



Vultology as a Predictor of Career Choice: A Pilot Study

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ABSTRACT

Preliminary research into facial micro-expressions and mannerisms (*vultology*) demonstrates a statistical leaning toward specific career paths among individuals who share the same expressive profile. Facial analysis using the CTVC (*Cognitive Type Vultology Code 1.1*) was used on 537 public and/or celebrity figures, grouping the subjects together into eight categories based on similarities in their expressions. The careers of the subjects were documented and narrowed to forty-four career categories and compared against the groupings by facial expressions. Eleven of the forty-four career categories measured were statistically tilted (at between 36%-61.5%) to one of these eight visual categories of expression, suggesting a significant connection between facial expressions/mannerisms and occupation.

1. Introduction

In recent decades, the connection between facial expressions, mannerisms and psychology has been explored most acutely through their ties to emotional states. Advances have been made by P. Ekman through his development of the Facial Action Coding System (FACS) to identify universal emotional expressions in people, as well as hundreds of compounding expressions generated by those universal expressions. The use of facial expressions as an objective window into subjective experiences (such as emotions) presents a promising alternative to psychometric instruments for ascertaining elements of psychology. In this study, the efficacy of a new system of facial codes - which postulate a correlation between a different set of micro-expressions and elements of cognitive processing and personality - was tested across 537 subjects to see whether it produced notable patterns in career path among those sharing the same set of micro-expressions.

1.1 Using the Instrument

The Cognitive Type Vultology Code 1.1 (CTVC) instrument, under development by J.E. Sandoval and L. Renee Bayard, consists of 110 signals which catalog four main aspects of a person's expression: facial muscle contractions, voice intonation, body posture/movements and elements of speech. The instrument quantifies a person's expressions

using eight main signal groupings (each consisting of ~10 signals). If the instrument identifies a predominance of one of these signal categories in a person's facial/body expressions, that individual is grouped together with others who also share the same predominance in their bodily expression. The 110 signals used to categorize the subjects are publicly available in the form of static images, animated images, audio files and video media at www.cognitivetype.com/ctvc.

The official study, when complete, will contain a second-by-second breakdown of the visible signals displayed by each subject during a specified timeframe, as well as a statistical aggregation of those signals to determine which of the eight signal categories ranks highest for them. However, for this preliminary study, the 537 subjects were ascertained and categorized by the leading researchers through an initial visual examination of 10-15 minutes of footage per subject. The subjects of this pilot study were chosen via a random survey of public and/or celebrity figures with ample media online for visual evaluation.

1.2 Careers

As many of the celebrity personalities used in this study hold multiple careers simultaneously, only the two most prominent careers (and the reasons for their notoriety/fame) were noted for each subject. A complete list of the subjects and their careers is available online at this link. Granu-

larity was employed when initially ascertaining the subject's career choices - resulting in 120 different careers represented among the 537 subjects. These 120 careers were then simplified together into 44 general career categories according to shared commonalities (for example, combining harpist, gui-

tarist and instrumentalist under the same category of "music"). Figure 1 shows these 120 careers and the corresponding categories they were surmized into.

Figure 1

Career Class	Career Groupings
Activist	Activist/Animal Rights Activist/Environmentalism/Feminist/Humanitarian/LGBT Activist/Philanthropist/Political Activist
Acting	Actor/Actress
Architect	Architect
Army Officer	Army Officer
Artist	Artist/Designer/Comic Artist/Political Cartoonist/Animator/Photographer
Mystic	Astrologer/Esotericist/Parapsychologist/Spiritual Transformation
Science	Astronomer/Astrophysicist/Cosmologist/Mathematician/Physicist
Author	Author
Athlete	Basketball Player/Football Player/Golfer/Gymnast/Martial Artist/Professional Wrestler/Racing Driver/Skateboarder/Soccer Player/Stunt Performer
Model	Model
Biologist	Biologist
Business	Businessman/Businesswoman/CEO/Executive/Economist
Comedy	Comedian
Music	Composer/Guitarist/Harpist/Instrumentalist/Musician/Pianist/Singer/Singer-Songwriter/Violinist
Computers	Computer Programmer/Computer Science
Dance	Dancer
World Leader	Dictator/President/Prime Minister
Diplomacy	Diplomat/First Lady/Aristocrat
Director	Director/Producer
Anthropology	Anthropologist/Social Scientist
Ecology	Ecologist/Primatologist/Dog Behaviorist
Psychology	Psychiatry/Psychologist/Psychoanalyst/Typologist
Engineer	Entrepreneur/Engineer
Fash	Fashion/Fashion Designer/Fashion/Beauty
Sports Coaching	Fitness Coach/Football Coach/Soccer Coach
Food Testing	Food Tester
Gardening	Gardener
Trivia	Jeopardy/Misc Media
Journaling	Journalist/Science Communicator
Law	Lawyer/Attorney
Lecturing	Lecturer/Minister/Teacher/Professor/Social Worker
Life Coaching	Life Coach/Wellness Coach/Love Coach/Pickup Artist
Language	Linguist
Neuroscience	Neuroscience/Neuroscientist
Philosophy	Philosopher
Medicine	Physician
Puppeteering	Puppeteer
News	News Broadcaster/Political Commentator
Screenwriting	Screenwriter
Social	Socialite/Pop Idol
Tech Reviewing	Tech Reviewer
Talk Shows	Talk/radio Host/TV Host
Video Games	Video Game Designer/Video Gamer
Politics	Politician/Left Politician/Right Politician/Senator

1.3 Background in Carl Jung

As it is beyond the scope of this paper to describe all the details of the CTVC - this pilot study assumes a familiarity with Cognitive Type theory and its theoretical framework. However, no special knowledge beyond the basics is necessary to understand the material herein. It is sufficient to know that the CTVC was designed as a means to ascertain the legitimacy

of Jung's functions through an objective metric; bodily expression. The eight categories of expression aim to quantify/measure the eight Jungian types, and via the addition of a supportive process, a total of sixteen types come together. The eight Jungian types (and their branches into 16) are as follows: **Fe** (FeNi & FeSi), **Te** (TeNi & TeSi), **Ne** (NeFi & NeTi), **Se** (SeFi & SeTi), **Ti** (TiSe & TiNe), **Fi** (FiSe & FiNe), **Si** (SiFe & SiTe), **Ni** (NiFe & NiTe)

For this pilot study, however, we simply tested whether a certain criteria for measuring bodily expressions produces significant statistical results in career path between individuals who share those same expressions.

2. Statistics

Figure 2 demonstrates how these sixteen visual categories (and types) were distributed among the 44 careers. The distribution of careers was noted to be uneven, with significant

Figure 2

Career Category	Types																TOTAL
	FeNi	FeSi	FiNe	FiSe	NeFi	NeTi	NiFe	NiTe	SeFi	SeTi	SiFe	SiTe	TeNi	TeSi	TiSe	TiNe	
Activist	6	3	3	1	2	1	3	2	1	0	0	0	9	5	0	0	36
Acting	12	15	2	5	9	9	11	6	14	5	8	7	14	13	9	2	141
Architect	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Army Officer	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Artist	0	1	1	1	1	4	0	0	0	0	1	3	0	0	0	3	15
Mystic	1	1	0	0	0	2	6	3	0	0	4	0	1	0	0	0	18
Science	3	0	3	0	1	2	0	1	1	0	0	1	3	0	0	0	15
Author	0	3	4	0	5	1	9	2	0	0	0	2	1	4	0	0	31
Athlete	2	4	0	0	0	1	1	4	1	4	0	1	0	0	2	0	20
Model	3	0	1	6	0	2	1	1	9	0	0	0	1	0	1	0	25
Biologist	0	0	2	0	1	0	1	0	0	0	1	0	0	0	0	0	5
Business	3	2	1	4	0	0	1	2	1	0	2	3	5	2	1	0	27
Comedy	0	2	0	0	14	3	0	1	1	2	2	4	2	12	0	0	43
Music	4	1	10	11	8	7	4	3	13	8	5	3	5	4	8	4	98
Computers	0	0	2	1	2	0	2	0	0	0	0	3	0	2	0	0	12
Dance	0	0	0	1	2	0	1	0	0	0	1	0	0	0	0	1	6
World Leader	0	1	0	0	0	0	0	1	0	0	0	1	1	0	0	0	4
Diplomacy	0	0	0	2	0	0	0	1	0	0	0	0	1	0	0	0	4
Director	6	5	1	4	1	3	3	1	4	1	6	5	2	4	1	2	49
Anthropology	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3
Ecology	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
Psychology	8	3	7	1	3	2	6	2	2	1	3	0	3	0	1	7	49
Engineer	1	1	1	0	1	0	0	0	0	0	0	2	0	4	1	1	12
Fash	0	0	0	1	0	0	0	0	4	0	0	0	2	0	0	2	9
Sports Coaching	1	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	4
Food Testing	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Gardening	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Trivia	0	0	0	0	1	1	0	1	0	0	0	2	0	8	0	0	13
Journaling	3	1	0	0	1	4	0	1	1	0	1	3	3	2	0	0	20
Law	0	0	1	0	1	0	0	0	0	0	0	1	0	3	0	0	6
Lecturing	4	2	1	0	1	0	2	1	0	0	3	4	3	3	0	2	26
Life Coaching	6	9	0	0	0	2	3	0	1	0	0	0	2	3	1	0	27
Language	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Neuroscience	2	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	5
Philosophy	0	0	0	0	0	0	2	2	0	0	1	0	0	1	1	1	8
Medicine	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Puppeteering	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
News	2	3	0	0	1	0	4	5	0	0	0	3	9	9	0	0	36
Screenwriting	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Social	0	0	0	0	0	0	0	0	3	0	0	0	0	0	2	0	5
Tech Reviewing	0	0	0	0	0	0	0	0	2	0	0	0	0	1	2	0	5
Talk Shows	4	5	1	1	4	0	3	1	1	0	1	1	4	6	0	0	32
Video Games	0	0	0	0	2	0	0	2	1	0	0	2	2	1	0	0	10
Politics	0	3	2	0	1	0	0	1	0	0	1	11	6	2	0	0	27
TOTAL	75	66	46	40	63	44	63	49	60	21	41	64	80	90	31	27	860

clustering of careers among certain types. The numbers here represent the number of careers, not the number of subjects. A total of 860 careers were measured, as many - but not all - subjects held two careers.

The results were then examined to identify what were the most highly represented careers among each of the sixteen types.

2.1 Accounting for Demographic Bias

Limitations exist in the evaluation of career prevalence, owing to the selection of subjects from the celebrity sphere which holds a higher representation of actors and

actresses. As we see in Figure 2, 141 subjects contained an acting career and 98 contained a career in music; well over twice the representation seen in other careers. To account for this heavy skewing in the pool of samples, statistics were calculated (in Figure 3) by the 44 career categories individually, to demonstrate what ratio of each type is visible in each career category. This approach highlights who is in what career, rather than what careers are most highly represented. Here we find that despite the higher presence of acting as a career choice in the selected subjects, acting as a career category is evenly distributed among several types. The most significant correlations can be summarized as:

1. Of 43 subjects in Comedy, 39.5% were Ne types.
2. Of 36 subjects in News, 50% were Te types.
3. Of 36 subjects in Activism, 38.9% were Te types.
4. Of 31 subjects as Authors, 35.5% were Ni types.
5. Of 27 subjects in Politics, 44.4% were Si types.
6. Of 27 subjects in Life Coaching, 55.6% were Fe types.
7. Of 25 subjects in Modeling, 36% were Se types.
8. Of 18 subjects in Mysticism, 50% were Ni types.
9. Of 13 subjects in Trivia, 61.5% were Te types.
10. Of 9 subjects in Fashion, 44.4% were Se types.
11. Of 8 subjects in Philosophy, 50% were Ni types.

I've omitted mention of high percentages from career careers below a sample size of 8 subjects, as the sample size would be too small to consider the associations mean-

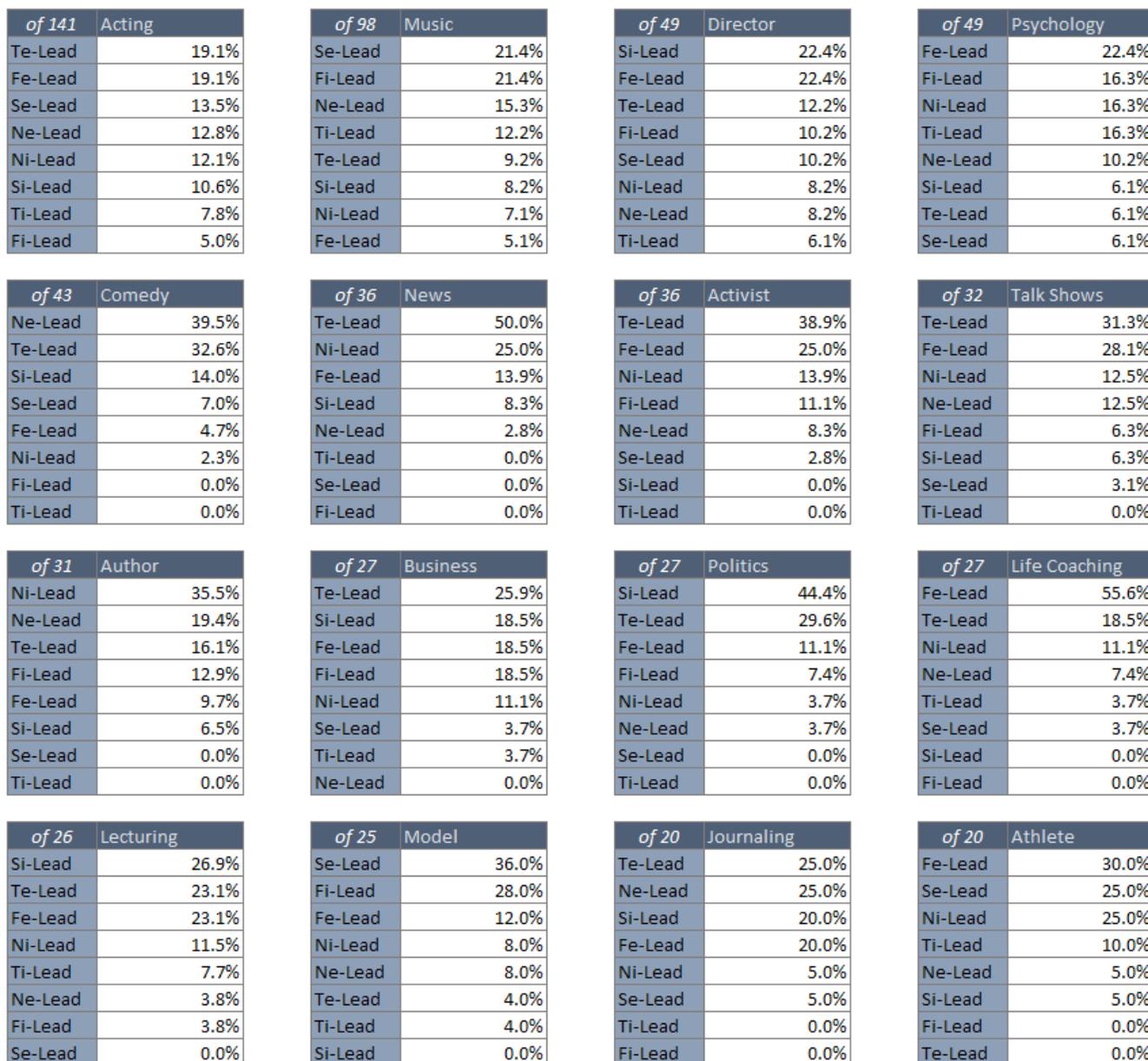


Figure 3.a

of 18 Mystic		of 15 Science		of 15 Artist		of 13 Trivia	
Ni-Lead	50.0%	Ne-Lead	20.0%	Ne-Lead	33.3%	Te-Lead	61.5%
Si-Lead	22.2%	Fi-Lead	20.0%	Si-Lead	26.7%	Si-Lead	15.4%
Ne-Lead	11.1%	Fe-Lead	20.0%	Ti-Lead	20.0%	Ne-Lead	15.4%
Fe-Lead	11.1%	Te-Lead	20.0%	Fi-Lead	13.3%	Ni-Lead	7.7%
Te-Lead	5.6%	Si-Lead	6.7%	Fe-Lead	6.7%	Fe-Lead	0.0%
Fi-Lead	0.0%	Se-Lead	6.7%	Se-Lead	0.0%	Se-Lead	0.0%
Se-Lead	0.0%	Ni-Lead	6.7%	Ni-Lead	0.0%	Ti-Lead	0.0%
Ti-Lead	0.0%	Ti-Lead	0.0%	Te-Lead	0.0%	Fi-Lead	0.0%

of 12 Engineer		of 12 Computers		of 10 Video Games		of 9 Fashion	
Te-Lead	33.3%	Si-Lead	25.0%	Te-Lead	30.0%	Se-Lead	44.4%
Fe-Lead	16.7%	Fi-Lead	25.0%	Ni-Lead	20.0%	Te-Lead	22.2%
Ti-Lead	16.7%	Ni-Lead	16.7%	Ne-Lead	20.0%	Ti-Lead	22.2%
Si-Lead	16.7%	Ne-Lead	16.7%	Si-Lead	20.0%	Fi-Lead	11.1%
Fi-Lead	8.3%	Te-Lead	16.7%	Se-Lead	10.0%	Fe-Lead	0.0%
Ne-Lead	8.3%	Fe-Lead	0.0%	Fe-Lead	0.0%	Si-Lead	0.0%
Ni-Lead	0.0%	Se-Lead	0.0%	Fi-Lead	0.0%	Ne-Lead	0.0%
Se-Lead	0.0%	Ti-Lead	0.0%	Ti-Lead	0.0%	Ni-Lead	0.0%

of 8 Philosophy		of 6 Law		of 6 Dance		of 5 Tech Reviewing	
Ni-Lead	50.0%	Te-Lead	50.0%	Ne-Lead	33.3%	Se-Lead	40.0%
Ti-Lead	25.0%	Ne-Lead	16.7%	Si-Lead	16.7%	Ti-Lead	40.0%
Si-Lead	12.5%	Si-Lead	16.7%	Fi-Lead	16.7%	Te-Lead	20.0%
Te-Lead	12.5%	Fi-Lead	16.7%	Ni-Lead	16.7%	Fe-Lead	0.0%
Fe-Lead	0.0%	Fe-Lead	0.0%	Ti-Lead	16.7%	Fi-Lead	0.0%
Ne-Lead	0.0%	Ni-Lead	0.0%	Te-Lead	0.0%	Ni-Lead	0.0%
Se-Lead	0.0%	Se-Lead	0.0%	Fe-Lead	0.0%	Si-Lead	0.0%
Fi-Lead	0.0%	Ti-Lead	0.0%	Se-Lead	0.0%	Ne-Lead	0.0%

of 5 Social		of 5 Neuroscience		of 5 Biologist		of 4 World Leader	
Se-Lead	60.0%	Fe-Lead	40.0%	Fi-Lead	40.0%	Si-Lead	25.0%
Ti-Lead	40.0%	Si-Lead	40.0%	Si-Lead	20.0%	Ni-Lead	25.0%
Fe-Lead	0.0%	Ti-Lead	20.0%	Ni-Lead	20.0%	Te-Lead	25.0%
Fi-Lead	0.0%	Te-Lead	0.0%	Ne-Lead	20.0%	Fe-Lead	25.0%
Te-Lead	0.0%	Ni-Lead	0.0%	Te-Lead	0.0%	Ne-Lead	0.0%
Ni-Lead	0.0%	Ne-Lead	0.0%	Fe-Lead	0.0%	Fi-Lead	0.0%
Si-Lead	0.0%	Se-Lead	0.0%	Ti-Lead	0.0%	Ti-Lead	0.0%
Ne-Lead	0.0%	Fi-Lead	0.0%	Se-Lead	0.0%	Se-Lead	0.0%

of 4 Diplomacy		of 4 Sports Coaching	
Fi-Lead	50.0%	Ni-Lead	50.0%
Ni-Lead	25.0%	Te-Lead	25.0%
Te-Lead	25.0%	Fe-Lead	25.0%
Si-Lead	0.0%	Se-Lead	0.0%
Ne-Lead	0.0%	Ti-Lead	0.0%
Fe-Lead	0.0%	Fi-Lead	0.0%
Ti-Lead	0.0%	Si-Lead	0.0%
Se-Lead	0.0%	Ne-Lead	0.0%

Figure 3.b

ingful. Figure 4 below shows the same representation - a ratio of types per career - but as evident across the sixteen groupings. We note here that:

1. **Of the 39.5% Ne types in Comedy:**
32.6% are NeFi
7% are NeTi
2. **Of the 50% Te types in News:**
25% are TeSi
25% are TeNi
3. **Of the 38.9% Te types in Activism:**
25% are TeNi

4. **Of the 35.5% Ni types in Authoring:**
13.9% are TeSi
29% are NiFe
6.5% are NiTe
5. **Of the 44.4% Si types in Politics:**
40.7% are SiTe
3.7% are SiFe
6. **Of the 55.6% Fe types in Life Coaching:**
33.3% are FeSi
22.2% are FeNi
7. **Of the 36% Se types in Modeling:**
36% are SeFi
0% are SeTi

of 141 Acting	
FeSi	10.6%
TeNi	9.9%
SeFi	9.9%
TeSi	9.2%
FeNi	8.5%
NiFe	7.8%
NeFi	6.4%
NeTi	6.4%
TiSe	6.4%
SiFe	5.7%
SiTe	5.0%

of 98 Music	
SeFi	13.3%
FiSe	11.2%
FiNe	10.2%
NeFi	8.2%
SeTi	8.2%
TiSe	8.2%
NeTi	7.1%
TeNi	5.1%
SiFe	5.1%

of 49 Director	
SiFe	12.2%
FeNi	12.2%
SiTe	10.2%
FeSi	10.2%
FiSe	8.2%
TeSi	8.2%
SeFi	8.2%
NiFe	6.1%
NeTi	6.1%

of 49 Psychology	
FeNi	16.3%
TiNe	14.3%
FiNe	14.3%
NiFe	12.2%
SiFe	6.1%
FeSi	6.1%
TeNi	6.1%
NeFi	6.1%

of 43 Comedy	
NeFi	32.6%
TeSi	27.9%
SiTe	9.3%
NeTi	7.0%

of 36 News	
TeSi	25.0%
TeNi	25.0%
NiTe	13.9%
NiFe	11.1%
SiTe	8.3%
FeSi	8.3%
FeNi	5.6%

of 36 Activist	
TeNi	25.0%
FeNi	16.7%
TeSi	13.9%
FeSi	8.3%
FiNe	8.3%
NiFe	8.3%
NeFi	5.6%
NiTe	5.6%

of 32 Talk Shows	
TeSi	18.8%
FeSi	15.6%
TeNi	12.5%
FeNi	12.5%
NeFi	12.5%
NiFe	9.4%

of 31 Author	
NiFe	29.0%
NeFi	16.1%
FiNe	12.9%
TeSi	12.9%
FeSi	9.7%
NiTe	6.5%
SiTe	6.5%

of 27 Business	
TeNi	18.5%
FiSe	14.8%
FeNi	11.1%
SiTe	11.1%
SiFe	7.4%
NiTe	7.4%
FeSi	7.4%
TeSi	7.4%

of 27 Politics	
SiTe	40.7%
TeNi	22.2%
FeSi	11.1%
TeSi	7.4%
FiNe	7.4%

of 27 Life Coaching	
FeSi	33.3%
FeNi	22.2%
TeSi	11.1%
NiFe	11.1%
TeNi	7.4%
NeTi	7.4%

of 26 Lecturing	
SiTe	15.4%
FeNi	15.4%
TeSi	11.5%
TeNi	11.5%
SiFe	11.5%
FeSi	7.7%
TiNe	7.7%
NiFe	7.7%

of 25 Model	
SeFi	36.0%
FiSe	24.0%
FeNi	12.0%
NeTi	8.0%

of 20 Journaling	
NeTi	20.0%
SiTe	15.0%
TeNi	15.0%
FeNi	15.0%
TeSi	10.0%
NiTe	5.0%
NeFi	5.0%
SeFi	5.0%
FeSi	5.0%
SiFe	5.0%

of 20 Athlete	
FeSi	20.0%
NiTe	20.0%
SeTi	20.0%
FeNi	10.0%
TiSe	10.0%
NiFe	5.0%
SiTe	5.0%
NeTi	5.0%
SeFi	5.0%

Figure 4.a

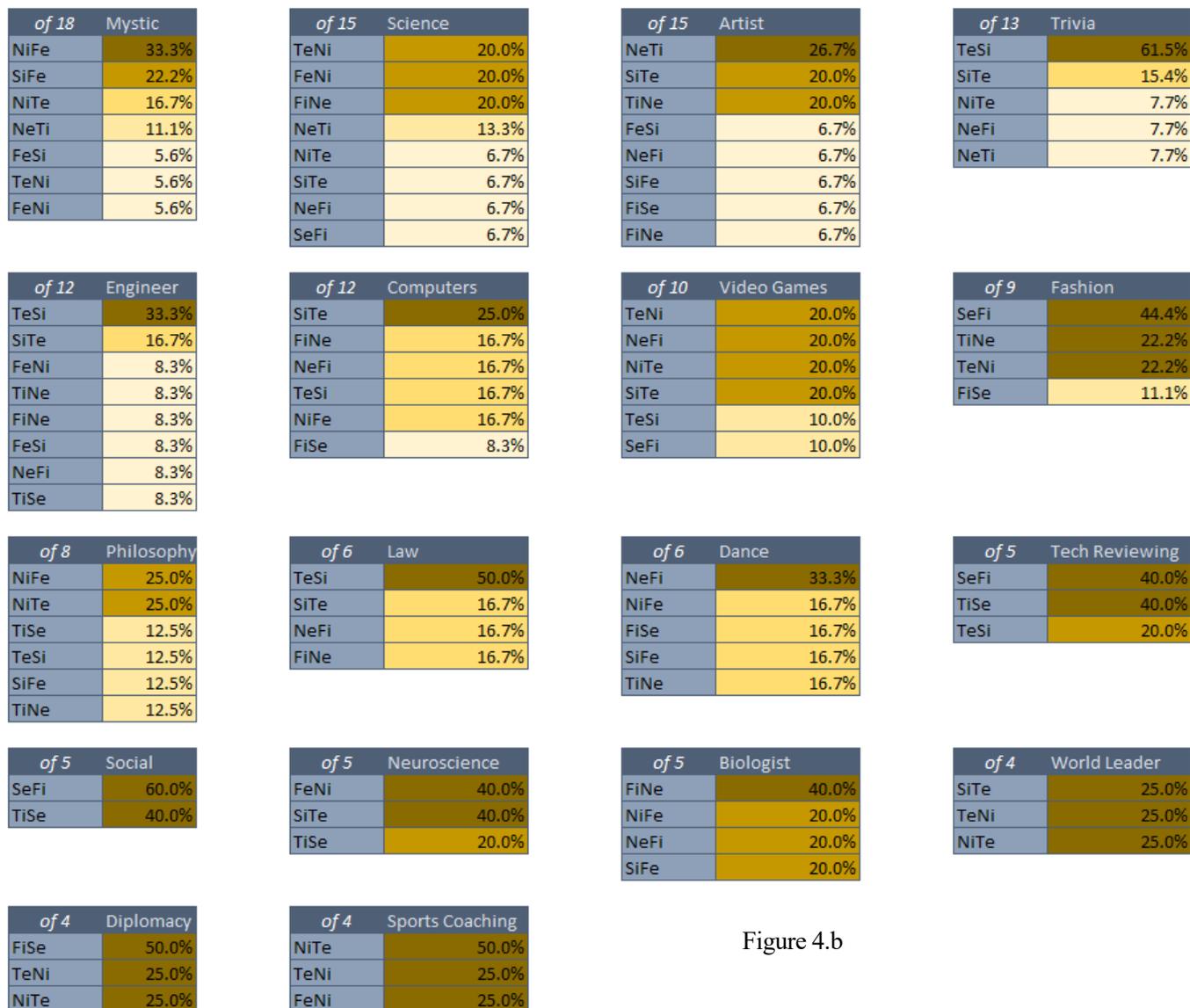


Figure 4.b

8. **Of 50% Ni types in Mysticism:**
33.3% are NiFe
16.7% are NiTe
9. **Of the 61.5% Te types in Trivia:**
61.5% are TeSi
0% are TeNi
10. **Of the 44.4% Se types in Fashion:**
44.4% are SeFi
0% are SeTi
11. **Of the 50% Ni types in Philosophy:**
25% are NiFe
25% are NiTe

3. Conclusions

While this initial pilot study contains many methodological problems such as with the demographic pooled for its selection of subjects and its dependence on the core researchers for the classification of the subjects, the information gathered thus far suggests a strong correlation between certain types and career paths.