Individual Learner Differences and Proficiency

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I. Introduction

Since the 1980 s study-abroad programs as part of the Japanese university as well as senior high school curriculum have become increasingly widespread. These programs typically range from a few weeks to a month or more. However, this study looks at a university program that was originally set up as a three-and-one-half-month program that was later expanded to five months. Along with this five-month program, this university established a long-term study-abroad program for a small, select group of students lasting approximately 18 months. This study will provide a brief report on the individual learner differences of personality, anxiety and motivation, and compare them to the proficiency and fluency of the 36 students who began this 18-month program.

In terms of personality, we looked at the continuums of extraversion and introversion, and neurotic and stable. Anxiety was examined in terms of situational anxiety, in this case, anxiety due to being in a foreign language classroom, trait anxiety, or one's predisposition towards being anxious, and state anxiety, or one's actual response to a stressful situation. With motivation, we drew on Gardner and Lambert's social psychological integrative and instrumental approaches as well as such cognitive approaches as those based on self-determination theory, which is associated with intrinsic and extrinsic orientations; attribution theory, which places emphasis on past experiences; and goal theories. We looked at proficiency based on TOEIC test scores and SPEAK test scores. In addition, a story-telling task from the SPEAK test was transcribed and scored for amount of output and such temporal variables as speech rate, articulation rate, length of pause and length of run. By comparing these various measures statistically, we hope to show the relationships among certain individual learner differences and higher levels of proficiency, output and fluency.

II. Study-Abroad Programs

One of the earliest studies to look at language proficiency and study-abroad was Carroll (1967) under the premise that study-abroad would provide informal learning opportunities, thereby leading to higher levels of proficiency. Freed (1998) and Coleman (1997) have provided surveys of study-abroad programs which generally show that fluency and

naturalness of speech are enhanced in comparison to accuracy. Tanaka and Ellis (2003) actually studied the program we are discussing here in terms of proficiency and changes in learner beliefs. The program they described has changed from 15 to 21 weeks, but is still a course-driven curriculum on its own campus in a northeastern American city where the students are housed together in dormitories. In addition to morning and afternoon classes, there are opportunities for field trips, community outreach, interaction with resident assistants, staff and teachers, and weekend excursions into the surrounding areas. In terms of proficiency, Tanaka and Ellis found very weak TOEFL score increases, which had typically been around five to six percent. This study was conducted in 2000 before major curriculum revisions in 2002, which have resulted in increases of 30 to 45 percent on the TOEIC test. Nonetheless, perhaps in comparison to more typical study-abroad programs run by American universities, this program, which Tanaka and Ellis term a "Japanese College Overseas," does not result in the same types of gains.

III. Personality

Our approach to personality is based on the work of Guilford and Martin (1943), who developed three personality inventories made up of six traits on the neurotic-stable continuum and six traits on the extravert-introvert continuum. These scales were translated and adapted for Japan by Tatsuro Yatabe and published as the Yatabe-Guilford Personality Inventory (1957).

The six neurotic-stable traits are:

D or Depression characterizes an individual who frequently feels depressed and has a predisposition for melancholy and pessimism.

C or Cyclic Tendencies characterizes an individual who undergoes mood shifts easily, becomes emotionally excited and is seen to have a personality that lacks emotional stability.

I or Inferiority Feelings characterizes an individual afflicted with a sense of inferiority and lacking in self-confidence.

N or Nervousness characterizes an individual with a nervous temperament, who is given to worrying and who has a predisposition for being irritable.

O or Lack of Objectivity characterizes an individual who engages in improbable daydreams, is unable to sleep and who stays awake fantasizing, and is hypersensitive.

Co or Lack of Cooperativeness characterizes individuals who are greatly dissatisfied and unreliable with a predisposition for discontent and insincerity.

The six extravert-introvert traits are:

Ag or Lack of Agreeableness/Aggressiveness characterizes a person who is short tempered, and acts as if he or she is in the right, regardless of what others believe. Such an individual does not want to listen to other people's opinions, and has a predisposition for aggressive behavior.

G or General Activity characterizes individuals who are physically active and prompt in the

workplace, exhibiting energetic behavior and having bright dispositions.

R or Rhathymia (carefreeness) characterizes an individual who delights in the company of others, is always seeking some kind of stimulation, is lighthearted and easygoing with a predisposition for impulsiveness.

T or Thinking Extraversion characterizes individuals who have a tendency to not worry over trivial things. The inverse of this is thinking introversion, which characterizes those who do fuss over minutia.

A or Ascendance characterizes individuals who work for the group or club, and never think of being alone. This trait is closely associated with the characteristic of social leadership.

S or Social Extraversion characterizes an individual who enjoys the company of others, and takes great pleasure in talking to others. Such individuals have a tendency to enjoy social contact. The opposite trait is Social Introversion.

The literature to date on comparisons between various personality traits and English language proficiency has been largely disappointing. There appears to be two main reasons for this. First, often the operationalization of the personality construct has been based on measures of dubious validity, such as the studies conducted by Busch (1982) and Ely (1986); or, only relations with proficiency measured by paper-and-pencil tests have been examined, and oral proficiency measures or oral data have been largely ignored. The good-language-learner studies typified by Naiman, Fröhlich, Stern and Todesco (1978) are typical of this type of approach. Those studies that have successfully shown relations between personality traits and some measure of language learning have done so with oral data. These studies include those done by Dewaele and his colleagues (2005 and with Furnham, 1999) and Robson (1994). In general, extraverts have been shown to prefer unstructured classroom activities, to be more active participants in language learning situations and to have higher levels of oral proficiency. Students who score high on neuroticism and introversion seem to prefer structured activities and to participate less in the language classroom.

IV. Anxiety

Theories regarding anxiety have tended to divide this construct into three operants—trait, state and situational. As mentioned previously, trait anxiety is one's predisposition to be anxious and, as such, can be considered part of one's personality. Thus, trait anxiety is subsumed under Neuroticism, and is seen as being a more or less stable construct. State anxiety is an individual's actual feelings of tension, apprehension, nervousness and worry during stressful situations. Both trait and state anxieties have typically been measured by Spielberger's State-Trait Anxiety Inventory (STAI, 1983). As just noted, while trait anxiety is seen as being relatively stable, state anxiety is transitory. Thus, items on the STAI can be differentiated based on "in general" for trait anxiety and "right now" for state anxiety. A normal trait score for female college students would be around 40 points, while a normal

state score would be around 39 points.

Situational anxiety is the individual's predisposed response to a particular situation, making it a type of situation specific, trait anxiety. Situational anxiety as related to language learning is described as a feeling of tension, apprehension, nervousness and worry, which results in difficulty concentrating, becoming forgetful, sweating and having palpitations in a language-learning context. Horwitz, Horwitz and Cope (1986) developed the Foreign Language Classroom Anxiety Scale (FLCAS), which requires respondents to identify particular self-perceptions, beliefs, feelings and behaviors related to communication apprehension, test anxiety and fear of negative evaluation within a classroom language-learning situation.

There have been a large number of anxiety studies conducted by Horwitz (with Young, 1991 and with Gregerson, 2002) and her colleagues as well as by MacIntyre and Gardner (1989), Ely (1986), Castagnaro (1992) and Robson (1994) among numerous others. In general, the findings have shown that there does indeed appear to be different types of anxiety; however, whether trait and state anxieties are actually separate types has not been well supported. Moreover, studies looking at state and trait anxieties in relation to some measure of language learning have been largely inconclusive. Language learning anxiety as a separate type has been consistently shown to be distinct, and, as such, learners with high levels of this type of anxiety have been shown to be less participatory in class and to have lower levels of language proficiency, both oral and as measured on paper-and-pencil tests.

V. Motivation

For the approach to motivation, we tried to combine a number of different approaches, including the concept of integrativeness advocated by Gardner (2001) and his colleagues. While there have been some problems in nailing down exactly what integrativeness means, in general, "an integrative motivational orientation concerns a positive interpersonal/affective disposition toward the L2 group and the desire to interact with and even become similar to valued members of that community. It implies an openness to, and respect for, other cultural groups and ways of life. Thus, a core aspect of the integrative disposition is some sort of psychological and emotional identification" (Dörnyei, 2001, page 5). Added to this concept, Gardner also includes an instrumental or more-goal oriented approach to motivation.

In addition to this, there are the cognitive approaches such as those involving intrinsic and extrinsic orientations toward motivation, where the reasons for L2 learning of an intrinsically-motivated student are derived from the inherent pleasure and interest in the activity. A student who is extrinsically-oriented is studying for reasons that are instrumental, such as fulfilling a school requirement or to help develop the student's talents. Other cognitive approaches include motivation based on past learning experiences and goal

oriented motivation. Past experiences of success or failure can greatly affect classroom performance and expectations. Moreover, language-learning goals in terms of the specificity of the learner's goals and the frequency of goal-setting strategies are seen as a central component of this type of orientation.

There has been an enormous amount of literature on motivation centered on the work of Gardner (2001) and his colleagues as well as Belmechri and Hummel (1998), Clément and Kruidenier (1983), Dörnyei (2001), McClelland (2000), Noels (2001) and Weiner (1992). The most recent findings can be generalized as showing that more integratively-oriented learners have a greater willingness to communicate and are more likely to use the target language outside the classroom. Those students who are either intrinsically or extrinsically motivated appear to be more willing to persevere and expend effort, while also being more participatory in class. Although there have been a number of studies that have shown relations between various types of motivation and proficiency, in general, motivation seems to be more oriented towards various types of in-class and outside-of-class behaviors.

VI. Proficiency and Temporal Variables

We have operationalized proficiency in terms of listening comprehension and reading comprehension based on TOEIC test scores, and spoken ability based on SPEAK test scores, as well as the amount of spoken output and the fluency of that output. We have defined amount of spoken output as the number of C-units produced or each incident of independent predication, number of words and number of syllables. Fluency was scored using the temporal variables of speech rate or the mean number of syllables spoken per second including pausing, articulation rate or the mean number of syllables spoken per second excluding pausing, pause length or the mean length of any pause longer than two seconds, and length of run or the mean number of syllables between pauses of more than two seconds in length.

VII. Research Questions

Based on the discussion above, we are interested in answering the following research questions:

1. What is the relationship between personality and English language proficiency and fluency?
2. What is the relationship between anxiety and English language proficiency and fluency?
3. What is the relationship between motivation and English language proficiency and fluency?
4. What is the relationship between English language proficiency and fluency?

The alpha for all statistical decisions was set at $p < .05$.

VIII. Methodology

There were 36 initial subjects in this study; however, four subjects were not available to take the final SPEAK test at the end of this research. The 36 subjects were all Japanese native-speaking females aged 18 and 19 years old studying English at a private women's university in Tokyo, Japan. The data were gathered over a period of 21 months from June 2005 to February 2007 in Tokyo and during the students' study-abroad program in America.

The Yatabe-Guilford Personality Inventory (1957) is composed of the 12 traits previously discussed. Each trait has ten questions that require a "yes," "no" or "I don't know" response marked with a circle around the "yes" or "no," and a triangle for "I don't know." Circles are scored two points and triangles are scored one point for a possible zero-to-20 points per trait. When a question is negatively worded, the no circle will register on the scoring sheet, and when a question is positively worded, the yes circle will register. The inventory was administered at the beginning of this research.

The previously mentioned measures used for anxiety were the Spielberger State and Trait Anxiety Inventories or the STAI S- and T-forms and the Foreign Language Classroom Anxiety Scale (FLCAS). The STAI consists of 20 statements on each form scored using a four-point Likert scale, with 20 points being the least anxious, around 40 points being within a normal range, and 80 points being highly anxious. On the S-form subjects mark each negatively or positively-worded statement about their fears and emotional stability at the time of response "not at all," "somewhat," "moderately so" or "very much." Example statements would be "I am tense," or "I feel calm." The T-form is the same as the S-form except that the responses are "almost never," "sometimes," "often," and "almost always." Example statements would be, "I have disturbing thoughts," or "I make decisions easily." The FLCAS has 33 items of which 24 are negatively worded and nine are positively worded. The items are scored on a five-point Likert scale ranging from "I strongly agree" to "I strongly disagree." Possible scores on the FLCAS range from 33 to 165; however, the normal range of scores seems to be between 94 and 98. These inventories were also administered at the beginning of the research, with the S-form being administered just before the subjects took the SPEAK test, which was felt to be a particularly anxious time.

The operationalization of motivation was based on a questionnaire developed by Morris and Melchior (1997) that, as noted previously, combines a number of different motivational orientations and then divides these into goals, objectives and expectations. There are 26 goal items, 14 objective items and 35 expectation items for a total of 75 items scored on a four-point Likert scale from "I strongly agree" to "I strongly disagree." Examples of items from each section include: "I am studying English in hopes of studying abroad in an English-speaking country," "I hope to improve my pronunciation," and "I believe I will learn English more effectively if I am taught lecture style." After administration, the questionnaire

was examined for internal reliability using Cronbach's alpha and was subjected to factor analysis to provide a level of item validity. The reliability was .93, and the factor analysis revealed a four-factor solution for the goals items, a three-factor solution for the objectives items and a six-factor solution for the expectations items. The items were examined for similarities within each factor and labeled. The four factors making up goals were Using English Abroad or UEA, Integrative or INT, Instrumental/Using English at Work or INS and Not Using English at Work or NEW. The three factors making up objectives were translation ability or TAB, vocabulary learning or VL and language skills or LS. The factors making up expectations were traditional activities or TA, traditional teaching styles or TTS, non-traditional teaching styles or NTTS, traditional learning styles or TLS, non-traditional learning styles or NTLS and modern facilities or MF. As with the other measures, this was administered at the beginning of the study.

The proficiency measures, the amount of speech measures and the fluency measures were drawn from a number of different sources. The TOEIC requires no explanation; however, many may not be as familiar with the SPEAK test. The SPEAK test is designed as a semi-direct measurement of English-speaking proficiency for non-native speakers of English. It is semi-direct in that the spoken interaction is between the examinee and a tape recorder rather than a face-to-face interview style test. The test has a time restraint and consists of seven parts: an unscored warm-up section, a printed passage to be read aloud, a sentence-completion task, a story-telling task, a question-answering task based on an illustration, an open-ended question task designed to elicit free and extended answers describing common objects or giving opinions on some topics, and description of a printed schedule. Each section is rated based on a scoring guide divided into four sections: pronunciation, grammar, fluency and comprehensibility, and scored on a zero-to-three-point scale. The SPEAK tests were scored by two raters independently and then re-scored together so that there was 100% agreement on all scores given. Both the TOEIC and SPEAK tests were given twice, once at the beginning of the study and a second time nine months later.

The amount of speech and temporal variables data were based on the story-telling task from the SPEAK pre-test and post-test. The students' utterances, which lasted approximately one minute, were transcribed and the number of C-units, words and syllables were tabulated. Then, using the transcription software Transana, the temporal variables of speech rate, articulation rate, pause length and length of run were calculated.

Finally, descriptive statistics and Pearson R correlations were calculated for all the variables in this study using the statistical software program Statistica.

IX. Results

Referring to the descriptive statistics in Table 1, we can see, to begin with, that a number of the variables violate the assumption of a normal distribution. Due to some scales

Table 1. Description Statistics for All Variables, $N=36$ (except Post-Speak & Fluency $N=32$)

	Mean	SD	Low	High	Skew	Kurtosis
D	12.58	5.62	0	20	−.52	−.75
C	11.0	5.02	2	19	−.37	−1.09
I	10.0	5.23	1	19	−.06	−1.13
N	11.11	5.21	1	19	−.22	−1.0
O	11.14	3.67	0	19	−.47	1.29
Co	8.58	3.97	0	17	.31	−.26
Ag	11.56	3.95	0	18	−.56	.51
G	10.94	4.44	2	19	.13	−.79
R	13.19	3.54	5	20	−.21	−.49
T	8.33	4.06	1	18	.29	−.13
A	10.89	3.75	3	16	−.79	−.25
S	13.06	4.75	2	20	−.57	−.55
FLCAS	96.19	16.19	62	137	.34	.07
STAI T	48.56	12.89	24	71	−.03	−1.02
STAI S	46.81	12.31	22	64	−.37	−.96
UEA	3.32	.58	1.5	4	−.98	1.24
INT	3.53	.35	2.7	4	−.38	−.56
INS	2.19	.59	1	3.5	.03	−.17
NEW	3.33	.62	1.5	4	−1.02	.93
TAB	3.22	.85	1	4	−.86	−.31
VL	3.71	.48	2.5	4	−1.36	.42
LS	3.78	.34	2.7	4	−1.96	3.57
TA	3.01	.85	1.8	3.67	−.66	−.23
TTS	2.22	.48	1	3.57	.06	−.71
NTTS	3.42	.34	2.3	4	−.72	.86
TLS	3.23	.52	2.3	4	−.29	−.29
NTLS	3.23	.61	1.6	4	−.99	.81
MF	3.29	.66	1	4	−1.25	2.62
TOEIC 1	439.86	62.58	290	600	−.01	.59
LIST 1	269.03	43.79	170	360	.03	−.23
READ 1	170.83	39.65	55	245	−.42	.80
TOEIC 2	557.36	70.57	425	750	.35	.20
LIST 2	330.28	41.95	255	430	.32	−.45
READ 2	227.08	44.49	150	320	.04	−.84
GAINS	117.50	63.26	5	215	−.20	−1.04
Pre-Pro	1.44	.33	.9	2	−.16	−1.44
Pre-Gram	1.36	.39	.6	2.5	.38	.57
Pre-Flu	1.03	.25	.4	1.7	.33	1.28
Pre-Comp	113.61	23.68	80	200	1.52	3.82
Post-Pro	1.95	.36	1.5	2.8	1.20	.94
Post-Gram	2.07	.26	1.6	2.5	.001	−1.01
Post-Flu	1.80	.25	1.3	2.4	.15	.81
Post-Comp	187.81	26.39	125	270	.80	2.70
Pre-C-Units	7.77	1.93	4	11	−.15	−.92
Pre-Words	39.05	9.56	21	56	.04	−.82
Pre-Syll	49.61	12.59	24	77	.10	−.39
Pre-Sp Rate	1.06	.28	.49	1.79	.34	.87
Pre-Art Rate	1.53	.34	.90	2.29	.53	−.38
Pre-Pause	3.02	.99	1.87	5.59	1.36	1.25
Pre-Run	1.78	.38	1.17	2.40	.02	−1.21
Post-C-Units	9.72	2.66	4.0	15.0	−.05	.09
Post-Words	57.19	14.89	32	95	.24	.02
Post-Syll	71.84	18.36	39	108	−.09	−.81
Post-Sp Rate	1.25	.31	.69	1.97	.12	−.12
Post-Art Rate	1.65	.28	.97	2.43	.36	1.27
Post-Pause	3.27	2.16	0	9.8	1.76	3.32
Post-Run	1.75	.39	1.05	2.75	.32	.38

only having a four-point range, this is understandable; however, such narrow distributions may have adversely affected the statistical outcomes. We can also see that there were both high and low scores on Depression and Lack of Objectivity. There were also high scores on Rhathymia and Social Extraversion. With anxiety there were both relatively high scores on the FLCAS and trait-anxiety. The range of TOEIC scores from 290 to 600 is very wide, and, in particular, the reading scores are rather low. All of the post-test scores improved, though the range of TOEIC scores remains far apart. The students' fluency based on the SPEAK test at the beginning of this study was rather poor with an average of three seconds of pauses over a minute's worth of speaking time. Their post-SPEAK test fluency shows increases in all measures, unfortunately with increases in pause length as well, and a decrease in length of run.

Table 2, like all of the tables showing the correlations, has been truncated to just those variables that have significant relationships in the interests of space. Here we have the correlations between personality and proficiency. There were a number of positive correlations between such neurotic measures as Cyclic Tendencies and Nervousness and the pre-TOEIC test. There were also three negative correlations between the extrovert measures of Ascendance and Social Extraversion and both pre- and post-TOEIC scores. There are also negative correlations between Cyclic Tendencies, Inferiority Feelings and Lack of Objectivity and gains. There were three negative correlations between Ascendance and the pre-SPEAK test. There was one positive correlation between Lack of Agreeableness and length of run on the pre-SPEAK test. There were four negative correlations on the post-SPEAK test between words and Inferiority Feelings, syllables and Inferiority Feelings, and speech rate and Cyclic Tendencies and speech rate and Inferiority Feelings. There were three positive correlations between these same three fluency variables, words, syllables and speech rate and General Activity.

Table 2. Correlations between Personality, Proficiency and Temporal Variables, $N=36$
(except Post-Speak & Fluency $N=32$)

	D	C	I	N	O	Co	Ag	G	R	T	A	S
TOEIC 1	.32	.34*	.22	.41*	.22	.14	−.15	−.28	−.18	−.26	−.41*	−.22
LIST 1	.16	.24	.20	.28	.25	.02	−.16	−.17	−.15	−.14	−.47*	−.19
READ 1	.32	.27	.13	.34*	.08	.20	−.05	−.26	−.11	−.25	−.12	−.14
READ 2	.20	.08	−.02	.20	−.02	.07	.13	−.24	−.24	−.22	−.31	−.33*
GAINS	−.20	−.36*	−.33*	−.27	−.38*	−.14	.13	.10	−.10	.07	.04	−.07
Pre-Pro	.12	.04	.19	.20	.01	−.10	−.04	−.26	−.07	−.02	−.34*	−.22
Pre-Flu	.09	−.08	−.01	−.01	.03	−.31	−.01	−.03	−.27	−.05	−.36*	−.25
Pre-Comp	.20	.15	.30	.29	.08	−.14	−.16	−.32	−.31	−.15	−.38*	−.22
Pre-Runs	.03	.05	−.08	−.06	−.10	.29	.35*	.09	.13	−.05	−.04	−.07
Post-Words	−.10	−.33	−.42*	−.13	−.03	−.07	−.02	.35*	−.20	−.26	.20	.22
Post-Syll	−.13	−.33	−.47*	−.19	−.05	−.11	.01	.39*	−.18	−.22	.21	.27
Post-Sp Rate	−.14	−.36*	−.49*	−.21	−.02	−.08	.08	.36*	−.13	−.27	.10	.22

* = p < .05

The anxiety results are shown in Table 3. There were two negative correlations between the FLCAS and C-units and words from the SPEAK pre-test. There were also negative correlations between trait anxiety and words, syllables, speech rate and articulation rate from the post-SPEAK test.

Table 3. Correlations between Anxiety, Proficiency and Temporal Variables, $N=36$
(except Post-Speak & Fluency, $N=32$)

	FLCAS	STAI Trait	STAI State
Pre-C-Units	$-.42^*$	$-.30$	$-.12$
Pre-Words	$-.34^*$	$-.28$	$-.07$
Post-Words	$-.16$	$-.42^*$	$-.18$
Post-Syll	$-.24$	$-.45^*$	$-.18$
Post-Sp Rate	$-.18$	$-.43^*$	$-.20$
Post-Art Rate	$-.15$	$-.36^*$	$-.49^*$

$^* = p < .05$

Table 4 shows the correlations between the various measures of motivation and proficiency. There were three positive correlations between the pre-TOEIC and Traditional Activities and Traditional Teaching Styles. There were two positive correlations between Instrumental Motivation and both the pre- and post-SPEAK test. There was one negative correlation between Vocabulary Learning and Comprehensibility on the post-SPEAK test, and two positive correlations between words and syllables from the pre-SPEAK test and Traditional Activities and Modern Facilities. There was one negative correlation between runs on the post-SPEAK test and Instrumental Motivation or Using English at Work.

Table 4. Correlations between Motivation, Proficiency and Temporal Variables, $N=36$
(except Post-Speak & Fluency, $N=32$)

	UEA	INT	INS	NEW	TAB	VL	LS	TA	TTS	NTTS	TLS	NTLS	MF
TOEIC 1	.09	$-.10$	.12	.10	.30	$-.15$	.10	$.44^*$	$.34^*$	.01	.12	.29	.17
LIST 1	.04	$-.14$	.20	.25	.22	$-.07$	.02	$.34^*$	.25	.08	.19	.19	.08
Pre-Gram	.16	.04	$.35^*$	$-.09$	$-.04$	$-.11$	.10	.13	$-.05$	$-.03$	$-.03$	.09	.25
Post-Pro	.16	$-.09$	$.45^*$	.09	.06	$-.31$	.15	.21	.08	$-.23$	$-.10$	.05	.24
Post-Comp	.06	$-.20$	.29	.05	$-.15$	$-.36^*$	$-.07$	.10	.03	$-.25$	$-.07$	.07	.16
Pre-Words	.23	.07	.31	$-.21$	$-.21$	$-.24$	.21	$.41^*$	.22	.29	.25	.25	$.42^*$
Pre-Syll	.22	.16	.27	$-.26$	$-.22$	$-.16$	.18	$.41^*$	.21	.29	.25	.26	$.44^*$
Post-Run	.11	.10	$-.40^*$	.17	.14	$-.01$	$-.2$	$-.16$	$-.10$	$-.19$	.04	.11	$-.12$

$^* = p < .05$

Table 5 shows the correlations between the measures of proficiency and the measures of oral output and fluency. There are significant positive correlations between the pre-SPEAK test C-units and the pre-TOEIC listening test. As expected, there were a large number of correlations between the pre-SPEAK test and these measures of fluency. C-units, words, syllables and speech rate from the pre-SPEAK test all correlated positively with the pre-SPEAK test measure of fluency, with an additional positive correlation between pre-SPEAK test C-units and the pre-SPEAK test measure of comprehensibility. There was one positive

correlation between C-units on the post-SPEAK test and pre-SPEAK test fluency. There were a large number of positive correlations between fluency and scores on the post-SPEAK test. These included C-units, words and speech rate from the pre-SPEAK test and the measures for grammar and fluency from the post-SPEAK test. C-units, words, syllables and speech rate from the post-SPEAK test all had positive correlations with the post-SPEAK test measure of fluency.

Table 5. Correlations between Proficiency and Temporal Variables, $N=36$

	TOEIC 1	LIST 1	READ 1	TOEIC 2	LIST 2	READ 2
Pre-C-Units	.25	.42*	−.08	.34	.38	.19

Table 5., cont. Correlations between Proficiency and Temporal Variables, $N=36$
(except Post-Speak & Fluency, $N=32$)

	Pre-Pro	Pre-Gram	Pre-Flu	Pre-Comp
Pre-C-Units	.24	.07	.50*	.37*
Pre-Words	.26	.03	.46*	.33
Pre-Syll	.22	−.02	.40*	.28
Pre-Sp Rate	.30	.16	.37*	.30
Post-C-Units	.20	.05	.37*	.28

	Post-Pro	Post-Gram	Post-Flu	Post-Comp
Pre-C-Units	.19	.51*	.36*	.16
Pre-Words	.13	.39*	.28	.08
Pre-Sp Rate	.34	.47*	.48*	.22
Post-C-Units	−.09	.20	.39*	.18
Post-Words	−.07	.11	.39*	.17
Post-Syll	−.05	.13	.42*	.19
Post-Sp Rate	−.05	.07	.46*	.18

*=$p<.05$

X. Discussion & Conclusion

For the entire group of students, what we can learn from the descriptive statistics is that they appear to be a more neurotic group than extravert, except for Rhathymia or carefreeness and Social Extraversion. As this group is somewhat more neurotic than usual, one would also expect there to be a high level of trait-anxiety, which is part of the trait makeup of neuroticism, and there is. Interestingly, state-anxiety is not as strong. This group is also rather anxious in terms of foreign language learning. The different motivation scales show this group to be somewhat more integrative than instrumental and to put emphasis on vocabulary learning and language skills learning. They also seem less interested in traditional teaching styles. Their proficiency level is not particularly high, although they do make fairly good gains over time, and while they were not very fluent at the beginning of this study, they made gains in this area too.

The answer to the first research question, what is the relationship between personality and English language proficiency, is somewhat mixed. In contrast to the previous research, where any kind of correlation between a paper-and-pencil test and personality had not been seen, there are a number of the correlations with the TOEIC test. At first, neurotic students scored better than the extravert students, but this changed on the post-test where the neurotic students made fewer gains. Nonetheless, the socially extraverted students did less well on the post-test reading section. There were only significant correlations with the pre-SPEAK test and these showed that the students with leadership personalities did less well. In terms of fluency, the results are less surprising. The extraverted students were more fluent than the neurotic students.

Given the personality results, one would expect the answer to the second research question, what is the relationship between anxiety and proficiency, to be strongly negative. The reason for this is that neurotic students are highly nervous and nervous students tend to also be anxious. However, there were no significant correlations with any of the proficiency measures. There were somewhat unsurprising negative correlations with fluency, including trait and state anxiety, though not language classroom anxiety.

The answer to the third research question, what is the relationship between motivation and English language proficiency, is also rather mixed. There were two negative correlations, one between post-test comprehensibility and vocabulary learning objectives and another between fluency and instrumental goals or using English at work. The other correlations were all positive and showed that those students who believed in instrumental goals were more orally proficient. Also, those who expressed an expectation for traditional activities like being given tests, had higher levels of proficiency and more oral output. Moreover, those who expressed an expectation for such traditional teaching styles such as following the textbook were also more proficient. Those who professed an expectation for such modern facilities as computer and language labs also had more oral output.

The fourth research question dealt with the relationship between proficiency and fluency. There is no clear answer for this group of students with the TOEIC test as only pre-SPEAK test C-units correlated with pre-test listening. There were a number of significant positive correlations between the measures on the SPEAK test and the temporal variables measures. In particular, fluency on both the pre- and post-SPEAK test correlated with everything but the number of words from the pre-test, which should not be surprising. This does additionally provide a further indication of both validity and reliability for this test.

In conclusion, we believe that the use of various self-report questionnaires on the individual learner differences discussed here can provide both an individual and general profile of the learners in a given program. Such a profile could be useful, in terms of a student's personality, to determine the types of activities that might best suit such a student, and the areas of proficiency where such a student would potentially be strong or

weak. Identifying particularly anxious students and trying to help them become more confident while also making the language-learning environment less threatening could be a boost to participation and oral output. The understanding that motivation is a highly complex variable made up of various components that can change from lesson to lesson, or even from activity to activity, would be useful for teachers' approaches to both their students and their classroom activities. Clearly some learners believe that certain types of goals, objectives and expectations will help them improve. It is also possible that certain types of motivation could lead to greater participation in certain activities. It is beyond the range of simple correlations to show this, and, moreover, we feel the least confident in the validity of the measure used. Nonetheless, it seems intuitive that maintaining and enhancing learner motivation can and should lead to greater and better levels of participation with the hope of attaining higher levels of proficiency. Nonetheless, the most sensitive of the data collected was the transcriptions of the SPEAK tests. These provided measures of fluency that were very robust in the statistics.

XI. References

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