Oral Communication Apprehension and Affective Factors: Self-esteem and Introversion/Extroversion

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Abstract
The present study intended to propose a causal model of factors that would predict Oral Communication Apprehension (OCA) of Iranian learners of English as a foreign language. To conduct the study, 135 male and female University students majoring in English were selected. Five variables including: learners’ self-esteem and introversion/extroversion (as independent variables), their gender and proficiency level (as moderator variables) and their oral communication apprehension (as the major dependent variable) were selected. To collect the data necessary for the study a language proficiency test and three questionnaires were used. Statistical analyses revealed that all the independent and moderate variables predicted the participants’ OCA. Furthermore, extroversion was found to be the strongest predictor of OCA. Results of the t-test and one-way ANOVA revealed that females and students of the lowest level of proficiency experience a significantly higher level of OCA. The findings are finally discussed and pedagogical implications of the study are provided.

Keywords: OCA, affective factors, self-esteem, introversion, extroversion.

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1. Introduction

The affective side of learners is probably one of the very strongest factors in language learning success or failure.

Affective factors are those that deal with the emotional reactions and motivation of the learners which have a direct effect on learning itself. In fact a broad understanding of affect in language learning is very important because attention to affective aspects can lead to more effective language learning. Hilgard (1963, as cited in Brown, 2005. p. 134) believes that “purely cognitive theories of learning will be rejected unless a role is assigned to affectivity”.

There are a number of variables that are commonly associated with the emotional side of human beings. From among them, oral communication apprehension (hitherto OCA), self-esteem (hitherto SE), and introversion/ extroversion (extraversion) are but three important affective variables that concern us in this study.

1.1 Oral communication apprehension

The term ‘oral communication apprehension’ was coined by James McCroskey and is defined as an “individual’s level of fear or anxiety associated with either real or anticipated communication with another person or persons” (McCroskey, 1977, p. 78). In fact, apprehension is present in all modes of communication. McCroskey (1982) states:

High OCA is seen as a potential inhibitor of the development of both communication competence and communication skill and as a direct precursor of negative communication affect. Low OCA, on the other hand, is seen as a facilitator of the development of communication competence and communication skill and as a precursor of positive communication affect. (p. 4)

He believes that individuals with a high level of CA have high levels of anxiety when it comes to communication. They feel more comfortable when alone and isolated. They tend to
have lower self-esteem, and have a high level of fear of communicating with others. A person with a low level of CA does possess some uneasiness of communicating, but in general can control it to some extent. This would probably characterize those who, despite getting a little nervous when making a speech, get over it, and speak fairly well.

According to McCroskey, Beatty, Kearney, and Plax (1985), if a student is apprehensive about oral communication in his second language, it is likely he will avoid communicating and as a result fail to experience the practice so necessary to the development of true competence in the language. “Of particular importance is the fact that this apprehension may stem either from the student’s lack of confidence about his or her ability in the second language or from his/her general OCA” (p.12).

A number of factors have been considered as leading to OCA. McCroskey (1980, as cited in Holbrook, 1987) identified seven such factors including low intellectual skills, speech skill deficiencies, voluntary social introversion, social alienation, communication anxiety, low social self-esteem, and ethnic/cultural divergence in communication norms.

1.2 Self-esteem

Self-esteem is a crucial factor in determining an individual’s success in an activity. It is defined as “the set of evaluative attitudes that a person has about himself or his accomplishments” (Morrison & Thomas 1975, as cited in Hensley, 1977 p. 45). “Self-esteem is considered to be the evaluative dimension of the self and is a conscious experience which is accessible to introspection… this may also involve unconscious processes, which may reflect an individual’s inner psychic structure” (Michie, Glachan & Bray, 2001). Coopersmith (1967, as cited in Meng & Wang 2006), defines self-esteem as “the evaluation, which the individual makes and
maintains with regard to himself to be significant, capable, successful and worthy” (p. 71). Andres (2003) believes that people derive their sense of self-esteem from the accumulation of their own experience and from assessments of the external world around them. He points out that a person’s self-esteem largely depends on the experiences, positive or negative, that they have in their environment, on how they are viewed by the “significant others” and how they see themselves.

According to Krashen (1980, as cited in Young, 1991) self-esteem is strongly related to language anxiety. In his view, low self-esteem individuals are worried about how others think about them. Thus, FL anxiety is assumed to have a threatening impact on an individual’s self-esteem. Actually those students who suffer from low self-esteem tend not to take risks or strive to reach their potential. They also lack confidence and are afraid of losing face and insecurity, all of which slow down progress and impede success in foreign language learning.

1.3 Introversion /Extroversion

Introverted students are those who have difficulty participating in classroom activities. Often times these students remain unnoticed by teachers and peers because of their general shyness and passivity in the classroom (Byrnes, 1984). Myers (1995, as cited in Phillips, Smith & Modaff, 1995, p. 82) states that “introversion is characterized by quiet, unsociable, reserved, passive, careful and thoughtful behavior”. These characteristics cause such students to be almost “invisible” in the classroom. On the other hand, those who are extroverted can be characterized by their social, outgoing, talkative, active and impulsive behavior.

According to Ellis (2001, as cited in Chiang, 2005), learners who are extrovert do better in acquiring basic interpersonal communication skills. The rationale for this hypothesis is that sociability (an essential feature of extroversion) results in more opportunities to practice, gain
input, and succeed in communicating in the foreign language. Therefore, it is suggested that extroverted students are more likely to participate in class activities. Many investigators have suggested that sociable learners, that is extroverts, will be more inclined to talk, more inclined to join groups, more likely to participate in class, more likely to volunteer and to engage in practice activities, and more likely to maximize language-use opportunities outside the classroom by using language for communication.

1.4 Theoretical framework
Since this study seeks the possible effect of two affective factors i.e., self-esteem and introversion/extroversion on OCA, the theoretical ground of each of them is discussed in two separate parts.

1.4.1 OCA and self-esteem
According to “reflected appraisals principle” proposed by Rosenberg, Schooler and Schoendach (1989), our self-perception is affected by our judgments of what others’ attitudes are towards us. This can have an impact on FL anxiety in that students are always worried about their teacher’s attitude towards them. Besides, speaking in class is frequently cited as anxiety-provoking by foreign language students (e.g. Aida 1994; Price 1991). Such performance anxiety is situation-specific and has been termed "communication apprehension” (CA) by E. K. Horwitz, M. B. Horwitz, and Cope (1986). CA in language learning is characterized by a reluctance to talk or shyness in communicating and is “a distinct complex of self-perception, beliefs, feelings, and behaviors . . . arising from the uniqueness of the language learning process” (Horwitz et al. 1986, p. 128). In fact, second language learners have the dual task not
only of learning the second language but also of performing in it.

These statements bridge the gap between self-esteem and communication anxiety. Thus, oral communication apprehension as measured by the Personal Report of Communication Apprehension (PRCA) Scale developed by McCrosky (1978) might be related to the construct of self-esteem.

1.4.2. OCA and introversion/extroversion

According to Jungian theory (1923, as cited in Hampson 1982) extroversion is linked with hysterical tendencies and introversion with depression and anxiety. In this theory introverts tend to have higher anxiety levels than extroverts and take longer to retrieve information. While extrovert students worry less about accuracy and have a tendency to take risks with their language, both of which are assets when it comes to communicative oral competence.

We can infer from this theory that extroverts are less inhibited in their communication and, as researchers believe, they take more risks and are better communicators. On this ground it seems reasonable to assume a relationship between communication apprehension as measured by PRCA and personal traits of introversion/extroversion and to see if this assumption works in the context of this project.

1.5 Objectives of the study

Oral communication apprehension can be a problem in every classroom. Anxiety experienced while communicating in English can be debilitating and can influence students’ adaptation to the target environment and ultimately the achievement of their educational goals (Woodrow, 2006). Overall introversion/extraversion tendencies and self-esteem as measured by sound inventories may produce some degrees of correlations with oral production apprehension in English
classrooms. Furthermore, it is believed that the results of an empirical study would shed light on the concept of FL anxiety, self-esteem, and introversion/extroversion as learner characteristics and would expand its pedagogical implications.

The study aimed at coming to a conceptual model of the factors which affect/predict OCA. As stated in the literature, there are several factors that lead to OCA. Among those only four variables were conceptualized to see if they can predict OCA. These factors are:

1. Affective factors: self-esteem and extroversion
2. Background variables: gender and proficiency level.

The reason why these two variables have been chosen lies in the fact that studies conducted in different contexts have provided contradictory results regarding this issue. Therefore, the present study seeks to investigate the effect of these three variables on OCA in the context of Iran, particularly Shiraz University and Shiraz Azad University.

In other words, this study seeks to answer the following questions:

1. What is the level of Iranian EFL learners’ oral communication apprehension?
2. Do males and females differ with respect to their level of OCA?
3. Do students of different levels of proficiency differ with respect to their level of OCA?
4. Is there any relationship between Iranian EFL learners’ level of OCA and factors such as self-esteem, extraversion, gender, and proficiency level?

2. Literature review
2.1 Research on OCA

Results of the studies regarding the relationship between communication anxiety and level of proficiency are controversial.
Liu (2006) conducted a study on anxiety in Chinese undergraduate non-English majors at three different proficiency levels. By way of survey, observations, reflective journals, and interviews, the study revealed that the more proficient students tended to be less anxious.

Matsuoka (2009) conducted a study on communication apprehension of Japanese college students and found a negative relation between proficiency level and CA. students with higher proficiency level were more apprehensive because of the fear of negative evaluation from others.

Results of research concerning the relationship between gender and OCA are also contradictory.

Frantz, Marlow, and Wathen (2005) examined the differences in communication apprehension (CA), regarding the learners’ gender. The students were asked to complete the Personal Report of Communication Apprehension (PRCA), a self-report measure of communication apprehension. It was found that females had a statistically significant higher level of CA.

Na (2007) surveyed and analyzed 115 students from a high school in Shandong Province, China to explore high school students’ English learning anxiety in Chinese EFL classrooms, besides gender differences in anxiety was also taken into account. The results indicated that students indeed had comparatively high anxiety in English learning. Males had higher anxiety in English classes than females.

2.2 Research on the relationship between OCA and self-esteem

Heyde (1977) examined the relationship between self-esteem and oral production in ESL performers at the University of Michigan. In her pilot study involving fifteen subjects, she found a high correlation between global self-esteem and teacher ratings of oral production.
Daubney (2002) conducted a study about anxiety in oral communication in third year university students in English Language classes in Portugal. Using the three categories developed by Horwitz et al. (1986) as a way of identifying types of anxiety, he reached the conclusion that students’ anxiety centered on the fear of academic evaluation and negative social evaluation. Furthermore, it was found that inhibition, self-esteem, and risk taking were so closely interrelated with anxiety.

2.3 Research on the relationship between OCA and introversion/extroversion

A great deal of research is allocated to the impact of personality traits of introversion/extroversion on second foreign language learning. However, there is a dearth of research on the relationship between these personality traits and oral production apprehension. Opt and Loffredo (2000, as cited in Frantz et al. 2005) state that “Research has found that introverts experience more CA than extroverts when faced with openly expressing themselves” (p. 3).

Opt and Loffredo (2000) investigated the relationships between Myers-Briggs personality type preferences, based on Jungian theory, and communication apprehension. Results showed that participants who preferred introversion or sensing reported significantly higher levels of communication apprehension in general and across the group, dyadic, meeting, and public contexts than did participants who preferred extraversion or intuition.

In their study Oya, Manalow, and Greenwood (2004) investigated the relationship between personality and anxiety characteristics of Japanese students and their oral performance in English. “The participants were 73 native-speakers of Japanese who were studying English at various language schools in New Zealand. The results suggested that
participants who were more extraverted produced better global impressions during their oral performance, and those who were experiencing higher levels of state anxiety made more errors in their spoken use of clauses.

2. Method

3.1 Participants

The sample size of the study was decided based on the fact that the main statistical analysis of the study was Multiple Regression and in this statistical procedure the number of participants should be between 20 to 40 times as many as the number of variables. Since there were 5 variables in this study the number of the participants of the study had to be between 100 and 200 students. On the whole, the sample of the study comprised 135 undergraduate students (50 males, 85 females) majoring in English at Shiraz University and Shiraz Azad University. From each institute 4 intact classes were selected randomly and all the participants in each class received the test and questionnaires. All the students were native speakers of Persian. They were a representative sample because all of them were learning English for academic purposes.

3.2 Instruments

Three questionnaires which were all in English and a proficiency test were used in this study. The first questionnaire was Personal Report of Communication Apprehension (PRCA) developed by McCroskey (1978). The second one was a self-esteem scale developed by Rosenberg (RSES) (1965), and the third one was Eysenck Personality Questionnaire (1973). At the end of each questionnaire a glossary was provided in which difficult words used in the questionnaires were explained. Furthermore, the researcher provided explanations for the participants who had any problem in understanding and answering the questionnaires.
PRCA consists of 24 items on a 5-point likert scale. The responses for answers range from “strongly agree” to “strongly disagree”. Every six items of this instrument measures individuals’ level of fear or anxiety across a different context. The PRCA questionnaire usually exhibits reliabilities above .90 (McCroskey, 1984). There is evidence for the predictive validity of this measure (McCroskey, 1978; McCroskey 1984; Yamini & Tahriri 2006). In this study the reliability score for the PRCA-24 was $\alpha = .90$, which is consistent with prior research.

The self-esteem questionnaire consists of ten items on a 4-point scale ranging from “strongly agree” to “strongly disagree”. It aims at a broad and stable sense of personal competence to deal affectively with a variety of stressful situations.

According to Demo (1985, as cited in Michie, Glachan & Bray 2001), a number of studies have been carried out to investigate the validity and reliability of the Rosenberg Self-esteem Scale (RSES) (1965). A positive relationship was found between scores on the RSES and scores on some other scales including the Coopermith Self-esteem Inventory. In the present study to determine the internal consistency of this questionnaire cronbach’s alpha was obtained. The result showed an index reliability of .85.

The third one was the Extroversion Scale (E-scale) of Eysenck Personality Questionnaire (1973). It should be mentioned that the whole questionnaire out of which the E-scale is adopted consists of 57 yes-no questions. Some of these questions are related to N-scale, whether or not a subject is neurotic. Some other questions are related to the L-scale. They show whether or not the subjects’ answers to the questions are honest. Out of these 57 questions, 24 are related to the E-scale (Extroversion scale). In order for the results to be exact, the whole questionnaire was administered and then the 24 items related to the E-scale were corrected for the purpose of this
study. Out of 24 items 12 items were related to extroversion and 12 items related to introversion. Based on test instructions, subjects with scores ranging from 13-24 were considered as extrovert and the subjects scored below 13 were considered as introvert. Francis, Lewis, Christopher, and Ziebertz (2006) examined the reliability of the Eysenck extroversion questionnaire and found an alpha reliability of .84. In a cross-cultural study, Francis, Brown, and Philipchalk (1992, as cited in Francis, Lewis & Ziebertz 2006) for the short form extraversion scale achieved alpha coefficients of 0.78, 0.83, 0.85, and 0.87 in the four samples. Rocklin and Revelle (1981) also examined and approved the content validity of the questionnaire correlating it with Eysenck personality inventory (1986, as cited in Fancis & Jones 2000), a questionnaire measuring personality trait of neuroticism, psychoticism, and extroversion.

The reliability of this questionnaire was also estimated by the researcher using split-half method. The obtained reliability index was .75.

The placement test used in this study was a reduced test of TOFEL constructed by Educational Testing Service (ETS, 1998). It is a 60-item test consisting of 15 structure questions, 15 written expressions, and 30 reading comprehension questions. The reason why the original test was reduced was that the class time during which the test was to be administered was only 90 minutes. In addition, since the test was to be given to the students at different levels, most of the students may not have been able to accomplish the whole questions and it would make the comparison difficult. Besides, since it was not part of their course program, had it been too long, the students would not have eagerly answered the whole test. The basis for this classification was the students’ score distribution. The top 27% scores and the low 27% of the scores were considered as high (level 1) and low levels (level 3), respectively, and the rest 46% of the scores
were considered as the mid level (level 2). Rahimi (2004) measured the criterion-related validity of this test using another test of TOFEL administered to a random group of students participating in his study and obtained a validity index of 0.76. He also estimated the reliability of the test using KR-21 method of estimating reliability. The obtained index was 0.85.

3.3 Data collection procedures

The data were collected in two different sessions. The first session was devoted to proficiency test and the second one to the questionnaires, because the proficiency test took a long time for the participants to finish and they would get tired and unwilling to fill in the questionnaires. The proficiency test was administered to the 8 randomly selected classes at the two universities. The questionnaires were administered in the second session. To avoid order effect, the three questionnaires were first counterbalanced and then were randomly distributed among the participants.

3.4 Data analysis procedures

First, the proficiency test and the three questionnaires were scored. Then, the participants were divided into three levels based on their grades on the proficiency test. Next, a data matrix was prepared, and the learners’ levels of oral communication apprehension, general self-esteem, and introversion/extroversion were specified. After this stage, the descriptive statistics of student’s performance on PRCA scale was obtained for the whole sample. Then, after dividing the participants into two groups of males and females their means on this scale was also compared using an independent samples t-test. A one way ANOVA was also run to seek the effect of proficiency on OCA, i.e. how OCA level changes as the students achieve higher levels of proficiency. In order to present a model of the factors that predicted OCA in the
students, Multiple Regression analysis was run. This procedure was applied to see which variables predicted OCA on the whole and which variable was the best predicator.

3. Results and discussion

In this section, the mean scores of the student’s level of OCA with respect to their sex and proficiency levels are presented. As for oral communication apprehension, the mean score of the whole sample, as shown in Table 1 was 60.88. Scores obtained from this questionnaire range from 24 to 120. According to McCroskey (1978) scores below 59 represent people who have very low OCA. Scores between 60 and 70 represent people with average OCA. Scores above 72 represent people who have generally more OCA than people who have average OCA. Scores above 85 represent people who have high levels of OCA.

<table>
<thead>
<tr>
<th>Table 1. Descriptive statistics of OCA for the whole sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>OCA</td>
</tr>
</tbody>
</table>

Therefore, the whole sample’s level of oral communication apprehension is average.

Considering the students’ sex and its effect on the level of OCA descriptive statistics and independent samples t-test were used the results of which are summarized in Table 2.
Table 2. Descriptive statistics and T-test of OCA for males and females

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>T</th>
<th>Df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>85</td>
<td>64.65</td>
<td>18.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>50</td>
<td>54.46</td>
<td>15.97</td>
<td>3.19</td>
<td>133</td>
<td>.002</td>
</tr>
</tbody>
</table>

As this table shows, the mean scores of 54.46 and 64.65 were obtained for male and female students, respectively. This indicates that male students had a very low level of OCA while female students had average levels of OCA. Besides, as the table shows gender had a significant effect on OCA (t=3.19 P< 0.001). That is to say, the sex of the students did have effect on the OCA level of the whole sample. In other words, biological sex determined the students’ level of OCA. The finding is in line with several studies done by different researchers like Tally and Richmond (1980), McCroskey, Simpson, and Richmond (1982), and Pappamihiel (2001).

The reason for such result can be discussed in two ways. First, if we compare the mean scores of males and females on the proficiency test we find that males have outperformed females on this test (mean scores of males= 49, mean scores of females=45). It is not hard to imagine that males are more confident in their abilities to learn the new language well. Therefore once they gain faith in their capabilities, they will be more ready to approach threatening situations in English classrooms. On the contrary, females, who have lower proficiency levels, perhaps, are inclined to attribute their bad performance in English classes to their low ability. Consequently, they are more anxious about English classes.

Second, according to Rubrecht (2004), Asian cultures are viewed as male-dominated societies in which women are treated as inferior. He believes that in such cultures in which female social roles have largely kept women a step behind
men in terms of social status for centuries one could accept the
fact that females in these cultures would be particularly
reticent and anxious above and beyond their male counterparts
in the language classrooms specifically those coeducational
ones. Perhaps Iran, an Eastern country, with almost the same
culture is not an exception to this problem.

With respect to the proficiency level of the students, the
fallowing results were obtained.

Table 3. Descriptive Statistics of OCA for different levels
of proficiency

<table>
<thead>
<tr>
<th>OCA</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Level</td>
<td>34</td>
<td>52.1471</td>
<td>16.93863</td>
</tr>
<tr>
<td>Mid Level</td>
<td>63</td>
<td>63.5873</td>
<td>19.14009</td>
</tr>
<tr>
<td>Low Level</td>
<td>38</td>
<td>64.2105</td>
<td>16.59234</td>
</tr>
</tbody>
</table>

As this table shows, the mean scores of 52.14, 63.58,
and 64.21 were obtained for students at different levels
of proficiency ranging from high level of proficiency to the low
level, respectively. This shows that OCA was very low at high
level while it was average at mid level and low level. In other
words, there was a difference in the level of OCA between
students of a higher level of proficiency and the students of the
mid/lower levels of proficiency. It seems that as the students’
proficiency increases, their level of OCA decreases.
Besides, in order to see whether there is any significant difference in the level of OCA at different proficiency levels, a one way ANOVA was run. The result is shown in Table 4.

Table 4. Results of ANOVA on the effect of proficiency on OCA

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3476.25</td>
<td>2</td>
<td>1738.12</td>
<td>5.415</td>
</tr>
<tr>
<td>Within Groups</td>
<td>42367.85</td>
<td>132</td>
<td>320.96</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>45844.10</td>
<td>134</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As the table shows, proficiency level has a significant effect on OCA (F= 5.41 p< 0.05). Scheffe test was also run to locate the exact difference. The result is shown in Table 5.

Table 5. Result of Scheffe test on OCA at different proficiency levels

<table>
<thead>
<tr>
<th>Proficiency</th>
<th>Proficiency</th>
<th>Mean difference</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>High level</td>
<td>Mid level</td>
<td>-11.44(*)</td>
<td>.013</td>
</tr>
<tr>
<td></td>
<td>Low level</td>
<td>-12.06(*)</td>
<td>.019</td>
</tr>
<tr>
<td>Mid level</td>
<td>Low level</td>
<td>-.62</td>
<td>.986</td>
</tr>
</tbody>
</table>

As this table shows, the difference in the level of OCA between students of high level and students of mid level is significant (P< 0.05) and the mean difference is negative. This shows that OCA is lower in level 1 (high level) than OCA in level 2 (mid level). The difference in the level of OCA, between students of high level and low level is also significant (p< 0.05). The mean difference is negative as well. This shows that OCA is lower in the high level compared to OCA in the
low level. However the difference in the level of OCA, between students of the mid level and the low level is negative but not significant. OCA in the mid level is lower than OCA in low level.

The results is in line with a few of other studies, like, Abu-Rabia (2004), and Liu (2006) in which it was found that proficiency level significantly affected the level of communication apprehension. Na (2007) believes that, actually, students of the lower level of proficiency would undergo some degrees of apprehension as a result of the effect of cognitive, personal or affective factors on the process of their learning or for the reason that they get to know the difficulties of the job and some of their inabilities to cope with them. However, as they go to the advanced level of proficiency their apprehension decreases because, at this time, they have learned the language almost properly and they believe that they have the necessary skills to handle their performance well. Furthermore, the existence of anxiety in students of lower levels can also be attributed to their English proficiency, which was not high enough to allow them to communicate with others freely, express themselves adequately in class and answer teachers’ questions properly. So, in English classrooms where much communication is needed, these students are more anxious than in other classes. Besides, serious competition among students also causes some students (specifically students of lower levels of proficiency) to pay more attention to others’ strong points and their own weak points which results in the arousal of anxiety.

4.1 Regression analysis
In order to present a model of the factors which predicted OCA in the students a multiple regression analysis was conducted. In the obtained results first we refer to the table of model summery (Table 6) in which $R^2$ (coefficient of multiple
determination) is shown. This index shows the percent of variance in the dependent variable (OCA) predicted by the combination of independent variables of the study, namely, self-esteem, extraversion, proficiency, and gender.

Table 6: Model summary of the multiple regression analysis (OCA and self-esteem, extraversion, proficiency, and gender)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.634(a)</td>
<td>.402</td>
<td>.384</td>
<td>14.51843</td>
</tr>
</tbody>
</table>

As this table shows the obtained $R^2$ is .40, a relatively good fit indicating that 40% of the variation in the level of OCA was accounted for by the independent variables.

Then we refer to Table 7, the ANOVA table, to make sure that the independent variables have been able to significantly predict the variance in the dependent variable.

Table 7: Result of ANOVA for the effect of the independent variables on OCA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>18442.08</td>
<td>4</td>
<td>4610.52</td>
<td>21.87</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>27402.01</td>
<td>130</td>
<td>210.78</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>45844.10</td>
<td>134</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), EXTRAVERSION, LEVEL, ENDER, SELF-ESTEEM
b. Dependent Variable: OCA

As illustrated in the table, the relationship between OCA and independent variables, proficiency level, gender, self-
esteem, and extraversion, is significant, (p< 0.01). Nonetheless this significance does not mean that all the variables, one by one, predicted OCA. Now we should refer to the third table (Table 8) which shows the partial regression coefficients pointing out the degree to which each independent variable was related to the dependent variable (OCA).

Table 8: Partial regression coefficients for the degree of prediction of independent variables

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
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<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>104.904</td>
<td>8.626</td>
<td>12.161</td>
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<tr>
<td>Level</td>
<td>4.184</td>
<td>1.767</td>
<td>-.166</td>
<td>2.367</td>
</tr>
<tr>
<td>Gender</td>
<td>-8.602</td>
<td>2.667</td>
<td>-.225</td>
<td>-3.225</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>-0.825</td>
<td>0.246</td>
<td>-.238</td>
<td>-3.352</td>
</tr>
<tr>
<td>Extraversion</td>
<td>-3.423</td>
<td>0.562</td>
<td>-.431</td>
<td>-6.087</td>
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</table>

a. Dependent Variable: OCA

As this table shows all the four independent variables have significance levels below .05. Furthermore, if we look at the Beta indices we can see the weighting of the variables that significantly predicted the variance in the level of OCA. As it is shown in Table 8, the obtained Beta values were -.16, -.22, -.23, and -.43 for independent variables, namely, proficiency level, gender, self-esteem, and extraversion, respectively. Therefore, we can conclude that extraversion is the best predictor of OCA in this study. This means that all the variables held constant, for every unit increase in the level of extraversion, the level of OCA increases by 0.40 unit for every extra point in the extraversion level. Furthermore, since this index turned out to be negative it predicted OCA in a negative way. That is OCA level decreased by .43 for every level of increase in the level of extraversion. It indicates that an
increase in OCA is associated with a decrease in extraversion, i.e. students who have higher degrees of OCA have lower levels of extraversion and vice versa. The obtained result is in line with Dewaele and Furnham (2000), Opt and Loffredo (2000), and Oya et al. (2004). In all of these studies it was found that extraverts experienced lesser degrees of apprehension and they were better communicators than introverts. Many investigators have suggested that sociable learners, which means extroverts, will be less inhibited in their communications, more inclined to talk, more inclined to join groups, more likely to participate in class, more likely to volunteer, and more likely to take risks.

Self-esteem was also found to predict OCA in a negative way. OCA decreased by .23 for every level of increase in self-esteem. It indicates that an increase in OCA is associated with a decrease in self-esteem, i.e. students who have higher degrees of self-esteem have lower levels of OCA and vice versa. The result is in line with McCroskey, Daley, Richmond, and Falcione (1977), Heyde (1977), Daubney (2002), Qin (2003), and many other studies in most of which a negative correlation has been found between self-esteem and OCA. According to Bandura’s (1991 cited in Daubney 2002) theory of self-efficacy, when a situation is perceived as threatening, the resultant anxiety is dependent on an individual’s perception of his/her ability to deal positively with that threat. Bandura additionally argues that self-esteem, also, can act as a mitigating factor in anxiety-producing circumstances. Besides, Foss and Reitzel (1988) believe that since those students who have low self-esteem, perceive themselves as less worthy than others and think their communication is less effective than their colleagues are apprehensive in their communications whether speaking their native language or learning a second or foreign language.
Gender and proficiency were the third and the fourth factors that predicted OCA. Proficiency also predicted OCA in a negative way. That is, for every unit increase in the level of proficiency OCA decreases by .16 unit for every extra point in proficiency score. Discussions for the effect of each factor are presented at part 4.2.1.2 and 4.2.1.3, respectively. Since all of the considered independent variables could predict OCA for the participants of this study therefore the conceptual model of the study would be Figure 1.

**Figure 1: Conceptual model of the study**

4. Conclusion

The findings of this study reinforced previous research that indicate a close relationship between second language communication anxiety and learners’ self-esteem in learning a second language. Together with the findings of previous research in other areas, this study seems to lend support to the reflected appraisal principle proposed by Rosenberg et al. (1989) who claim that our self-esteem and self-perception can have an impact on foreign language anxiety. Furthermore, it also supports Jung’s theory of personality that linked extroversion with hysterical tendencies and introversion with depression and anxiety and “Personality” theory according to
which, “people who experience low self-esteem, high introversion and low self-assertiveness also have high levels of communication apprehension.”

It was also in line with most research in which OCA was found to be higher in females than males and students of lower levels of proficiency.

So, to summarize, communication apprehension is the most prevalent phobia in most of the situations in which speaking in a foreign/second language is needed. As a matter of fact its detrimental effects can undermine a person’s personal, professional, and academic successes in life.

Finally, regarding the generalizability of the findings of this study, it should be noted that although they are in line with most research in this area and with language learning theories and principles, these results may be biased on the grounds that the number of male students participating in this study is smaller than female students. Furthermore, with respect to the proficiency level of the students, the number of students of level 3 was also smaller than other groups in a way that it may have biased the results, as well. Since this study had a relatively limited scope and was conducted with English majors at Shiraz University and Shiraz Azad University further research is needed to ensure the external validity of the findings. It is necessary to see if the same results and conclusion would be obtained with different samples.

5.1 Pedagogical implications

The principal implication of this study for concerned second language teachers is that they should try their best to reduce communication apprehension in their students, specifically female students if they are perceived to have higher OCA compared to males, using proper techniques. According to Qin (2003) personality factors are the most influential factors to which teachers should attach great importance in the foreign language teaching process. An
awareness of these factors may help teachers reconsider their teaching methods and come up with more effective approaches in teaching a foreign language.

Na (2007) suggests that teachers should try to create a relaxed atmosphere for students, which can make them feel safe to speak or express their views. Secondly, teachers should avoid negative evaluation of students in classrooms and comment on students’ behaviors with more encouragement.

Tok (2009) advises EFL teachers to give the most reticent students the opportunity to speak and build up their self-confidence in a positive, caring environment (e.g., by facilitating interactive group activities or calling on students in a non-threatening manner). Feeling the concern of their teachers, the students should gradually become more willing to participate in speech communication.

Finally, Using different techniques to increase, support and encourage students’ self-esteem in language classrooms can reduce their level of communication apprehension.
References


