

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

		Б	D (Valid	Cumulative
		Frequency	Percent	Percent	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									osis			
\sim	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

	Ν	Min Max		Mea	Mean		Skev	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

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

	Ν	Min	Max	Mea	n	Std. Dev	Ske	wness	Kurt	osis
	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

16PF Factors

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

				Valid	Cumulative
		Frequency	Percent	Percent	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							wness	Kurt	osis			
\sim	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 Skewn		wness Kurto		osis	
	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

	_ 10	3		
		LEGISLATIVE USAGE	EXECUITVE USAGE	JUDICIAL USAGE
		CATEGORY	CATEGORY	CATEOGRY
N	Valid	53	53	53
Ν	lissing	0	0	0
Median		4.0000	5.0000	4.0000
Skewness		444	976	288
Std. Error of		.327	.327	.327
Skewness				
Kurtosis		933	.492	-1.232
Std. Error of		.644	.644	.644
Kurtosis				

TSI Function Usage Scores

	Ν	Min	Max	Mea	n	Std. Dev	Skev	wness	Kurt	osis
	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

16PF Factors

Appendix VII: Independent T-Test for TSI Raw Scores

And 16PF Factors Grouped by Gender

Subsection I: Independent T-Test for TSI Raw Scores

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

Group Statistics

Independent Samples Test

		Levene's Test for Equality of Var.			t-test for	95% CI of the Diff				
		F	Sig.	t	df	Sig. (2- tailed)	Mean DIff	Std. Error DIff	Lower	Upper
Legislative	ΕV	.699	.406	3.555	71	.001	.7185	.20210	.31549	1.12144
	UV			3.547	68.716	.001	.7185	.20254	.31439	1.12255
Executive	ΕV	.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

				Std.	Std. Error
	GENDER	Ν	Mean	Deviation	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

Group Statistics

Independent Samples Test

		Levene's Z Equality	Fest for 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	ΕV	.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	0.64	00.6	015	70.363	.988	-5.2553	.3523	7078	.6973
Factor G	EV	.061	.806	247	7/1	.806	-9.9850	.4051	9075	.7078
F (H		2.060	005	246	/0.13/	.806	-9.9850	.4055	9086	.7089
Factor H	EV	3.060	.085	-1.275	/1	.206	5/43	.4504	-1.4/25	.3238
Easter I		1 562	215	-1.271	71	.208	3745	.4320	-1.4/08	.3282
Factor I		1.305	.215	-1.527	/1	.131	7425	.4802	-1.7120	.2270
Eactor I	EV	412	523	2 021	71	.132	7423	3807	1.0510	1 56/6
Pactor J		.412	.525	2.021	70 268	.047	7875	3901	9 5650	1.5040
Factor M	EV.	1 413	238	643	70.200	522	2920	4539	- 6130	1.0000
I detor ivi	UV	1.415	.230	.043	69,168	.523	2920	4547	- 6151	1.1992
Factor N	FV	4 695	034	1 470	71	146	.2920	4739	- 2483	1.6417
T dettor 1 (UV		1001	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	ΕV	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	ΕV	.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	ΕV	2.893	.093	-1.132	71	.261	4917	.4344	-1.3578	.3744
	UV	100	10.6	-1.128	65.453	.264	4917	.4360	-1.3622	.3789
Anxiety	EV	.490	.486	590	71	.557	2484	.4213	-1.0885	.5917
Touch Mind. 1		450	504	591	08.834	.556	2484	.4201	-1.0866	.5897
1 ougn Minded		.450	.504	.040	70 747	.524	.3125	.4882	0009	1.2859
Solf Control	EV	406	191	.040	71	.324	.5125	.4004	0013	1.2004
Sell Control		.490	.464	-1.025	70.000	.510	5974	.3000	-1.1722	.3774
Independent	EV	4 226	0/13	-1.023	70.999	789	3974	.3004	-1.1/18	081/
macpendent	UV	4.220	.0+5	.267	61.645	.790	.1165	.4360	7551	.9881

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

		Legislative Raw Score	Executive Raw Score	Judicial Raw Score	Legislative Function Usage	Executive Function	Judicial Function Usage
Factor A	Pearson Corr	- 031	- 093	- 139	- 0/13	- 101	- 091
I detoi A	Sig (2-tailed)	798	075	157	0+3	396	071
Factor B	Pearson Corr	051	041	- 064	014	013	- 041
I detor D	Sig (2-tailed)	670	732	.004 592	909	916	732
Factor C	Pearson Corr	384	- 084	083	432	- 066	049
i detoi e	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

Pearson's Correlation Between 16PF Factors and TSI Scores

* 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

				Std.	Std. Error
/		Ν	Mean	Deviation	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
a 10 a - i	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

Group Statistics

Independent Samples Test

		Levene's	Test for		4 4 4 6	. T	M		059/ CI -4	4h - D:66
		Equanty of	v ariances		t-test for	Equality of	Maans	64.1 E	95% CI 01	the Diff
		F	Sig.	t	df	sig. (2- tailed)	Diff	Sta. Error Diff	Lower	Upper
Factor A	ΕV	.309	.580	562	71	.576	3235	.5760	-1.4719	.8250
	UV			567	43.843	.574	3235	.5705	-1.4733	.8263
Factor B	ΕV	.313	.578	1.287	71	.202	.4270	.3317	2344	1.0883
	UV			1.238	39.049	.223	.4270	.3449	2706	1.1245
Factor C	ΕV	.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	ΕV	.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	ΕV	.327	.569	-1.457	71	.150	5452	.3742	-1.2914	.2010
	UV			-1.448	42.185	.155	5452	.3766	-1.3050	.2146
Factor G	ΕV	.035	.852	.850	71	.398	.3687	.4339	4965	1.2339
	UV			.879	46.542	.384	.3687	.4196	4757	1.2131
Factor H	ΕV	.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	100		.655	48.466	.516	.3304	.5048	6843	1.3451
Factor J	ΕV	.188	.666	741	71	.461	3183	.4296	-1.1749	.5384
	UV	001	0.01	748	43.844	.459	3183	.4255	-1.1760	.5394
Factor M	EV	.001	.981	146	/1	.885	-7.1304	.4898	-1.0480	.9054
		000	000	145	42./16	.885	-/.1304	.4903	-1.0604	.9178
Factor N	EV	.000	.999	.643	/1	.522	.3322	.5163	6972	1.3616
Es star O		102	750	.642	42.568	.524	.3322	.51/5	/119	1.3/62
Factor O		.102	.750	1.010	/1	.110	./383	.4308	1/25	1.0490
Easter O1		020	880	1.330	71	.134	./303	.4823	2500	2012
Factor Q1		.020	.009	-2.392	/1	.019	-1.2087	.5052	-2.2101	2015
Easter 02	EV	124	715	-2.385	42.303	.022	-1.2087	.3008	-2.2311 9224	1803
Factor Q2		.134	./15	.125	39 / 53	.902	5.4780	.4449	8324	.9420
Eactor 03	EV.	005	943	- 460	71	647	- 2296	4987	-1 2239	7647
1 actor Q5		.005	.945	- 454	41 428	652	- 2296	5056	-1 2503	7911
Factor O4	FV	018	894	- 521	71	604	- 2104	4037	-1.0154	5945
Tuetor Q T	UV	.010	.071	- 521	42.764	605	- 2104	4039	-1.0252	6043
Extroversion	FV	125	725	-1.075	71	286	- 5030	4679	-1.4359	4300
Lintroverbion	ŪV			-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	ΕV	.040	.842	1.004	71	.319	.5252	.5232	5180	1.5684
ũ hà	UV			.979	40.359	.333	.5252	.5363	5585	1.6089
Self Control	ΕV	.190	.664	.442	71	.660	.1861	.4207	6527	1.0249
	UV			.436	41.268	.665	.1861	.4272	6765	1.0487
Independent	ΕV	.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

				Std.	Std. Error
		Ν	Mean	Deviation	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

Group Statistics

Independent Samples Test

		Levene's	Fest for							
		Equality of `	Variances		t-test for	• Equality of 1	Means		95% CI of	the Diff
	_					Sig. (2-	Mean	Std. Error		
		F	Sig.	t	df	tailed)	Diff	Diff	Lower	Upper
Factor A	ΕV	.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	ΕV	.030	.864	.970	71	.335	.3368	.3472	3555	1.0291
	UV			.973	34.457	.337	.3368	.3462	3664	1.0400
Factor C	ΕV	.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
		2.029	150	900	34.430	.374	5142	.5712	-1.6745	.6462
Factor F	EV	2.028	.159	.029	/1	.977	1.1320	.3956	///4	.8000
Easter C		800	240	.032	43.803	.975	1.1320	.5552	/00/	.7255
Factor G		.890	.549	283	/1	.///	1292	.4340	-1.0343	.7700
Factor H	EV	1.085	301	275	71	704	1292	5102	8220	1 2116
Pactor II		1.085	.501	352	29 649	728	1943	5528	- 9353	1 3239
Factor I	EV.	4 377	040	1.012	71	315	5566	5500	- 5400	1.6532
Tuetor I	UV	1.577	.010	.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	ΕV	.125	.724	385	71	.701	1962	.5097	-1.2126	.8202
	UV			364	30.908	.718	1962	.5390	-1.2956	.9032
Factor N	ΕV	.126	.723	.704	71	.484	.3783	.5374	6933	1.4499
	UV			.652	29.868	.519	.3783	.5798	8060	1.5626
Factor O	ΕV	.041	.840	.492	71	.625	.2377	.4836	7266	1.2020
	UV			.521	38.664	.605	.2377	.4563	6854	1.1609
Factor Q1	ΕV	.480	.491	837	71	.405	4557	.5443	-1.5410	.6297
	UV			874	37.426	.388	4557	.5214	-1.5116	.6003
Factor Q2	ΕV	.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
Easter 04		265	(00	-1.015	29.585	.318	30/9	.5597	-1./110	.5/58
Factor Q4		.205	.008	.045	/1	.964	1.8870	.4213	8212	.8589
Extroversion		078	791	.042	30.909 71	.900	2124	.4449	0007	1 2002
Extroversion		.078	./81	.040	/1 3/ 025	.524	.5154	.4899	0034	1.2902
Anviety	EV	1 473	229	027	71	979	1 2740	4734	0710	9567
AllAlety	UV	1.475	.22)	.024	28,773	.981	1.2740	.5227	-1.0566	1.0821
Tough Minded	EV	.758	.387	376	71	.708	2059	.5483	-1.2992	.8873
r sugn minded	ŪV			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	ΕV	.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. trueb. ?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 behaviorb. ?c. doesn't have too many rules.

- 6. I usually enjoy spending time talking with friends about social events of parties.
 - a. trueb. ?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. trueb. ?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. trueb. ?c. false
- 15. I find it easy to talk about my life, even about the things that others might consider quite personal.
 - a. trueb. ?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 everb. ?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 everb. ?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. ?
 - J. : TI 1
 - 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. trueb. ?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. trueb. ?c. false
- 36. In a situation where I'm in charge, I feel comfortable giving people directions.
 - a. trueb. ?c. false
- 37. I'd prefer to spend an evening:

a. working on a quiet hobbyb. ?c. at a lively party.

- 38. People think of me as more:
 - a. cooperativeb. ?c. assertive.
- 39. I greatly enjoy the racy and slapstick humor of some television shows.
 - a. trueb. ?c. false.

- 40. I value respect for rules and good manners more than easy living.
 - a. trueb. ?c. false.
- 41. I am shy and cautious about making friends with new people.
 - a. trueb. ?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. trueb. ?c. false
- 44. It would be more interesting to be a musician than a mechanic.
 - a. trueb. ?c. false.
- 45. People form opinions about me too quickly.
 - a. hardly everb. ?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. trueb. ?c. false.
- 49. My thoughts tend to be about sensible, down-to-earth things.
 - a. trueb. ?c. false
- 50. I tend to be reserved and keep my problems to myself.
 - a. trueb. ?c. false
- 51. After I make up my mind about something, I still keep thinking about whether it's right or wrong.
 - a. usually trueb. ?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

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b. ?
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c. people are on their own.

- 57. I usually leave some things to chance rather than make complex plans about every detail.
 - a. trueb. ?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. trueb. ?c. false
- 60. If people interrupt me while I'm trying to do something, it doesn't bother me.
 - a. true, it doesn'tb. ?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. trueb. ?c. false
- 66. If people are doing something wrong, I usually tell them what I think.
 - a. trueb. ?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. trueb. ?c. false.
- 70. I'd rather dress:

a. neatly and quietlyb. ?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. sometimesb. ?c. never.
- 76. It's wise to be on guard against smooth talkers because they might take advantage of you.
 - a. trueb. ?c. false
- 77. I'd rather stop in the street to watch an artist painting than a building being constructed.
 - a. trueb. ?c. false.
- 78. People are lazy on a job if they can get away with it.
 - a. hardly everb. ?c. often
- 79. I get new ideas about all sorts of things, too many to put into practice.
 - a. trueb. ?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 everb. ?c. often

83. I find people more interesting if their views are different from most people's.

a. trueb. ?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. trueb. ?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. trueb. ?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. trueb. ?c. false
- 90. I don't usually mind if my room is messy.
 - a. trueb. ?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. trueb. ?c. false
- 93. I'm somewhat of a perfectionist and doing something together such as going to a park or to a museum.
 - a. trueb. ?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. sometimesb. ?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. trueb. ?c. false.
- 107. When I'm in a group, I usually sit and listen and let others do most of the talking.
 - a. trueb. ?c. false.
- 108. I'd usually appreciate the beauty of a poem more that as expert football strategy.
 - a. trueb. ?c. false.
- 109. If people are frank and open, others try to get the better of them.

a. hardly everb. ?c. often

- 110. I'm always interested in mechanical things and am pretty good at fixing them.
 - a. trueb. ?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. trueb. ?c. false
- 112. It seems that more than half the people I meet can't really be trusted.

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

- 113. I usually find that I know other people better than they know me.
 - a. trueb. ?c. false
- 114. People often say that my ideas are realistic and practical.
 - a. trueb. ?c. false
- 115. I make smart, sarcastic remarks to people if I think they deserve it.
 - a. sometimesb. ?c. never
- 116. Sometimes I feel as if I've done something wrong, even though I really haven't.
 - a. trueb. ?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 peopleb. ?c. by myself.

- 124. I am patient with people, even when they aren't polite and considerate of my feelings.
 - a. trueb. ?c. false
- 125. When I do something, I usually take time to think of everything I will need for the job first.
 - a. trueb. ?c. false
- 126. I get frustrated when people take too long to explain something.
 - a. trueb. ?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. trueb. ?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. trueb. ?c. false
- 131. I have more ups and downs in mood than most people I know.
 - a. usually trueb. ?c. usually false
- 132. When others don't see things my way, I can usually get them to come around.
 - a. trueb. ?c. false
- 133. I think that being free to do what I want is more important than good manners and respect for rules.
 - a. trueb. ?c. false.
- 134. I love to make people laugh with witty stories.
 - a. trueb. ?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. trueb. ?c. false.
- 138. I prefer reading rough and realistic action stories more than sensitive, imaginative novels.
 - a. trueb. ?c. false.
- 139. I suspect that people who seem friendly to me could be disloyal behind my back.
 - a. hardly everb. ?c. often.
- 140. In school I preferred math more than English.
 - a. trueb. ?c. false
- 141. Many people are too fussy and sensitive and should toughen up for their own good.
 - a. trueb. ?c. false.
- 142. I get so interested in thinking about my ideas that I sometimes overlook practical details.
 - a. trueb. ?c. false
- 143. If someone asks me a question that is too personal, I carefully try to avoid answering.
 - a. usually trueb. ?c. usually false

- 144. When asked to do volunteer work, I say I'm too busy.
 - a. sometimesb. ?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. trueb. ?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. trueb. ?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. trueb. ?c. false

153. I take advantage of people.

- a. sometimesb. ?c. never
- 154. I like to plan ahead so that I don't waste time between tasks.
 - a. rarelyb. ?c. often
- 155. When I'm feeling tense, even small things get on my nerves.
 - a. trueb. ?c. false
- 156. In building or making something, I would rather work:
 - a. with othersb. ?c. on my own.
- 157. In carrying out a task, I'm never satisfied unless I give careful attention even to small details.
 - a. trueb. ?c. false
- 158. I've trained myself to be patient with all kinds of people.
 - a. trueb. ?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 rarelyb. ?c. quite often

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

a. machineryb. ?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 easilyb. ?c. false.

163. If I notice that another person's line of reasoning is wrong, I usually:

a. point it outb. ?c. let it pass.

164. I greatly enjoy inviting guests over and amusing them.

a. trueb. ?c. false.

165. I enjoy having some competition in the things I do.

- a. trueb. ?c. false
- 166. Most rules are made to be broken when there are good reasons for it.
 - a. trueb. ?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. terminalb. seasonalc. 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

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

Raw Scores for Judicial Function

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.