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## ABSTRACT

The relationship between both extraversion/introversion and gender to the pronunciation accuracy of English as a foreign language was examined. Instruments for this study included a specifically developed introversion scale and an English language pronunciation accuracy test. Subjects were third-year English language specialists. It was found that: (1) extroversion/introversion positively correlated with English pronunciation accuracy among Arabic speaking Egyptian college students; (2) male students outperformed female students in their performance of the pronunciation accuracy test; (3) extroverted students were more accurate in their English language pronunciation than introverted ones. Overall, this study has provided further evidence relating extraversion/introversion to better language learning, because it was found to be a significant predictor of pronunciation accuracy in English. However, the small and unscientific sample limits the study's scope for generalization. Several data-rich tables are provided throughout the text. "English Pronunciation Accuracy Form" in English and Arabic is included in appendices, as is an "Extraversion/Introversion: Social Characteristics and Learning Preferences" matrix. (Contains 53 references.) (KFT)

## ABSTRACT

# Extraversion/Introversion and Gender in Relation to the English Pronunciation Accuracy of Arabic Speaking College Students

By

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The relationship between both extraversion/introversion and gender to the pronunciation accuracy in English as a foreign language was examined. Instruments for this study included a specifically developed Extraversion Scale and an English Language Pronunciation Accuracy Test. Subjects were third year English language specialists.

Major findings obtained from this study indicated that:

- (a) Extraversion/introversion positively correlated with English pronunciation accuracy among Arabic speaking Egyptian college students,
- (b) Male students outperformed their female counterparts in their performance on the Pronunciation Accuracy Test, and
- (c) Extraverted students were more accurate in their English language pronunciation than introverted ones.

Overall, this study has provided further evidence relating extraversion/introversion to better language learning since it was found to be a significant predictor of pronunciation accuracy in English. It is felt that this study has made some important contributions toward a better understanding of extraversion/introversion personality variable in its relationship to some learning outcomes (e.g., pronunciation accuracy). However, conclusions from this study are, of course, restricted due to certain limitations that are inherent in a study of this nature especially the small number of male subjects. Consequently, the findings cannot be considered ultimate answers to the acquisition and testing of foreign language pronunciation. Finally, it is recommended that this study be replicated using a more representative sample size of male students.

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## INTRODUCTION:

Personality is considered important to language learning because it influences the way people learn and what they learn (*McCaulley and Natter, 1980; Myers and Myers, 1980*). The possible relationship between personality and language learning has been studied a number of times (*e.g., Brodkey and Shore, 1976; Boylan, 1978; Gayle, 1981; Ely, 1988, etc.*). These studies have tried to associate between certain personality variables and certain aspects of language learning and teaching. Among these variables that have been investigated are field dependence/independence (*e.g., Hansen and Stansfield, 1981; Hassan, 1988; Chapelle and Green, 1992*), ambiguity tolerance (*e.g., Chapelle and Roberts, 1986*), reflection/impulsivity (*e.g., Jamieson, 1992*), and extraversion/introversion (*e.g., Busch, 1982; Kasper, 1995*).

The theory of extraversion-introversion comes from the work of Hans Eysenck (*Morris, 1979*) who contends that the basic difference between extraverts and introverts is biological, rooted in the reticular activating system of the brain. This system, which monitors incoming neural impulses resulting from environmental stimulation, controls the arousal level of the cortex of the brain. Introverts are held to have higher levels of cortical arousal compared with extraverts. These different arousal levels cause introverts and extraverts to have different behavioral and attitudinal preferences and tendencies. Assuming that both groups function best at a moderate level of arousal, extraverts tend to seek stimulation from the environment to increase arousal level while introverts attempt to seek a reduction of stimulation.

The behavioral differences are such that extraverts seek out the presence of other persons, enjoy social activities and talking, tend to act

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aggressively and impulsively, and crave excitement. On the other hand, introverts learn social inhibitions since social situations are most likely to be overstimulating for them. They tend to be introspective, reserved, unimpulsive, unaggressive, and prefer reading to talking to people (*Eysenck and Eysenck, 1968*). According to *Moody (1988)*, extraverts tend to be outgoing. Their interests flow exuberantly to the outer world of actions, objects, and persons. In contrast, introverts are more restrained, focusing mainly on the inner world of concepts and ideas. (See Appendix C).

Extraversion vs. introversion is a significant dimension of style that particularly influences classroom management, especially grouping of students (*Oxford and Anderson, 1995*). Extraverted learners gain their energy and focus from events and people outside of themselves. They enjoy a breadth of interest and many friends, and they like group work. Extraverted students enjoy English conversation, role plays and other highly interactive activities. Introverted learners, on the other hand, are stimulated most by their own inner world of ideas and feelings. Their interests are deep, and they have fewer friendships than extraverted students (but often strong ones). They prefer to work alone or else in pair with someone they know well, they dislike lots of continuous group work in the language classroom. With introverted students, it is often useful to employ the 'think-pair-share' sequence, in which the student gradually eases into group work (*Oxford and Anderson, 1995*).

Extraversion is a desirable behavior particularly in Western societies (*Brown, 1973*). The outgoing, amiable, talkative personality tends to be held up as axiomatically ideal. This valuing over introversion carries over to the language classroom as well. Quiet, reserved personalities are treated in such societies as 'problems,' and language teachers seek ways of

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encouraging extraversion. The syndrome is further complicated, according to *Brown (1994)*, by the tendency in modern language teaching to emphasize speaking in the classroom with all too little emphasis on aural comprehension.

Crosscultural studies report that Arabic-speaking students are typically very gregarious, overtly verbal and interested in a whole-class, extraverted mode of instruction. They also want their teacher to be an authority figure but expect personal kindness from the teacher at the same time (*Harshbarger et al., 1986; Willing, 1988*).

## RELATED LITERATURE:

### (A) Extraversion / Introversion :

Some studies have investigated the possible relationship between extraversion/introversion and second language learning. Following is a review of these studies.

*Rossier (1975)* attempted to determine whether introversion/extraversion was a significant variable in the learning of English as a second language by Spanish speaking high school students in the United States. A positive correlation was found between extraversion and oral English fluency as judged by three raters when variables representing the written aspects of English and the length of stay in the United States were controlled.

*Chastain (1975)* found that an outgoing personality, a major trait of extraverted people, was one of the factors most significantly related to the final course grade of American students studying French, German, and Spanish in high school.

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*Seliger (1977)* relied on classroom observation to determine levels of extraversion-introversion. In order to test the hypothesis that students who initiate language interactions (High Input Generators, or HIGs) are higher achievers in second language (L2) learning. Seliger devised an experiment in which six students were observed in a classroom situation. He found that the HIGs scored significantly higher than the Low Input Generators (LIGs--students who are passive in language interaction situations) and that the HIGs had more contact with the L2 outside of the classroom. Thus, he concluded, active learners who utilize all opportunities--both formal and informal -- tend to learn the L2 at a faster rate.

Using the Eysenck Personality Inventory to measure the extraversion-introversion tendencies of junior and senior high school students, *Naiman, Frohlich, Stern, and Todesco (1978)* found no significant correlations between extraversion and L2 proficiency as measured by a battery of standardized tests. They did, however, find that certain types of extraverted behavior, such as calling out answers and handraising, correlated positively with L2 proficiency.

*Busch (1982)* explored the relationship between the extraversion-introversion tendencies of Japanese students and their proficiency in English as a foreign language (EFL). It was hypothesized that in an EFL situation, extraverted students would attain a higher proficiency in English because they may take advantage of the few available opportunities to receive input in the language. To test the hypothesis that extraverts are more proficient in English, 80 junior college English students and 105 adult school English students took a standardized English test and completed a form. In addition, 45 of the junior college students participated in English oral interviews which were then rated for proficiency by two evaluators.

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The hypothesis that extraverts are more proficient in English was not supported. Statistical analysis revealed that extraversion had a significant negative correlation with pronunciation, a subcomponent of the oral interview test. In addition, introverts tended to have higher scores on the reading and grammar components of the standardized English test. Even though introverts tended to score better on most of the English proficiency measures, it was found that junior college Japanese males who had tendencies towards extraversion had higher oral interview scores, except for the pronunciation subcomponent of this oral interview measure.

In his empirical study of 21 Dutch-speaking university students learning French, *Dewaele, 1993* (cited in *Johnstone, 1994*) found that in a formal context the oral discourse of introverted speakers was richer than that of extraverts. All students were at a fairly advanced level of French having studied it for at least six years pre-university. He found that the stress and anxiety felt by the introverted learners led them to produce a discourse that was delivered more slowly but that was richer in vocabulary.

More recently, *Kim (1998)* investigated the relationship between some personality variables (including extraversion- introversion) measured in the Murphy-Meisgeier Type Indicator (MMTIC) for Children and EFL proficiency of Korean elementary school children measured in the Level Test with a consideration of other independent variables, such as grade and gender. Contrary to the prior research with adult foreign language learners using the MBTI measure, the results of this study did not show any significant main effect of personality variables. Yet the interaction between Extraversion/Introversion and the grade of the students was significant at the 0.10 significance level. The findings reveal the need for the consideration of the disadvantaged students due to their personality differences.

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In summary, several conclusions can be drawn from the above-reported studies: Firstly, two studies (*Naiman et al., 1978, and Busch, 1982*) did not establish any significant correlation between extraversion and second language proficiency. Secondly, both *Chastain (1975) and Seliger (1977)* found out that extraverted learners do better on final course grade and exam respectively. Thirdly, although *Rossier (1975)* found a positive correlation between extraversion and oral English proficiency, *Busch (1982)* reported that extraversion correlated negatively with the pronunciation subcomponent of the oral interview test. This last finding, indicating that extraverts do poorly on pronunciation, needs to be further investigated to find out if it is a recurring pattern which is characteristic of extraverts or is it merely a one-time event that is less likely to occur again? Finally, *Busch's (1982)* findings, again, as related to gender, indicate that extraverted males (and not females) had higher oral interview scores, except for the pronunciation subcomponent of this oral interview measure. This raises the question of whether student gender has a role to play in attaining a certain accuracy level in students' pronunciation of English as foreign language. Hence, 'gender' and 'pronunciation' variables deserve to be discussed in the following two sections.

#### (B) Gender :

Some studies in L2 acquisition have focused on gender (which is 'socially constructed' as opposed to 'sex' which is 'biological') as an explanation for individual differences when learning, acquiring a second or a foreign language.

*Walker and Perry (1978)* reported that gender was not found to be a significant learner characteristic among 18 to 22 year old French-speaking Canadians learning English. *Carroll (1967)* found no difference in foreign

language achievement between male and female college-level students majoring in foreign languages. However, another study conducted by *Carroll and Sapon, 1959* (cited in *Carroll, 1967*) has shown girls to have a slight foreign language superiority over boys in grades kindergarten to 12.

More recently, *Ehrman and Oxford (1990)* found no significant differences in language performance relating to gender. Exploring gender differences in text comprehension, *Bugel and Buunk (1996)* reported that in the final examinations at the end of schooling in Holland, scores by female students in English reading comprehension were slightly but consistently lower than those of male students. Finally, after a brief account of gender and language learning, *Bailly, 1993* (cited in *Johnstone, 1994*) concludes that girls are not verbally superior as might be expected, and favours social cultural explanations in order to account for girls' great access to language and foreign language competence.

Some other studies, on the other hand, report the superiority of females over males in language learning. For example, *Asher and Garcia (1969)* report that females tend to have an initial advantage over males when acquiring target language pronunciation. *Farhady (1982)* reports some evidence suggesting that females are better than males in listening comprehension tasks. *Boyle (1985)* concludes that females are typically superior to males in all aspects of language learning, except listening vocabulary. Finally, *Larsen-Freeman and Long (1991)* have speculated that females, when compared to males, tend to be superior language learners.

It can be seen from the above-reviewed studies that there is some conflicting evidence regarding male vs. female competence in the different aspects of language learning including the target language pronunciation

(*Asher and Garcia, 1969*). This leads us to the final section on pronunciation.

### (C) Pronunciation :

Pronunciation instruction is generally overlooked in English language classes. Even with the popularity of language laboratories where there is more emphasis on listening comprehension of some situational dialogues, pronunciation does not receive its due attention. Some researchers have referred to this problem in their writing. For example, *Tarone (1978)* affirms that there is lack of emphasis on pronunciation development. *Pennington and Richards (1986)* maintain that pronunciation is regarded as having limited importance in a communicatively-oriented curriculum.

Recently, there has been a resurgence of interest in the teaching of pronunciation with adult second language learners, as evidenced by numerous survey articles and research reports appearing in a number of major publications (*Avery and Erlich, 1987; Leather, 1983; Morley, 1987; Pennington and Richards, 1986*).

Some of these studies tried to relate pronunciation to some personality variables such as field independence and hemispheric preference. For example, *Elliott (1995)* examined 12 variables believed to be related to pronunciation accuracy of sixty-six intermediate students studying Spanish at Indiana University. Variables that related most to pronunciation were: a) attitudes or individual concern for pronunciation; b) subject's degree of field independence (FI), and c) subject's degree of right hemispheric specialization (RT) in relation to accurate pronunciation on a free-speech exercise. Results suggest that although FI and RT hemispheric

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specialization relate to accurate target language pronunciation in certain tasks, attitude or concern for pronunciation accuracy proved to be the most significant factor. Finally, in an attempt to investigate the predictors of pronunciation accuracy in second language learning, *Suter (1976)* found that students' attitudes were important in this regard. Suter concluded that students who were more concerned about their pronunciation did in fact have a better pronunciation of English as a second language.

It is noteworthy from the above-sections that although some studies have tried to relate 'extraversion/introversion' to language learning and more specifically to the oral skills, none has ventured to establish its relationship to pronunciation accuracy which makes the difference between a good teacher and a bad one.

#### NEED FOR THE STUDY :

After reviewing some studies investigating the possible relationship of extraversion/introversion to certain aspects of language learning and teaching, *Brown (1994)* concludes that " it is not clear then, that extraversion or introversion helps or hinders the process of second language acquisition" (p. 146). Then, he joins *Skehan (1989)* in asserting the dire need to conduct much more research before any conclusions can be drawn.

Bearing in mind that some personality variables such as field independence and right hemispheric preference (*Elliott, 1995*) have been linked to pronunciation accuracy of language learning, it would seem justifiable to further investigate the possible relationship between another personality variable, namely, extraversion/introversion and English pronunciation accuracy in an Arabic speaking foreign language

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environment especially when cross-cultural studies report that Arabic-speaking students are very gregarious, overtly verbal and interested in a whole-class, extraverted mode of instruction (*Harshbarger et al., 1986; Willing, 1988*) and that Arabic students generally have certain problems in their pronunciation of the English language (*Wahba, 1998*).

To the best of this researcher's knowledge, no previous work has attempted to relate extraversion-introversion and gender to the 'pronunciation accuracy' subcomponent of the oral proficiency in English as a foreign language among Arabic speaking college students.

### **PURPOSE OF THE STUDY :**

The purpose of this study was to investigate the possible relationship between 'extraversion/introversion' and 'gender' of Arabic-speaking college students to the 'pronunciation accuracy' subcomponent of their oral proficiency in English as a foreign language.

More specifically, this study will attempt to answer the following questions:

- (1) Is there a relationship between extraversion/introversion and English pronunciation accuracy of students?
- (2) Which style will be dominant for this sample?
- (3) Is there a difference between male and female students in their pronunciation accuracy scores?
- (4) Is there a difference between extraverted and introverted students in their extraversion/introversion scores?
- (5) Is there a difference between male and female students in their extraversion/introversion scores?

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- (6) Is there any interaction between 'gender' of students and their extraversion/introversion personality variable in their English pronunciation accuracy scores?

### **HYPOTHESES :**

- (1) There is a significant relationship between extraversion/introversion and English pronunciation accuracy of students.
- (2) Most students will tend to fall within the extraverted mode.
- (3) Female students will tend to be more accurate in their pronunciation than their male counterparts.
- (4) Extraverts will tend to be less accurate in their pronunciation than introverts.
- (5) Female students will tend to be less extraverted than their male counterparts.
- (6) There are no significant interactions between 'gender' of students and their extraversion/introversion personality variable in their English pronunciation accuracy scores.

### **SUBJECTS :**

Seventy-one third year students (16 males and 55 females) enrolled at the English Department, College of Education, Mansoura University participated in this study during their English Language Laboratory hours and during their regular class sessions.

### **INSTRUMENTS :**

#### **(1) The Extraversion Scale :**

Based on previous research on extraversion/introversion (*e.g.*, *Eysenck and Eysenck, 1968; Myers and McCaulley, 1985; Oxford, 1993*),

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the Extraversion Scale was specifically prepared to measure individuals' levels of impulsivity and sociability, as these two factors are believed to be, according to *Eysenck and Eysenck (1968)*, the main subcomponents of extraversion.

Following a 3-point Likert scale format, the Extraversion Scale (Appendix A) is made up of 10 statements to which students have to respond indicating their agreement/disagreement. Possible scores on the scale range from 10 to 30. For this study sample, scores ranged from 10 to 26.

## (2) The English Pronunciation Accuracy Form :

After reviewing pertinent literature on language testing especially in the area of testing the oral language (*Sollenberger, 1978; Educational Testing Service, 1985; American Council on the Teaching of Foreign Languages, 1986; Hughes, 1989; Royal Society of Arts Examination Board, n.d.*), the English Pronunciation Accuracy Form (Appendix B) was prepared.

This form is made up of six statements describing the different levels of accuracy in the English language pronunciation. Raters were asked to put a score for each student ranging from 1 to 6.

## PROCEDURE :

- (1) Subjects were administered the Extraversion Scale in one class session. Instructions for the scale made it clear for students that there were no right or wrong answers to the scale statements and that they need to express their degree of agreement/ disagreement with the statements based only on the way they felt. They were also asked to respond to the

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statements promptly and not to spend a long time on reading the statements.

- (2) Once students had completed the scale, their answers were recodified. Each response was given a value of 1 through 3, so that a 3 indicates the highest level of extraversion per item.
- (3) The English Pronunciation Accuracy Form was administered with the help of two language instructors close to the end of the 1998 Fall semester in the English Language Laboratories at the College of Education, Mansoura University. The testing sessions took the form of an oral interview where students were required to talk for about five minutes about their home town/village or give some general information about the College of Education. Based on the specific instructions detailed in the form and describing English pronunciation accuracy in terms of phonemes, stress, and intonation patterns, the two language instructors (who are M.A. candidates and with average teaching experience of 5 years) put a holistic score ranging from 1 to 6, with 6 indicating the highest level of accuracy in English language pronunciation. The judges'/raters' scores were analyzed statistically to determine their interrater reliability. The reliability coefficient obtained ranged from 0.84 - 0.85, indicating a high degree of agreement among the individual judges' ratings per subject.
- (4) It was the initial intention of the researcher to include a larger number of subjects in the study. However, due to some practical problems, this was not possible.

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## RESULTS AND DISCUSSIONS :

Results of the study will be reported according to the research hypotheses. A series of statistical analyses were computed using the SPSS/PC+ Statistical Software Program.

### (1) Descriptive Statistics Results :

Table (1)  
Descriptive Statistics for the Different Variables of the study

Variable	N	$\bar{X}$	SD	Min.	Max.
Extraversion	71	17.65	3.76	10	26
Pronunciation	71	3.08	1.36	1	5

Table 1 summarizes the descriptive statistics for the study sample (N=71) on both the Extraversion Scale and the English Pronunciation Accuracy Test. Bearing in mind that the highest obtainable scores on the two instruments are 30 and 6 respectively, it can be noted that the study sample scored above the mean in the two cases.

### (2) Pearson Product-Moment Correlations :

Table (2)  
Correlations Between Extraversion/Introversion and  
English Pronunciation Accuracy (N=71)

Variables	r	p*
Extraversion/introversion Pronunciation accuracy	0.25	0.05

\*  $p < 0.05 = .19$

Table 2 shows that the extraversion-introversion personality variable and the English pronunciation accuracy among EFL Arabic speaking college students are related at the 0.05 level of significance ( $r=.25$ ). This result means that as students tend to score high on the Extraversion Scale, they tend to be more accurate in their English language pronunciation. Thus, the first research hypothesis is upheld.

For the purpose of further statistical analysis, the continuous scores of the Extraversion Scale were classified into ordinal scores, thus yielding two groups (one high and another low): students obtaining high scores on the Extraversion Scale [labeled as Extraverts (N=24) hereafter] and others obtaining low scores [labeled as Introverts (N=21) hereafter]. The following equation (*EL-Sayyed, 1978*) was used to conduct the classification: Mean ( $\bar{X}$ )  $\pm$  0.5 of the Standard Deviation (SD). The cutting point for Extraverts was greater than or equal to the score 12 on the Extraversion Scale and it was 8 for Introverts.

### (3) Chi-Square Test

Table (3)  
Chi-Square Test Results

Group	N	DF	Chi-Square	P
Extraverts	24	1	0.20	NS
Introverts	21			

Table 3 reports the chi-square test results for both Extraverts and Introverts. It indicates that although Extraverts outnumbered Introverts, the

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chi-square value is not statistically significant. Thus, the second research hypothesis (stating that most students will tend to fall within the extraverted mode) can be rejected.

This finding is in contradiction with other research findings reported by *Harshbarger et al., 1986; and Willing, 1988*. For cross-cultural comparisons, it is worth mentioning that the extraversion vs. introversion figures that are used for the US population at large are approximately 75% extraverted, 25% introverted (*Ehrman and Oxford, 1989*).

**(4) T-test Results :**

**Table (4)**  
**A Comparison of Male and Female Students'**  
**Mean Scores on the English Pronunciation Accuracy Test**

Group	N	$\bar{X}$	SD	T	P
Males	16	3.75	1.27	2.07	0.05
Females	55	2.96	1.37		

Table 4 reports the means and standard deviations for both male and female students on the English Pronunciation Accuracy Test. While the mean score for male students was 3.75 with a standard deviation of 1.27, the mean score for female students was 2.96 with a standard deviation of 1.37.

The results shown in Table 4 indicate that the mean score difference between the two groups is statistically significant ( $t=2.07, p<0.05$ ) in favor of male students. This leads to the retention of the third research hypothesis. This result means that male students outperformed their female counterparts on the English Pronunciation Accuracy Test.

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This finding was not expected and is not in line with other research findings reported by *Asher and Garcia (1969)* indicating that females are more accurate in their pronunciation than female students. Still, this finding agrees with similar findings reported by *Busch (1982)* indicating that Japanese males are more accurate in their pronunciation than Japanese female students.

This researcher hesitates to draw conclusions from this finding because of the fact that the sample size of males was small, only 16 subjects, compared to 55 females.

**Table (5)**  
**A Comparison of Extraverted and Introverted Students'**  
**Mean Scores on the English Pronunciation Accuracy Test**

Group	N	$\bar{X}$	SD	T	P
Extraverts	24	3.58	1.35	2.02	0.05
Introverts	21	3.05	1.28		

The means and standard deviations of both Extraverts and Introverts on the English Pronunciation Accuracy Test are reported in Table 5. The mean score of Extraverts was 3.85 with a standard deviation of 1.35 and that of Introverts was 3.05 with a standard deviation of 1.28.

Results indicate that the mean score difference between the two groups is statistically significant at the 0.05 level. This leads to the rejection of the fourth research hypothesis (stating that Extraverts will tend to be less accurate in their pronunciation than Introverts).

This finding continues to repeat the same trend observed earlier from Table 2 indicating that extraversion was associated with more accurate

pronunciation. This finding is opposite to the findings obtained by *Busch (1982)* who reports a negative correlation ( $r = -0.38, p < 0.009$ ) between extraversion and the pronunciation subcomponent of her oral interview test.

This finding may be consistent with the extraversion- introversion theory proposed by Eysenck (*Morris, 1979*) in the sense that extraverts being more sociable, they are more fluent in social interaction in the foreign language class (and may be more accurate in their acquisition of the target language pronunciation) than introverts who might be afraid to initiate interaction inside the class with their teacher and their fellow classmates.

**Table (6)**  
**A Comparison of Male and Female**  
**Students' Mean Scores on the Extraversion Scale**

Group	N	$\bar{X}$	SD	T	P
Males	16	17.69	2.70	0.15	NS
Females	55	17.64	4.04		

Table 6 reports the means and standard deviations for both male and female students in their performance on the Extraversion Scale.

It is noteworthy that the mean score difference between male and female students is minor. It must be noted also that the calculated t-test value ( $t=.15$ ) is very small and is not statistically significant at the 0.05 level. This leads to the rejection of the fifth research hypothesis (stating that female students will tend to be less extraverted than their male counterparts). This result corresponds to a similar result obtained by *Busch (1982)* when she reported that the mean extraversion scores for males and females were almost identical and no significant differences were found.

This finding was not expected since in a traditional Arabic cultural background, which is a paternal type of culture, males tend to exhibit more extraversion than females. One possible explanation for this finding could be that over the past few years females, and not males, form the overwhelming majority of the student population of many university colleges in Egypt including the College of Education, Mansoura University. Thus, EFL classrooms are in a sense female-dominated. Always occupying the front seats, females tend to play the rules of the game to their own advantage in terms of steering classroom discussions and voicing their opinions freely without any inhibitions on their part. Another possible contributing factor could be the level of university education students have reached may have caused female students to become more assertive and thus become not afraid to initiate interaction in a formal EFL classroom setting.

(5) Analysis of Variance Results :

Table (7)  
Analysis of Variance of Pronunciation Accuracy  
According to Gender and Extraversion (N=71)

SV	SS	DF	MS	F	P
Main Effects	7.04	2	3.52	2.07	NS
Gender	3.31	1	3.31	1.95	NS
Extraversion	3.23	1	3.23	1.90	NS
2-way Interactions	1.52	1	1.52	0.89	NS
Gender X Extraversion	1.52	1	1.52	0.89	NS
Explained	8.56	3	2.85	1.68	NS
Residual	69.75	41	1.70		
Total	78.31	44	1.78		

Results, given in Table 7, indicate a non-significant main effect for both extraversion-introversion and gender independent variables in student performance on the English Pronunciation Accuracy Test. Similar non-significant results were obtained for the 2-way interactions for the same variables. Thus, the sixth research hypothesis can be retained.

## **CONCLUSIONS AND RECOMMENDATIONS :**

Major findings obtained from this study indicate that: a) extraversion/introversion positively correlated with English pronunciation accuracy among Arabic speaking Egyptian college students, b) male students outperformed their female counterparts in their performance on the English Pronunciation Accuracy Test, and c) extraverted students were more accurate in their English language pronunciation than introverted ones.

Overall, this study has provided further evidence relating extraversion/introversion to better language learning since it was found to be a significant predictor of pronunciation accuracy in English. Thus, it is felt that this study has made some important contributions toward a better understanding of the extraversion/ introversion personality variable in its relationship to some learning outcomes (i.e., pronunciation accuracy in learning English as a foreign language).

Bearing these findings in mind, pronunciation instructors need, for example, to evaluate the effect of grouping their students (according to extraversion/introversion and gender) and allow for a variety of classroom procedures and/or arrangements that can best suit the needs of students belonging to the different groups. While acknowledging that teacher resources in tailoring instruction to different personality variables (e.g., extraversion vs. introversion) tend to be limited, teachers may, for instance, be able to place students in several different groups during portions of the

class period. In larger classes where it is difficult to work with more than one group at a time, teachers can have one or two of the better students in the class assist with a group.

Since the ultimate purpose of optimal matching of students to classroom activities is to achieve progress and growth on the part of the students, teachers could attempt to encourage the desired personality variable(s) (i.e. extraversion) in pronunciation instruction classes by attempting to reduce, for example, the causes for student introversion inside the classroom (such as being afraid of venturing less than a 100% correct answer.) Thus, by carefully considering the personality variables that characterize foreign language learners and attempting to modify their teaching practices accordingly, teachers may find their EFL students participating in language learning activities with increased enthusiasm and enjoyment.

This study may be considered a further addition to the existing bulk of literature emphasizing the individuality of the learner (e.g., extravert vs. introvert and male vs. female), stressing the need to appreciate and respect individual differences, and advocating the importance of making any necessary adjustments in our teaching styles and evaluation practices.

If EFL educators in Egypt are to help students become more competent and proficient language learners, they need to give them the attention that is necessary for their various personality variables. Also, instructors will be at an advantage when planning strategies for classroom use in the different aspects of teaching the language including pronunciation instruction. This way, they will save time by using specific and adequate strategies within a classroom that addresses the different personality variables of students present.

Formal pronunciation instruction in language courses can be designed in such a way so that it will cater for the different individual differences of language learners. The methodology of these courses could teach concrete rules about point, place, and manner of articulation, provide students with ample drill and practice exercises, give immediate feedback in order to prevent phonological fossilization, and design class presentations on pronunciation that appeal to all learning styles and preferences.

By varying their modes of pronunciation instruction (e.g., aural, oral, verbal, visual, deductive, or inductive) in the classroom, teachers can appeal to the distinct learning styles of their students whereby student chances for successful mastery of the nonnative phonological system can be increased. The implication here is: a variety of instructional techniques should be employed in the classroom in order to appeal to all cognitive styles, learning preferences, and personality variables.

It is noteworthy in this regard that pronunciation instruction requires close interaction between teacher and students, difficult if not impossible to achieve in a typical university classroom. However, it is possible to get feedback from a large number of students and enhance their motivation for and interest in English pronunciation and phonetics by applying some less traditional techniques and tasks such as: phoneme cards, pronunciation-based quiz games, using materials prepared by the students, and encouraging students' reports on various aspects of pronunciation and phonetics.

Contributing in the same direction of improving pronunciation instruction are other techniques such as slowed-down speech that could be

alternatively used by both teachers and their students. Teachers in 'Phonetics Labs' can slow down their speech especially when introducing new language utterances for the first time so that their students can listen to the differences existing between different sounds, stresses, and intonation patterns. Similarly, EFL students can improve their own pronunciation by pausing more frequently and slowing down their articulation, particularly on stressed syllables. This not only helps overall rhythm and intelligibility, it can also be useful in mastering certain difficult consonants and consonant clusters. Using also a variety of exercises (such as: spelling association games, student-generated word lists, visual identification drills, phrase and sentence drills, etc...) to meet the different personality needs of the individual students is highly recommendable.

The effect of various teaching methods and techniques on both extraverted and introverted students' EFL proficiency is a research point for another study to be undertaken. More specifically, the facilitating or interfering effects of certain methods (incorporating drama, pantomime, humor, role plays, etc...) that invoke extraversion need to be carefully considered.

Conclusions from this research are, of course, restricted due to certain limitations that are inherent in a study of this nature especially the small number of male subjects. Consequently, these findings cannot be considered ultimate answers to the acquisition and testing of foreign language pronunciation.

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**APPENDIX A**  
**THE EXTRAVERSION SCALE**

غير موافق	متعدد	موافق	العبارة
			<p>(١) من عادتي أن أقول وأعمل بسرعة دون توقف للتفكير.</p> <p>(٢) أفضل القراءة والإطلاع على التحدث مع الآخرين بصفة عامة.</p> <p>(٣) أتوقف وأفكر كثيرا قبل الإقدام على عمل أى شىء.</p> <p>(٤) أحب الخروج من المنزل كثيرا.</p> <p>(٥) يعتقد الآخرون أنني نشيط جدا وحيوى للغاية.</p> <p>(٦) يغلب على الهدوء عندما أكون مع الآخرين.</p> <p>(٧) أحب نوع العمل الذى يحتاج منى إلى إنتباه دقيق.</p> <p>(٨) أشعر بتعاسة شديدة إذا لم أرى كثيرا من الناس فى معظم الأوقات.</p> <p>(٩) أعتقد أنني واثق من نفسى بصفة عامة.</p> <p>(١٠) يسهل على إدخال الحيوية على حفل ممل.</p>

# APPENDIX B

## THE ENGLISH PRONUNCIATION ACCURACY FORM

Name of Student : -----

DEAR INSTRUCTOR,

PLEASE SPEND FEW MINUTES WITH EACH STUDENT LISTENING TO HIM/HER DESCRIBE HOME TOWN/VILLAGE OR GIVE SOME GENERAL INFORMATION ABOUT THE COLLEGE OF EDUCATION. THEN, PLEASE RATE THE DEGREE OF THE STUDENT'S ENGLISH PRONUNCIATION ACCURACY BY TICKING (✓) THE APPROPRIATE SCORE NEXT TO THE STATEMENTS BELOW: [PLEASE PAY CLOSE ATTENTION TO THE ARTICULATION OF SOUNDS, STRESS, RHYTHM, AND INTONATION PATTERNS.]

- 1. Pronunciation frequently unintelligible.
- 2. Frequent gross errors and foreign stress and intonation patterns make understanding difficult, require frequent repetition.
- 3. Phonemic errors and foreign stress and intonation patterns cause the speaker to be occasionally intelligible.
- 4. Some phonemic errors and foreign stress and intonation patterns, but speaker is intelligible.
- 5. Occasional non-native pronunciation errors, but speaker is always intelligible.
- 6. Near native pronunciation with almost no trace of 'foreign accent.'

Name of Instructor: -----

## APPENDIX C

### Extraversion/Introversion: Social characteristics and Learning Preferences

	Extraversion	Introversion
<b>Social Characteristics :</b>	<ul style="list-style-type: none"> <li>- Oriented to the outer World</li> <li>- Focusing on people, things, and actions</li> <li>- Using trial and error with confidence.</li> <li>- Scanning the environment for stimulation</li> </ul>	<ul style="list-style-type: none"> <li>- Oriented to the inner world.</li> <li>- Focusing on ideas, concepts, inner impressions</li> <li>- Considering deeply before acting</li> <li>- Probing inwardly for stimulation</li> </ul>
<b>Learning Preferences :</b>	<ul style="list-style-type: none"> <li>- Specific facts</li> <li>- Spontaneous action</li> <li>- Examples first</li> <li>- Talking, discussion, with a group.</li> <li>- Social interaction</li> <li>- Oral tests</li> <li>- Practical application, Psychomotor activity</li> </ul>	<ul style="list-style-type: none"> <li>- Ideas, relationships</li> <li>- Thinking, depth of concentration</li> <li>- Rule first</li> <li>- Reading, verbal reasoning.</li> <li>- Work alone</li> <li>- Written tests</li> <li>- Concepts</li> </ul>

*(From Moody, 1988, p. 391).*



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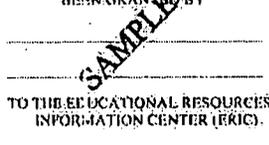
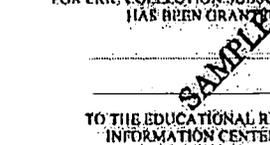
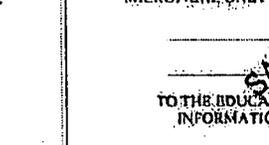
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