The effects of motivation and metacognitive strategy use on EFL listening proficiency

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Abstract

Listening ability is significant for both daily life and second language acquisition. There are many factors affecting listening ability in second language acquisition. Motivation and metacognitive strategy use are two of these factors and they are variables which students bring with themselves and can develop with their teachers. Motivation is a significant factor which determines the effort a learner puts into language learning. Metacognitive strategy use as the other variable of the study is defined as thinking about thinking or thinking about your own studies. The strategy use is also an important factor for language learning. Therefore, the purpose of the study is to investigate the relationship among listening proficiency, motivation and metacognitive strategy use. The participants of this study are 33 students majoring in the ELT Department of the Buca Education Faculty at Dokuz Eylül University. The research was designed primarily to collect quantitative data to be analyzed. The data was collected using three instruments: Metacognitive Awareness Listening Questionnaire (MALQ), Language Learning Orientations Scale (LLOS) and the listening section of the TOEFL.

Introduction

Second language learning is a complex and prolonged process. While some learners can complete this process successfully, some cannot achieve their goal in second language learning even if they are exposed to the same

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instruction. In other words, the learners differ from each other with respect to acquiring a second language. This variation brings to mind such questions as why some learners are better at acquiring a language than others and what causes this difference. Dörnyei (2009) states that second language learning is considered as an agent-based process, that is to say, this process is dependent on learners or individuals. Thereby, we can say that individual differences can cause the variation and influence second language learning as well as EFL listening.

Individual differences (IDs) refer to “dimensions of enduring personal characteristics that are assumed to apply to everybody and on which people differ by degree” (Dörnyei, 2006:42). Cohen (2010) defines individual differences as ‘personal baggage’ which learners bring to the language course that will have an important influence on how learning proceeds. Individual differences cover many factors like age, gender, anxiety, personality, aptitude, motivation, attitude, beliefs, learning styles and learning strategies. In their study, Gardner and MacIntyre (1992) group individual differences into three broad categories: cognitive, affective and the factors which could have either cognitive or affective implications. Cognitive variables include intelligence, language aptitude, learning strategies, etc. Affective variables consist of attitudes, motivation, language anxiety, personality attributes and learning styles, etc. The last group, which could have either cognitive or affective implications, includes factors like age, gender and sociocultural experiences. In this study, we focused on metacognitive language strategies as a cognitive variable, and also an affective variable, motivation.

The research on language learning strategies emerged with the curiosity of identifying “what a good language learner does” (Rubin, 1975) by 1970s. In his study, Rubin (1975) lists several strategies used by good learners and states that language teachers can use these strategies to train poor learners. Besides, he (1975) emphasizes how significant the strategies are as a means to help the students help themselves, when the teacher is not around. Although over a quarter of a century has passed since then, the area of language learning strategies attracts the researchers’ attention (Anderson, 1991; Cohen, 1998; O’Malley & Chamot, 1990; Oxford, 1990; Rubin, 1975; Wenden, 1991, 2002). Many researchers have attempted to define the term learning strategies in accordance with the changes in psychology and cognitive theories. Rubin (1975: 43), in his study, broadly defines the strategies as ‘the techniques or devices which a learner may use to acquire knowledge.’ Oxford (1990:8) also provides an alternative definition of learning strategies as “specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations.” Oxford (1990) also has developed a comprehensive system of language learning strategies. Oxford (1990) divided language learning strategies into two main categories, direct and indirect strategies. Direct strategies are strategies working with language itself directly. These are memory strategies, cognitive strategies and compensation strategies. Indirect strategies do not affect the language tasks directly but they make a more indirect contribution. They consist of metacognitive, affective and social strategies.

Metacognition is basically defined as thinking about thinking. Flavell (1976:232) defined it as “one’s knowledge concerning one’s own cognitive processes and products or anything related to them”. According to Magaldi (2010), the actual use of metacognition can only be achieved by supporting the use of metacognitive strategies which in turn will lead to learner autonomy. Metacognitive strategies are “general skills through which learners manage, direct, regulate, guide their learning, i.e. planning, monitoring and evaluating” (Wenden, 1998: 519). The studies show that metacognitive strategies have an important effect on second language learning (Chamot et al. 1999; Lam, W.Y.K., 2010; Li and Munby, 1996; Mokhtari and Reichard, 2002; Yanyan, 2010). The effects of metacognitive strategies on listening proficiency have been investigated by several studies (Goh and Yusnita, 2006; O’Malley and Chamot, 1990; Vandergrift, 1998, 2003). According to Vandergrift (1999), metacognitive strategies have a crucial role since they oversee, regulate, or direct the language learning process. In his study, Vandergrift (1998) examined the strategies employed by second language learners to facilitate their comprehension of listening texts. While the students were listening to the text, the think-aloud sessions were administered to them individually and were audio recorded. Analyses were made at three different levels of language proficiency, at the Novice I, Novice II and Intermediate II levels. The results showed that successful listeners use more metacognitive strategies and use them effectively. In their study, Goh and Yusnita (2006) investigated the effect of metacognitive instruction on listening for young learners. Participants were all between 11 and 12 years old. Eight listening lessons were conducted a few months before the students’ primary school leaving examination. The lessons consisted of three-stages; listen and answer– reflect–report and discuss. After the application of the study, all the students reported a better understanding of the nature and the demands of listening.
Other individual variable in this study is motivation. Motivation is a significant component affecting the success of second language learning. It covers such aspects as energy, direction, persistence, activation and also intention (Ryan and Deci, 2000). According to Dörnyei (1998:273), ‘without sufficient motivation, even individuals with the most remarkable abilities cannot accomplish long-term goals, and neither are appropriate curricula and good teaching enough on their own to ensure student achievement’. Until today, many theories have attempted to explain the basis of motivation in second language learning including socio-educational model, self-determination theory, goal theories, and attribution theory. This study focuses on the motivational orientations of self-determination theory (Deci and Ryan, 1985). Self-determination theory basically focuses on social-contextual circumstances promoting or hindering self-motivation and healthy psychological development (Ryan and Deci, 2000). Self-determination theory includes two general types of motivation, intrinsic and extrinsic. The theory supports that intrinsic and extrinsic motivation lie along a continuum of self-determination (Noels et al, 2000). It places them on a continuum between self-determined (intrinsic) and controlled (extrinsic) types of motivation (Katsuhisa and Masahide, 2006). Intrinsic motivation refers to motivation to involve in an activity since it gives pleasure and satisfaction (Deci et al, 1991). In other words, intrinsically motivated people participate in activities which make them satisfy and pleased, and also these people do them voluntarily. Vallerand and colleagues (1992) divided intrinsic motivation into three sub-types: knowledge, accomplishment and stimulation. In contrary to intrinsic motivation, extrinsic motivation refers to the performance of an activity in order to attain some separable outcome (Ryan and Deci, 2000). It is based on instrumental aims to involve in an activity. Extrinsic motivation includes three sub-types: external regulation, introjected regulation, and identified regulation. In addition to intrinsic and extrinsic motivation, the theory identifies the term, amotivation which refers to ‘the situation in which people see no relation between their actions and the consequences of those actions’ (Noels et al, 2000:40).

Some studies have focused on the relationship between self-determination theory and second language learning. Noel and colleagues (2000), in their study, investigated the existence of the self-determination theory in second language learning. They studied with adult anglophone students learning French. They found that correlations between each of the sub-scales increased in accordance with the continuum of increasing self-determination: from AM to more self-determined forms of motivation (EM) and then to more self-determined forms of motivation (IM). Vandergrift (2005) examined the relationship between self-determination theory and listening proficiency. In his study, Vandergrift found that there was a strong negative correlation between amotivation, but the relation between listening and other two motivation orientations, extrinsic and intrinsic is not statistically significant even if it is positive. This study investigated following three research questions: (1) Is there any relationship between listening proficiency of ESL students and metacognitive strategy use? (2) Is there any relationship between listening proficiency of ESL students and the orientations related to motivation (AM, EM, and IM)? (3) Is there any relationship between metacognitive strategy use and the orientations related to motivation?

2. Methodology

2.1. Participants

The participants of this study were 33 students of English majoring in English Language Teaching department at Dokuz Eylül University in Izmir, Turkey. They were 20 juniors and 13 seniors whose age ranged from 20 to 24. Six of the participants were male students. The students’ length of exposure to formal English instruction was 12 or 13 years. They did not have any second language other than English. All the students participated in the study voluntarily.

2.2. Instrumentation

The research was designed primarily to collect quantitative data to be analyzed. The data were collected using three instruments: Metacognitive Awareness Listening Questionnaire (MALQ), Language Learning Orientations Scale (LLOS) and the listening section of the TOEFL.

2.2.1. The Metacognitive Awareness Listening Questionnaire (MALQ)
The Metacognitive Awareness Listening Questionnaire developed by Vandergrift, Goh, Mareschal, Tafaghodtari (2006) consists of 21 items. The items are rated on a six-point Likert scale rating from 1 (strongly disagree) to 6 (strongly agree). It evaluates “the extent to which language learners are aware of and can regulate the process of L2 listening comprehension” (Vandergrift, et al., 2006, 432). The questionnaire contains five metacognitive factors: problem-solving, planning and evaluation, mental translation, directed attention, and person knowledge. The reliability coefficient of MALQ calculated in this study was .73.

2.2.2. Language Learning Orientations Scale (LLOS)

Language Learning Orientations Scale (LLOS) developed by Noels, Pelletier, Clément, and Vallerand (2000) measures the motivational orientations of the students. The scale consists of 21 items which are rated on a seven-point Likert scale from 1 (Does not correspond) to 7 (Corresponds exactly). It contains three subscales including amotivation, intrinsic and extrinsic motivation. The total score of each sub-scale is indicative of learner’s motivational orientation. Amotivation subscale itself has 3 questions like “I don’t know why I should learn English Language.” Extrinsic orientation subscale has 9 questions. For instance, “In order to get a more prestigious job later on.” Intrinsic orientation subscale has 9 questions, as well. For example, “For the satisfied feeling I get in finding out new things.” The reliability coefficient of LLOS calculated in this study was .828.

2.2.3. Listening Section of the TOEFL

Other instrument used in this study was the listening section of the TOEFL. It was used to measure the listening proficiency. It consisted of 33 multiple-choice questions. The test included two dialogues and four lectures from biology, anthropology, astronomy, and art history. Three different levels of listening proficiency, at high, intermediate and low levels were identified for the analyses.

2.3. Procedure

At first, the researcher informed the students about the purpose and procedure of the study. It was also emphasized that their participation would be anonymous and confidential. Then, the listening section of TOEFL was applied to the participants. It took 45 minutes to finish answering the questions. Immediately after the administration of the test the MALQ and the LLOS were administered. It took almost 15 minutes to complete them.

3. Results

3.1. Relationship between listening proficiency and metacognitive strategy use

In this study, the first research question investigated the relationship between listening proficiency and metacognitive strategy use. The table 1 indicates the intercorrelations among listening proficiency and the subscales of MALQ.

| Variables                      | 1   | 2   | 3   | 4   | 5   | 6   |
|--------------------------------|-----|-----|-----|-----|-----|-----|
| 1.Listening Proficiency        | .01 | .23 | .03 | -.68**|-.49**|
| 2.Problem solving              |     | .42*| .09 | .35**|-.21 |
| 3.Planning and evaluation      |     | .05 |     | -.13 |-.17 |
| 4.Directed attention           |     |     |     | -.06 |-.29 |
| 5.Person Knowledge             |     |     |     |     |.52**|
| 6.Mental Translation           |     |     |     |     |     |

*p < .05; **p < .01

We hypothesized that there would be statistically significant correlation (.41) between listening proficiency and
three subscales of MALQ. However, there is not a significant correlation between listening proficiency and three sub-scales; problem solving (.01), directed attention (.03), and planning and evaluation (.23). Other two subscales of MALQ, person knowledge (-.68) and mental translation (-.49) have a significantly negative correlation with listening proficiency, as expected.

3.2. Relationship between listening proficiency and the motivation orientations (AM, EM, and IM)

The second research question investigated the relationship between listening proficiency and the motivation orientations. The table 2 shows that as hypothesized, there is a significant relationship (0.42) between listening performance and extrinsic orientation to motivation. However, the correlation between listening performance and intrinsic motivation (0.15) is not statistically significant.

Table 2. Means, standard deviations of listening proficiency, amotivation, intrinsic motivation, and extrinsic motivation, and intercorrelations among them.

| Variables               | Mean | SD  | 1   | 2   | 3   | 4   |
|-------------------------|------|-----|-----|-----|-----|-----|
| 1. Listening Proficiency| 2.72 | 0.62| -.20| .42*| .15 |
| 2. Amotivation          | 19.87| 1.97| -.04| .07 |
| 3. Extrinsic Motivation | 35.12| 9.20| .45**|
| 4. Intrinsic Motivation | 45.60| 9.67|

As hypothesized, there is a negative relationship between listening test scores and amotivation but it is not statistically significant. Table 2 also shows the intercorrelations among the subscales of LLOS. There is a significant positive relationship (0.45) between extrinsic motivation and intrinsic motivation. The relationship between amotivation and extrinsic motivation is expectedly negative but not significant. However, the relationship between amotivation and intrinsic motivation is unexpectedly positive even if it is not significant. These results show that there is no simple pattern among the subscales of LLOS.

3.3. Relationship between metacognitive strategy use and the motivation orientations

Other research question in the study sought to explore the relationship between metacognitive strategy use and the motivation orientations (AM, EM, and IM). The table 3 indicates the relationship between the subscales of MALQ and the subscales of LLOS.

Table 3. Relationship between metacognitive strategies and the motivation orientations

| Metacognitive Strategies | The Motivation Orientations |
|--------------------------|-----------------------------|
|                          | AM  | EM  | IM  |
| Problem solving          | -.04| .01 | .04 |
| Planning and evaluation  | -.02| .23 | .14 |
| Directed attention       | -.11| .00 | .04 |
| Person Knowledge         | .42*| -.39*| -.07|
| Mental Translation       | .27 | -.50**| -.29|

Firstly, the relationship between amotivation and three subscales of MALQ (problem solving, directed attention and, planning and evaluation) is expectedly negative but not statistically significant. As hypothesized, person knowledge and mental translation correlate positively with amotivation. The correlation between person knowledge and amotivation is statistically significant (.42). As seen in the table 3, there is a positive and weak relationship between extrinsic motivation and three subscales of MALQ (problem solving, directed attention and, planning and evaluation). Besides, there is a significantly negative correlation between extrinsic motivation, and person knowledge (-.39) and mental translation (-.50). The relationship between intrinsic motivation and
metacognitive strategies is similar to the relationship between extrinsic motivation and metacognitive strategies. The results indicate that there is a positive and weak relationship between intrinsic motivation and three subscales of MALQ (problem solving, directed attention and, planning and evaluation). Moreover, as expected, there is a negative correlation between intrinsic motivation, and person knowledge and mental translation even if it is not significant.

4. Discussion

This study investigated three research questions: (1) the relationship between listening proficiency and metacognitive strategy use; (2) the relationship between listening proficiency and the motivation orientations; (3) the relationship between metacognitive strategy use and the motivation orientations. When we examined the results of the first research questions we see that as hypothesized, there is a negative correlation between listening proficiency and two subscales of MALQ, person knowledge and mental translation. In the MALQ, the person knowledge subscale includes the statement such as “I feel that listening comprehension is a challenge for me” and “I find that listening is more difficult than reading, speaking, or writing in English.” This means that a student who gets high score from this subscale has a high level of anxiety and a lack of confidence while listening English. The other subscale, mental translation contains such statements as “I translate in my head as I listen” and “I translate word by word, as I listen.” The participants who use these strategies activate their first language and it may interfere with attention to and overall processing of input. In other words, negative correlation between listening proficiency and these subscales is anticipated. We hypothesized that there would be a strong positive relationship between listening and other three subscales of MALQ, problem solving, directed attention, and planning and evaluation. Although there is a positive correlation between them, it is not statistically significant. The sample size of this study is thirty-three students therefore; a larger sample size may have produced more significant correlations.

The second research question examined the relationship between listening proficiency and the motivation orientations. The results showed that there is a significant relationship between listening proficiency and extrinsic orientation to motivation, as expected. Although it was anticipated that the correlation between listening proficiency and intrinsic orientation would be higher than extrinsic orientation, there was not a relationship between them. The participants in this study are the students majoring English Language Teaching Department, hence these students may want to perform in English well and have high intrinsic motivation. However, the listening section of TOEFL includes passages from different courses such as biology, astrology, history, thus they may not know the words which the passages and dialogues contain. This may explain the absence of the relationship between listening proficiency and intrinsic orientation. Amotivation correlated negatively with listening proficiency but the correlation was not significant. As mentioned earlier, a larger sample size may have produced more significant correlations. Even if it is not one of the research questions in this study, the existence of self-determination continuum was examined. As hypothesized; there is a significant positive relationship between extrinsic motivation and intrinsic motivation. The relationship between amotivation and extrinsic motivation is expectedly negative but not significant. However, the relationship between amotivation and intrinsic motivation is unexpectedly positive even if it is not significant. These results indicate that there is no simple pattern among the motivation orientations. This finding is not congruent with the results of the study by Noels et al. (2000) and Vandergrift (2005). The absence of simple pattern among the motivation orientations merits further exploration. This study have a small sample size so further studies need to be applied to a larger sample for a simple pattern among the orientations.

Lastly, the study investigated the relationship between metacognitive strategy use and the motivation orientations. Negative correlation between amotivation and three subscales of MALQ (problem solving, directed attention and, planning and evaluation) is not surprising since amotivated students do not have intention to act, and they see no relation between their action and their consequences. However, this negative correlation is not statistically significant so it need to be further investigated with a larger group. As hypothesized, amotivation correlates positively with person knowledge and mental translation. The students who employ person knowledge strategies indicate a high level of anxiety and a lack of confidence. This may cause the lack of intention to act, namely amotivation. Extrinsic motivation correlates positively with three subscales of MALQ (problem solving, directed attention and, planning and evaluation) but the relationship is not important. Again, this may be derived
from the sample size. The relationship between extrinsic motivation and other two subscales of MALQ (mental translation and person knowledge) is significantly negative. Well-internalized extrinsic motivation is the base for autonomous or self-determined behavior (Deci & Ryan, 2000) and also for self-regulated behavior (Pintrich, 1999). In other words, the students with extrinsic motivation do not show a high level of anxiety and a lack of confidence, and also regulate their own learning. As in the case of extrinsic motivation, intrinsic motivation correlates positively with three subscales of MALQ (problem solving, directed attention and, planning and evaluation) and negatively with other two subscales of MALQ (mental translation and person knowledge) but these correlations are not important. Therefore, we can say that it needs to be further investigated with a larger group.

5. Conclusion

In the light of these findings, we can say that the learners who use translation may be unsuccessful in listening skill because the first language may interfere with the process of listening. Besides, the learners who have a high level of anxiety and a lack of confidence may be unsuccessful in listening skill. This study also indicates that there is a significantly positive correlation between listening proficiency and extrinsic motivation. However, the correlation between listening proficiency and intrinsic motivation is not significant. These findings may be derived from the sample size in the study; therefore we suggest that further studies should investigate these research questions with a larger group.

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