

## THE SIGNIFICANCE OF LEARNER VARIABLES AS PREDICTORS OF ESL PROFICIENCY

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### 1. Introduction

As more and more variables are found to be influencing ESL proficiency and, consequently the Second Language Acquisition (SLA) process, it will become increasingly difficult to typify individuals and to classify groups of individuals together. Each person appears to be a unique complex of variables.

Researchers (e.g., Chapelle – Roberts 1986; Reid 1987; Wenden – Rubin 1987; O'Malley – Chamot 1990; Oxford 1990; Skehan 1991) have attempted to isolate particular learner variables which might enhance or hinder progress in learning another language. A number of variables that account for some of the differences in how students learn have been identified:

- attitude and motivation (Gardner – Lambert 1972; Gardner – Smythe 1975; Gardner et al. 1977),
- personality type/traits (Chastain 1975; Guiora et al. 1975; Brodkey – Shore 1976; Busch 1982),
- learning styles (especially the field independence/dependence distinction) (Witkin et al. 1977a; 1977b; Birckbichler – Omaggio 1978; Hosenfeld 1979; Hansen – Stansfield 1981; 1982; Chapelle – Roberts 1986; Reid 1987),
- language learning strategies (Bialystok – Fröhlich 1978; Bialystok 1981; Wenden 1983; 1986a; 1986b; O'Malley et al. 1985a; 1985b; Wenden – Rubin 1987; Oxford 1989; O'Malley – Chamot 1990; Oxford 1990).

It is difficult to take all these learner variables into account when investigating their influence on ESL proficiency. The scope of this paper is, therefore, limited to the investigation of three major learner variables, viz. field independence/dependence (FI/D), language learning strategies (LLSs) and personality types/traits (PT).

Most of the research which has examined the relationship between learner variables and language proficiency allows the researcher to quantify the strength of the relationship. As a result, it is possible to decide whether the relationship concerned is trivial, moderate, or even strong. It is therefore possible to state whether a relationship is statistically significant or not. However, very little research has stated whether these relationships are also practically significant. If teachers are considering the possibility of implementing or changing their learners' styles or strategies it will be essential to know not only if the relationship is statistically significant, but also if it is practically significant, because if it is not practically significant the results of such adaptations might not be commensurate with the effort.

The purpose of this article is, therefore, to determine which of these variables can be considered to be statistically significant as well as practically significant predictors of English second language proficiency.

## 2. Field independence/dependence, language learning strategies, personality types/traits and ESL proficiency

A review of the literature indicates that variables such as attitude, aptitude and motivation have been extensively studied and documented with fairly consistent results, whereas research investigating FI/D, LLSs and PT offers mixed and somewhat inconsistent conclusions. For example, Hansen and Stansfield (1981: 365) found positive linear correlations ranging from  $r=.20$  to  $r=.43$ ,  $p<.001$  between students' FI/D and performance on various measures of Spanish proficiency. It is clear that these correlations are rather modest. However, Chapelle and Roberts (1986: 37) found correlations of  $r=.55$  and  $r=.75$ ,  $p<.001$  between FI and TOEFL scores administered at the beginning and end of the semester, respectively. These correlations are significantly higher than those by Hansen and Stansfield (1981: 365), indicating a stronger relationship between field independence and proficiency. However, Bialystok and Fröhlich (1978: 333), in their work with English Canadian high school students learning French, did not find any support for claiming that field was a factor for predicting success on the second language reading, listening and writing tasks which they had selected. They found that field independence accounted for 1.7% of the variance on the reading task, 1% of the variance on the writing task and 0.1% of the variance on the listening task.

Various studies (e.g., O'Malley et al. 1985a; 1985b; Abraham – Vann 1987) have attempted to show that a positive relationship exists between language learning strategies and the different levels of language proficiency of students.

One of the purposes of the O'Malley et al. (1985a: 21-46) study was to determine whether the strategies used interact with the level of proficiency of the students. The subjects were 70 high school age students enrolled in ESL classes. The students were divided into two levels: Beginning level (students who have little or no proficiency in English) and Intermediate level (students with limited proficiency). Results revealed that intermediate level students tended to use proportionately more metacognitive strategies than students with beginning level proficiency. Whereas intermediate level students used 34.9% metacognitive strategies,

beginning level students used 27.4% metacognitive strategies. However, overall, both beginning and intermediate level students used more cognitive than metacognitive strategies. It is also interesting that contextualization is difficult for beginning level students to use because it presumes some level of proficiency (Cohen – Apek 1981: 221-235).

Abraham and Vann (1987: 85-99) were interested in students who had enrolled for an intensive English as a second language (ESL) programme at a university, where "success" meant passing the Test of English as a Foreign Language (TOEFL) and being able to function adequately in a university environment. In their case study they chose two subjects: Gerardo (successful) and Pedro (unsuccessful). Gerardo obtained a final TOEFL score of 523, whereas Pedro obtained a TOEFL score of 473. The results of Abraham and Vann's (1987) study indicates that Gerardo used a greater variety of strategies, as well as several strategies far more frequently than Pedro. Strategies were identified in two ways: firstly, by means of interviews and secondly, by presenting the subjects with tasks typical of those assigned in their English classes. Gerardo used a total number of 317 strategies during the interviews, whereas Pedro only used 81. Gerardo also used 32 different strategies, whereas Pedro only used 19.

It would seem as if there is a certain pattern or relationship between LLSs and L2 proficiency. In all the studies mentioned above the more proficient the language learner the more strategies they used. The more proficient language learners also used a greater variety of strategies and the frequency of use was also higher. However, an important point to bear in mind is that the "poor" language learners also used a number of strategies; they are, therefore, not "inactive". It would seem as if they have a problem with applying the correct strategy to the particular task at hand. It might also be that their repertoire of strategies is very limited. More research is needed to find out exactly what the poor language learner does.

The notion of examining the possible relationships between learners' personality characteristics and their rate and degree of success in language acquisition is not new, but the findings of the studies which have been conducted to date have been contradictory.

According to Reiss (1985: 511) personality variables are undoubtedly the most "elusive" of all the learner variables that have been studied. Brodkey and Shore (1976: 153-162) found students' personality to be a strong predictor of good and poor language learning behaviour. Skehan (1989: 90-115), on the other hand, concludes that personality plays a much more minor role than LLSs. Busch's (1982: 109) hypothesis that extroverted students would be more proficient than introverted students was not supported. According to Brown (1987: 110), Busch's study was done in one culture with one group of learners, therefore, much more research is needed before conclusions can be drawn.

### 3. Method of research

#### 3.1 Subjects

The subjects of this study were all Afrikaans (native language) first year students at the Potchefstroom University in South Africa taking English as a second language. All the first year students taking ENG 111 (81 students) and ENG 112 (224 students) were included in the study. A total number of 305 students, ranging in age from 18 to 21 years, completed all the tests successfully. A total number of 179 females and 126 males took part in the study. ENG 111 refers to the more conventional academic English course, whereas ENG 112 refers to the more practical English course taken mostly by law students. Owing to the differences between ENG 111 and ENG 112 courses the subjects did not represent a homogeneous group. It was, therefore, possible to compare the two groups.

#### 3.2 Variables

The independent (predictor) variables are: Field Independence/Dependence (FI/D); Language Learning Strategies (LLSs) and Personality Type/Traits (PT). The dependent (criterion) variable in this study is English Second Language (ESL) proficiency.

#### 3.3 Instrumentation

Five paper-and-pencil instruments were used in this study:

- (1) The Gottschaldt Figures Test (GFT) for determining field independence/dependence,
- (2) The Strategy Inventory for Language Learning (SILL), a self-report survey of preferred language learning strategies,
- (3) The Jung Personality Questionnaire (JPQ) for personality type and,
- (4) The High School Personality Questionnaire (HSPQ) for a variety of personality traits.
- (5) The Test of English as a Foreign Language (TOEFL) for determining English Second Language (ESL) proficiency.

Each instrument can briefly be described as follows:

The Gottschaldt Figures Test is a test of analytical ability in which the student is required to find embedded figures in more complex diagrams. The student's ability to find the simple figures without becoming distracted by the complex figure indicates the extent to which he/she is field independent.

The SILL is a Likert-scaled, self-report instrument which assesses the frequency with which a respondent uses a variety of different strategies for learning a second language. A typical SILL item asks the respondent to indicate the frequency of use ("almost always" to "almost never", on a five-point scale) of a given strategy. The SILL is divided into six parts. Each part represents a group of strategies:

- Part A: Remembering more effectively (Memory strategies)
- Part B: Using all your mental processes (Cognitive strategies)

- Part C: Compensating for missing knowledge (Compensation strategies)
- Part D: Organizing and evaluating your learning (Metacognitive strategies)
- Part E: Managing your emotions (Affective strategies)
- Part F: Learning with others (Social strategies).

The JPQ was constructed in order to give a delineation of an individual's personality structure in terms of Jung's theory of personality. Jung's personality typology entails his concepts of the "attitudes" of extroversion and introversion and the psychological "functions" of thinking, feeling, sensing and intuiting.

The HSPQ includes all the more adequately research-demonstrated dimensions of personality from the general personality sphere. It aims at giving the maximum information in the shortest time about the greatest number of dimensions of personality. The test measures fourteen factorially independent personality dimensions.

The TOEFL test is an internationally administered, standardized, multiple-choice test. The purpose of the TOEFL test is to determine the English proficiency of people whose native language is not English. TOEFL contains 150 multiple-choice questions and requires about 105 minutes of testing time. The test consists of 3 sections that are separately timed: Listening comprehension, Structure and Written expression and Vocabulary and Reading comprehension.

#### 3.4 Data Collection Procedure

Data collection was conducted by the researcher, with the cooperation of teaching assistants at the English Department, who helped with the handing out of test material and with the maintenance of discipline. The tests for the predictor variables were group-administered during scheduled afternoon tutorial periods at the beginning of April 1991. The "predictor tests" were administered in the following order: GFT, HSPQ, SILL and the JPQ. The subjects received uniform instructions on how to fill out the various tests. The criterion test, TOEFL, was group-administered towards the end of June 1991.

#### 3.5 Design and Analysis

Correlational and multivariate research designs were used in this study. The data were analysed by means of SAS statistical programmes (SAS Institute Inc., 1988).

Pearson product-moment correlations were used to determine the direction and strength of the relationship between the predictor variables and the criterion variable. Canonical correlations were used to determine the relationship between the independent variables and the different sections of the TOEFL test which functioned as the dependent variable.

Cohen's effect size  $d$  was used to calculate the difference between two means. Cohen uses the following scale for the  $d$  values:

- Small effect – 0.2
- Medium effect – 0.5
- Large effect – 0.8

Cohen's (1977: 77-81) effect size  $r$  was used to calculate the correlation between two variables. Cohen uses the following scale for the  $r$  values:

- Small effect – 0.1
- Medium effect – 0.3
- Large effect – 0.5

Cohen's (1977: 223-227) effect size  $w$  was used to calculate the relationship between two "categorical" variables. Cohen uses the following scale for the  $w$  values:

- Small effect – 0.1
- Medium effect – 0.3
- Large effect – 0.5

Stepwise multiple regression analyses were also conducted to determine the most effective predictors of the criterion measure. A stepwise multiple regression analysis was conducted separately on each of the independent variables (those that allowed it), namely SILL, JPQ and the HSPQ, using the TOEFL score as the dependent variable. Finally, a stepwise multiple regression analysis was conducted using all the predictor variables and the TOEFL score as the criterion measure.

### 3.6 Discussion of Results

This section is devoted to the presentation and discussion of the analysed data. The aim with this section is to attempt to answer the following questions:

- Is there a statistically significant as well as a practically significant relationship between FI/D and ESL proficiency?
- Is there a statistically significant as well as a practically significant relationship between LLSs and ESL proficiency?
- Is there a statistically significant as well as a practically significant relationship between PT and ESL proficiency?
- Which independent variable(s) can be considered to be the most significant (statistically as well as practically) predictor(s) of ESL proficiency?

#### 3.6.1 Field independence/dependence

Pearson product-moment correlations were calculated to determine the direction and strength of the linear relationship between student FI/D, as measured by the GFT, and performance on the TOEFL test. The results appear in Table 1. The correlations between the GFT scores and the TOEFL scores (total and subparts) are all positive, but very low, though with the large number of students involved they are significant ( $p < .01$  and  $p < .05$ ). This finding is consistent with the extensive literature on relationships between measures of FI/D and scores from various language proficiency tests (cf. Bialystok – Fröhlich 1978; Naiman et al. 1978; Hansen – Stansfield 1981). Cohen's (1977: 77-81) effect size  $r$  also indicates that the correlation between FI/D and the TOEFL scores cannot be regarded as practically significant, because only a small effect size was established (cf. section 5.5; Table 1).

Table 1: Pearson Product-Moment Correlations between the Predictor Variables and the Criterion Measure.

Predictor Variables	Criterion Measure (TOEFL)											
	Total			Section 1			Section 2			Section 3		
	r	Significance		r	Significance		r	Significance		r	Significance	
GFT	0.15	**	+	0.11	*	+	0.14	**	+	0.15	**	+
JPQ	0.00			-0.00			0.04			-0.03		
(TF)	-0.08			-0.06			-0.08			-0.07		
(SN)	-0.02			-0.03			-0.04			0.01		
(JP)	0.01			0.05			0.01			-0.02		
SILL A	0.01			0.03			0.00			0.02		
B	0.23	****	+	0.20	***	+	0.22	****	+	0.22	****	+
C	0.20	***	+	0.16	**	+	0.12			0.30	****	+
D	0.62	****	+++	0.55	****	+++	0.54	****	+++	0.64	****	+++
E	0.14	**	+	0.16	**	+	0.09			0.15	**	+
F	0.09			0.08			0.09			0.08		
SILL Average	0.33	****	++	0.28	****	+	0.28	****	+	0.37	****	++
HSPQ A	0.09			0.04			0.11			0.06		
B	0.30	****	+	0.32	****	++	0.21	***	+	0.31	****	++
C	0.00			0.04			-0.00			-0.00		
D	0.03			0.00			0.03			0.03		
E	-0.04			-0.03			-0.04			-0.05		
F	-0.09			-0.12	*	+	-0.04			-0.12	*	+
G	0.08			0.11	*	+	0.04			0.10		
H	0.06			0.07			0.05			0.03		
I	0.18	***	+	0.17	**	+	0.13	**	+	0.21	***	+
J	0.08			0.07			0.02			0.15	**	+
O	0.06			0.02			0.07			0.08		
Q <sup>2</sup>	0.03			-0.02			-0.04			-0.03		
Q <sup>3</sup>	0.00			0.02			-0.01			-0.00		
Q <sup>4</sup>	-0.01			-0.04			0.00			-0.01		

#### Statistical Significance

- \*  $P < 0.05$
- \*\*  $P < 0.01$
- \*\*\*  $P < 0.001$
- \*\*\*\*  $P < 0.0001$

#### Practical Significance

- + Small Effect  $r = 0.1$
- ++ Medium Effect  $r = 0.3$
- +++ Large Effect  $r = 0.5$

One problem inherent in correlational analysis is that statistically significant correlations may be found when the observed association is actually rather weak. In this case, the existence of significant and positive correlations is interpreted as an indication that the cognitive restructuring abilities linked to FI are perhaps being utilized to promote successful performance on the TOEFL test (a higher GFT score indicates a relatively greater degree of FI). The results indicated that field independence was related to better performance on the TOEFL test,  $p < .05$  (cf. Table 2). The difference between the FI- and FD group was assessed by means of a t-test.

Table 2: Students FI/D and their Performance on the TOEFL Test

Predictor Variable	N	X	SD	Min.	Max.
GFT 6 (FI)	28	519.16	36.54	480.00	596.67
GFT (FD)	241	504.09	35.55	413.33	610.00

$p < .05$   $d = .41$

In section 2 it was mentioned that ENG 111 refers to the conventional academic English course. The content of this course is closely related to “classroom learning” that involves analysis and attention to detail. On the other hand, the ENG 112 practical course tends to focus more on natural communication. One of the aims of the course is to improve the communicative competence of the students, in order to equip them for their vocational choices (e.g., law). The results indicated that 19.11% of the students in the ENG 111 course were relatively field independent, whereas, only 7.4% of the students in the ENG 112 course were relatively field independent. This difference was significant,  $p < .01$ . However, it cannot be considered to be practically significant, because a small effect size was established ( $w = .16$ ) (cf. Table 3; section 5.5).

Table 3: The Number of FI and FD Students in ENG 111 and ENG 112

Course	N	FI	FD
ENG 111	68	13 (19.11%)*	55 (80.88%)
ENG 112	201	15 (7.46%)	186 (92.53%)

$p < .01$  \* $w = .16$

It, therefore, seems as if the students in the ENG 111 course have to have a certain degree of FI in order to successfully complete the various analytical tasks required in the course, whereas the cluster of characteristics associated with FD (cf. Naiman et al. 1978; Hansen – Stansfield 1981; Chapelle – Roberts 1986; Brown 1987) are required in the ENG 112 course where the focus is more on communicative ability.

### 3.6.2 Language learning strategies

Pearson product-moment correlations were calculated to determine the direction and strength of the relationship between the students’ LLS use and their ESL proficiency, as measured by the TOEFL test. The results appear in Table 1. The correlations between the SILL scores and the TOEFL scores were positive and highly significant. This finding is consistent with the literature that has investigated the relationship between LLS use and second language proficiency (cf. Bialystok 1981; O’Malley et al. 1985a; 1985b; Abraham – Vann 1987). The strongest correlation ( $r = .64$ ,  $p < .0001$ ) was obtained between SILL (D) (“organizing and evaluating your learning” – metacognitive strategies) (cf. section 5.3) and the vocabulary and reading comprehension section (section 3) of the TOEFL test. However, the correlations between SILL (D) and the total TOEFL score, as well as the other sub-sections of the TOEFL test, were all strong and highly significant (cf. Table 1). The next strongest relationship ( $r = .23$ ,  $p < .0001$ ) was found between SILL (B)

(“using your mental processes” – cognitive strategies) (cf. section 5.3) and the TOEFL test.

In addition to the Pearson product-moment correlations, canonical correlations were also computed to assess the relationship between language learning strategy use and ESL proficiency. A highly significant correlation of  $r = .73$ ,  $p < .0001$  was found. In addition to the significant correlations, Cohen’s (1977: 77-81) effect size  $r$  indicated that the correlation between LLS use and ESL proficiency was also practically significant, because in most cases a large effect size (cf. section 5.5; Table 1) was found. The correlations therefore indicate that the relationship between LLS use and ESL proficiency is significant as well as practically significant.

In order to assess the importance of the language learning strategy variable in view of other factors such as the students’ FI/D and their personality characteristics, a stepwise multiple regression analysis was done. A summary of the results is shown in Table 4. Approximately 45% of the total variance on the TOEFL test can be explained by language learning strategies. The strategy group “organizing and evaluating your learning” (SILL D), accounted for 41% of the total variance. As a result SILL D had a significant effect on ESL proficiency  $F = (1.303) = 211.80$ ,  $p < .0001$ . The only other variables which showed any effect on ESL proficiency were two personality traits (HSPQ B and JPQ SN) (cf. du Toit 1983; HSRC 1981), but the effect they had was negligible, because together they accounted for less than 1% of the total variance on the TOEFL test. In this study, the results seem to indicate that LLSs are the most significant predictors of ESL proficiency, especially strategies in the following groups: “organizing and evaluating your learning” (metacognitive), and “managing your emotions” (affective).

Table 4: Multiple Regression Analysis Using GFT, SILL, JPQ and HSPQ Scores as Predictors of ESL Proficiency

Criterion Measure	Step	Predictor Variable	Partial $R^2$	Multiple $R^2$	F-ratio	Significance (p)
TOTAL TOEFL SCORE	1	SILL (D)	0.411	0.411	$F = (1.303) = 211.81$	$P < 0.0001$
	2	SILL (E)	0.026	0.438	$F = (2.302) = 14.30$	$P < 0.001$
	3	SILL (F)	0.011	0.449	$F = (3.301) = 6.08$	$P < 0.01$
	4	HSPQ (B)	0.007	0.456	$F = (4.300) = 3.97$	$P < 0.05$
	5	JPQ (SN)	0.004	0.461	$F = (5.299) = 2.67$	$P = 0.10$
	6	SILL (B)	0.004	0.465	$F = (6.298) = 2.56$	$P = 0.11$
	7	SILL (A)	0.004	0.470	$F = (7.297) = 2.76$	$P = 0.09$

### 3.6.3 Personality types/traits

The rationale for investigating the role of personality in English second language learning was to establish whether certain personality types/traits might affect the ESL proficiency of Afrikaans first year students. In this study two personality questionnaires (the JPQ and the HSPQ) were used, in order to assess as many types/traits as possible, because of the multi-faceted nature of personality.

Pearson product-moment correlations were computed to determine the direction and strength of the relationship between various personality types/traits and ESL proficiency. The results appear in Table 1. The correlations between the JPQ

scores and the TOEFL scores were very small and none of the relationships were significant. The correlations between the HSPQ scores and the TOEFL scores were also low, but slightly better than those for the JPQ. The results indicated that factor B and factor I of the HSPQ had the strongest and also the most significant relationship ( $p < .0001$  and  $p < .01$ ) with ESL proficiency (cf. Table 1). This is consistent with findings in research literature (cf. Cattell et al. 1980). This means that only two out of the fourteen factors correlated significantly with ESL proficiency, and factor B is actually a cognitive component (i.e., intelligence) (cf. HSRC 1981).

In addition to the Pearson product-moment correlations, canonical correlations were also computed to assess the relationship between personality types/traits and ESL proficiency. A statistically non-significant correlation of  $r = .15$  was found between the JPQ scores and the TOEFL scores, whereas a significant correlations of  $r = .46$ ,  $p < .0001$  was found between the HSPQ scores and the TOEFL scores. Cohen's (1977: 77-81) effect size  $r$  indicated that the correlations between the HSPQ scores and the TOEFL scores only had a small or medium effect (cf. Table 1). Although a medium effect size was established it is important to bear in mind that a correlation of  $r = .46$  implies a common variance of 21% between the HSPQ scores and the TOEFL scores.

In order to determine the contribution of the HSPQ factors of predicting ESL proficiency a stepwise multiple regression analysis was done. The results appear in Table 5. From these results it is clear that factors B and I played an important role towards the prediction of ESL proficiency and that five factors of the HSPQ accounted for 13% of the total variance on ESL proficiency as determined by the TOEFL test.

Table 5: Stepwise Multiple Regression Analysis Using HSPQ Scores as Predictors of ESL Proficiency

Criterion Measure	Step	Predictor Variable	Partial $R^2$	Multiple $R^2$	F-ratio	Significance (p)
	1	HSPQ (B)	0.085	0.08	$F = (1.303) = 28.45$	$P < 0.0001$
TOTAL	2	HSPQ (L)	0.023	0.10	$F = (2.302) = 8.03$	$P < 0.01$
TOEFL	3	HSPQ (F)	0.007	0.11	$F = (3.301) = 2.51$	$P < 0.11$
SCORE	4	HSPQ (A)	0.011	0.12	$F = (4.300) = 3.92$	$P = 0.05$
	5	HSPQ (J)	0.008	0.13	$F = (5.299) = 3.01$	$P = 0.08$

### 3.7 Conclusion

That English second language learning is a complex process involving intricate interactions among a variety of variables is attested to by the results that have been presented in this study.

The results indicate that there is a "statistically significant" relationship ( $p < .05$ ) between FI/D, as measured by the GFT, and ESL proficiency, as measured by mean TOEFL scores, although the correlation between the independent variable and the criterion measure is rather small ( $r = .15$ ). Even though the relationship is statistically significant it "cannot" be regarded as "practically significant", because only a small effect size  $r$  was established (cf. section 3.5; Table 1).

There is a "statistically significant" relationship ( $r = .73$ ,  $p < .0001$ ) between LLSs, as measured by the SILL, and ESL proficiency, as measured by mean TOEFL scores. This relationship is also "practically significant", because a medium to a large effect size  $r$  was established (cf. section 3.5; Table 1).

There is a "statistically significant" relationship between a very small number of personality traits (HSPQ (B)  $r = .30$ ,  $p < .0001$ ; HSPQ (I)  $r = .18$ ,  $p < .001$ ), as measured by the HSPQ, and ESL proficiency, as measured by mean TOEFL scores. The relationship between the independent variables and the criterion measure "cannot" be regarded as "practically significant", because only a small effect size  $r$  was established (cf. section 3.5; Table 1). Although when considered on their own five HSPQ factors accounted for 13% of the total variance on the TOEFL test.

A stepwise multiple regression analysis indicated that LLSs accounted for approximately 45% of the total variance on the TOEFL test, while the other variables accounted for approximately 1% of the total variance on the TOEFL test.

These results can, therefore, have certain implications for second language teaching. For example, as teachers become more aware of the ways in which relatively FI and FD students learn concepts, they may become more effective in adapting instructional procedures to the needs of these different kinds of students. Some researchers (e.g., Birckbichler - Omaggio 1978: 336-344) have developed second language methods and materials to accommodate these differences, however, more research is needed to determine how these students should be taught. However, the association found between student FI/D and ESL proficiency, as well as the fact that the relationship was not practically significant, is perhaps not strong enough to merit the design of elaborate educational programmes focused solely on the individual variation in FI/D preference. The amount of work in such adaptations might not yield results commensurate with the effort.

The importance of LLSs in predicting ESL proficiency will necessarily have implications for teacher training. Intervention by the teacher could help less able students profit from the strategies used by more able students, and even the more able students could be provided with opportunities to refine and add to their language learning strategies so that they can become as efficient as possible. LLS was the only variable which had a statistically significant as well as a practically significant relationship with ESL proficiency. It seems as if the advantage of exploring the effects of these strategies is that they can presumably be taught to any English Second Language learner and thus modify his progress through their facilitative effects. The teaching and training of LLSs might, therefore, be an investment which is well worthwhile.

Although this study has produced significant relationships between some personality traits and ESL proficiency, these findings and lack of correlations, as well as practical significance, between other personality types/traits and ESL proficiency require further explanation and research. While there is no suggestion that certain personality characteristics are either a necessary or a sufficient condition for swift and successful second language learning, there is a possibility that personality characteristics may influence SLA indirectly as opposed to directly.

## REFERENCES

- Abraham, Roberta G. – Roberta J. Vann  
1987 "Strategies of two language learners: A case study", in: Anita Wenden – Joan Rubin (eds.).
- Bialystok, Ellen  
1981 "The role of conscious strategies in second language proficiency", *The Modern Language Journal* 65(1): 24-35.
- Bialystok, Ellen – Maria Fröhlich  
1978 "Variables of classroom achievement in second language learning", *The Modern Language Journal* 62(7): 327-336.
- Birckbichler, Diane – Alice Omaggio  
1978 "Diagnosing and responding to individual learner needs", *The Modern Language Journal* 62(7): 336-344.
- Brodkey, Dean – Howard Shore  
1976 "Student personality and success in an English language program", *Language Learning* 26(1): 153-162.
- Brown, Douglas H.  
1987 *Principles and practices in second language teaching and learning*. Rowley, Mass.: Newbury House.
- Busch, Deborah  
1982 "Introversion-Extraversion and the ESL proficiency of Japanese students", *Language Learning* 32(1): 109-132.
- Cattell, Raymond B. – Herbert W. Eber – Maurice M. Tutsuoka  
1980 *Handbook for the 16PF*. Champaign, Ill.: Institute for Personality and Ability Testing.
- Chapelle, Carol – Cheryl Roberts  
1986 "Field independence and ambiguity tolerance as predictors of proficiency in English as a second language", *Language Learning* 36(1): 27-46.
- Chastain, Kenneth  
1975 "Affective and ability factors in second language acquisition", *Language Learning* 25(1): 153-161.
- Cohen, Andrew D. – Edna Apek  
1981 "Easifying second language learning", *Studies in Second Language Acquisition* 3(2): 221-236.
- Cohen, Jacob  
1977 *Statistical power analysis for the behavioural sciences*. (Revised ed.). New York: Academic Press.
- Du Toit, Louwrens B.H.  
1983 *Handleiding vir die Jung Persoonlikheidsvraelys (JPV)*. Pretoria: RGN.
- Gardner, Robert C. – Wallace E. Lambert  
1972 *Attitudes and motivation in second language learning*. Rowley, Mass.: Newbury House.
- Gardner, Robert C. – Padric C. Smythe  
1975 "Motivation and second language acquisition", *The Canadian Modern Language Review* 21(2): 218-230.
- Gardner, Robert C., – Padric C. Smythe – G.R. Brunet  
1977 "Intensive second language study: Effects on attitudes, motivation and French achievement", *Language Learning* 27(2): 243-261.
- Guiora, Alexander Z. – Maria Paluszny – Benjamin Beit-Hallahmi – John C. Catford – Ralph E. Cooley – Cecelia Y. Dull  
1975 "Language and person studies in language behaviour" *Language Learning* 25(1): 43-61.

- Hansen, Jacqueline – Charles Stansfield  
1981 "The relationship of field dependent-independent cognitive styles and foreign language achievement", *Language Learning* 31(2): 349-367.
- 1982 "Student-teacher cognitive styles and foreign language achievement: A preliminary study", *The Modern Language Journal* 66(2): 263-273.
- Hosenfeld, Carol  
1979 "A learning-teaching view of second language instruction", *Foreign Language Annals* 12(1): 51-57. Human Sciences Research Council.
- 1981 *Manual for the JR-SR high school personality questionnaire (HSPQ)*. Pretoria: HSRC.
- Naiman, Neil – Maria Fröhlich – H.H. (David) Stern – Angela Todesco  
1978 *The good language learner*. Toronto: Ontario Institute for Studies in Education.
- O'Malley, Michael J. – Anna Uhl Chamot  
1990 *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.
- O'Malley, Michael J. – Anna Uhl Chamot – Gloria Stewner-Manzanares – Lisa Kupper – Rocco Russo  
1985a "Learning strategies used by beginning and intermediate ESL students", *Language Learning* 35(1): 21-46.
- 1985b "Learning strategy applications of students of English as a second language", *TESOL Quarterly* 19(4): 557-584.
- Oxford, Rebecca L.  
1989 "Use of language learning strategies: A synthesis of studies with implications for strategy training", *System* 17(2): 235-247.
- Oxford, Rebecca L.  
1990 *Language learning strategies: What every teacher should know*. New York: Harper Collins.
- Reid, Joy M.  
1987 "The learning style preferences of ESL students", *TESOL Quarterly* 21(1): 87-111.
- Reiss, Mary Ann  
1985 "The good language learner: Another look", *The Canadian Modern Language Review* 65(2): 121-128.
- 1988 *SAS/STAT User's Guide*. Release 6.03 ed. Cary, NC.: SAS Institute Inc.
- Skehan, Peter  
1989 *Individual differences in second language learning*. London: Edward Arnold.
- Skehan, Peter  
1991 "Individual differences in second language learning", *Studies in Second Language Acquisition* 13(2): 275-298.
- Wenden, Anita  
1983 "Literature review: The process of intervention", *Language Learning* 33(1): 103-121.
- 1986a "Helping language learners think about learning", *English Language Teaching Journal* 40(1): 3-12
- 1986b "What do second language learners know about their learning? A second look at retrospective accounts", *Applied Linguistics* 7(2): 186-205.
- Wenden, Anita – Joan Rubin (eds.)  
1987 *Learner strategies in language learning*. Englewood Cliffs, NY.: Prentice-Hall.
- Witkin, Herman A. – Carol Ann Moore – Donald R. Goodenough – Patricia W. Cox  
1977 "Field dependent and field independent cognitive styles and their educational implications", *Review of Educational Research* 47(1): 1-64.
- Witkin, Herman A. – Carol Ann Moore – Philip K. Oltman – Donald R. Goodenough – Florence Friedman  
1977 "Role of the field dependent and field independent cognitive styles in academic evolution: A longitudinal study", *Journal of Educational Psychology* 69(3): 197-211.