The Relationship between Self-Regulation and Use of Language Learning Strategies in Secondary School Students

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Abstract

This study aimed to investigate the relationship between self-regulation and use of language learning strategies. The participants were 264 secondary school students from a foundation school. The study employed Strategy Inventory for Language Learning, which was developed by Oxford (1990), Self-Regulation Skills Scale, which was developed by Arslan (2011), and the Personal Information Form prepared by the researcher as data collection instruments. The data, which were gathered from these tools, were analysed through SPSS 18.0 program. The findings showed that the students had a medium level of language strategy use although they were young learners and had a little previous learning experience. It was also seen that there was a relationship between self-regulation and use of language learning strategies. Additionally, it was found out that age, level of income and education level of mothers influenced the development of self-regulation in children. We can claim that teaching students self-regulation strategies at early ages can back up their educational development and language learning.

Keywords: Secondary School Students, Language Learning Strategies, Self-Regulation, English Language Teaching
**Introduction**

Self-regulated learning is not a simple structure. Researchers from different fields explain it with different terms (Boekaerts, 1999). Self-regulated learning can be defined as the combination of awareness related to using suitable actions together with motivation to achieve aims in conditions where students have the opportunity of being autonomous. It covers issues like cognition, metacognition, motivation, task engagement and social support, and presents a holistic perspective regarding skills, motivation and knowledge of students (Paris & Paris, 2001). It can be associated with three schools of thought which deal with learning styles, metacognition and regulation styles and theories of the self. It is a series of cognitive and affective processes which work in conjunction (Boekaerts, 1999). The process of self-regulation begins as an emotional construct. Then it becomes a process which includes emotion and cognition (Conover & Daiute, 2017). That is, self-regulated learning has a close relationship with psychological features of learners and teachers.

Motivational beliefs are considered to be important in the development of self-regulation. There is a positive relationship between self-regulation and self-efficacy. Self-regulated learners are believed to be confident in their learning skills and their potential of learning. Task value can be effective in self-regulation. If learners think that the task is important, useful and attractive, they possibly develop more self-regulation. We can also mention about the link between mastery goal orientation and self-regulation. When students specify their self-development as their objective, they deal with a variety of cognitive and metacognitive activities to improve themselves (Pintrich, 1999). Self-regulatory skills can be seen as the starting point of learning in an effective learning context. They are significant in making learning easier and benefitting from learning sources around (Boekaerts, 1999). Development of self-regulation may depend on teachers’ educational beliefs and acceptance of the value of self-regulated learning. There is a harmony between beliefs and practice. Self-regulated learning practices can be more successful when teachers have developmental educational beliefs. (Vandevelde,
Vandenbussche & Van Keer, 2012). It is possible to say that perspectives of both learners and teachers on education contribute to self-regulated learning from motivational side and potential educational success as well.

Motivation and self-regulation can be seen as important components for the achievement in English exams (Peng, 2012). Motivation to use self-regulation strategies is necessary for the students to improve their self-regulation (Pintrich, 1999). Motivation towards self-regulation is thought to be more related with the students’ peer context rather than their families and instructors (Conover & Daiute, 2017). However, social and educational behaviour of teachers is also important in the development of self-regulation. A mutual understanding and respect encourage students to engage in self-regulation (Shahmohammadi, 2014). Using appropriate learning strategies can increase students’ motivation and self efficacy as well as their meaningful learning (Lavasani, Mirhosseini, Hejazi & Davoodi, 2011). Self-regulated learning is a transferrable skill which is influential on achievement level of students as it increases motivation and provides the students with the responsibility of their learning. It also identifies the changing patterns of negative behaviours (Daniela, 2015). In other words, using self-regulation skills requires motivation. It is also a variable which increases learner motivation. It is at core of learner-centred learning, but teachers have the duty of transferring self-regulation skills to their learners.

Self-regulation is useful for both current and future achievement of students. It is beneficial for achievement and getting rid of procrastination of students (Goulão & Menedez, 2015). It affects educational life of students in the long term (Savoji, Niusha & Boreiri, 2013). Self-regulated learners have an awareness of self-regulation strategies. They set their goals, monitor their learning, evaluate their progress, identify strategies which are appropriate for their needs. They can engage in meaningful learning experiences. They can also control their learning process and organize their learning environment (Savoji et al., 2013). They are active and purposeful learners who can specify related learning strategies or change them when they need,
check their learning to reach their goals. They can adjust their
learning environment to improve their academic achievement
(Lavasani, Mirhosseini, Hejazi & Davoodi, 2011). Therefore, self-
regulated learners can organize their learning as they are strategic
learners.

Being strategic is important for students in self-regulated
increases vocabulary knowledge in language learning (Şentürk,
2016). In terms of learning approaches, deep learning is positively
associated with setting goals and managing time to achieve goals.
Learning approach has an impact on self-regulation which is
important in online learning environments due to learner
autonomy (Ekici, Coşkun & Yurdugul, 2014). Teaching self-
regulation strategies in the primary years of elementary school is
quite significant (Lavasani, Mirhosseini, Hejazi & Davoodi, 2011).
Self-regulated learning is helpful in language learning. It indicates
how learners view their own learning process and decide on
language learning actions to increase effectivity of their learning
effort.

Language learning strategies are specific actions which are
carried out by language learners to facilitate their language
learning. Personal factors can influence how people learn foreign
languages (Aruselvi, 2016). Language learning strategies can be
thought as one of the most significant variables related to the
success in second language learning. They provide the language
learner with the opportunity of acting independently. Using such
strategies facilitates and boosts language learning (Karatas, Balyer
& Alci, 2015). It is necessary for language learners to be aware of
the learning strategies. When they have such an awareness, their
levels of autonomy can increase (Ungureanu & Georgescu, 2012).
The language learners who move consciously in their actions
about language learning and use a variety of strategies are more
likely to be successful (Rahimi & Katal, 2012). Good language
learners tend to use various language learning strategies when
compared to poor learners (Kayaoğlu, 2013; Yılmaz, 2010).
Language learners, who use language learning strategies, are
assumed to be successful learners. Using these strategies can
shape one’s performance in language learning. They can also be
affected by individual features of learners.

Age levels of students can be associated with their use of language learning strategies. Language learning strategies are teachable and teachers can support language learning of their students who have different ages by teaching them the ways of developing their learning strategies (Chen, 2014). Knowledge of a strategy is not meaningful alone, using it in a strategic way to reach success is important (Anderson, 1991). Emotional intelligence can be thought as related to use of language learning strategies. Students learn better when they feel joy. Considering this, teachers can use techniques which foster the development of emotional intelligence of students such as games and simulations (Zafari & Biria, 2014). Using certain strategies can be associated with the culture and educational context to which learners are exposed (Yılmaz, 2010). Personal features may constitute an effective variable in language strategy use. Similarly, requirements of learners can guide them towards using specific strategies.

It can be claimed that different language skills can be associated with the use of different learning strategies. Some specific language learning strategies can be more beneficial in the development of a skill (Setiyadi, Sukirlan & Mahpul, 2016). It can be put forward that successful language learners, who are more interested in communicative side of language learning, use communication-focused strategies. Different tasks may require different strategies. Therefore, we can not discriminate the strategies as good or bad. Epistemological beliefs are effective on the strategy uses of learners (Kayaoğlu, 2013). Cognitive strategies can be viewed as one of the most important variables which effect language proficiency of learners (Zarei & Baharestani, 2014). It is the teachers’ duty to make students aware of strategies (Zafari & Biria, 2014). It is not easy to choose which strategy is better for learners. Learner needs are determinant in their strategy preferences and teachers can create awareness in their learners about language strategy use.

Self-regulation can be seen as the beginning point of an effective learning environment (Boekaerts, 1999). Similarly, language learning strategies constitute an important factor in successful language learning (Karatas, Balyer & Alci, 2015). Thus,
they drew much interest in the field of research. Self-regulation was investigated with several variables such as learning approaches (Ekici et al., 2014), learner autonomy (Goulão & Menedez, 2015), academic procrastination (Kandemir, 2014), academic performance and gender differences (Senler & Sungur-Vural, 2014), academic achievement (Peng, 2012) teacher behaviours (Shahmohammadi, 2014) and the role of motivation (Pintrich, 1999). The other term, language learning strategy use, was searched with a wide range of individual variables such as preferences of learners (Deneme, 2008), academic achievement (Solak & Cakir, 2015; Rahimi & Katal, 2012; Kayaoğlu, 2013; Zarei & Baharestani, 2014; Yilmaz, 2010), strategy training (Aruselvi, 2016), Emotional Intelligence (Zafari & Biria, 2014) and age (Chen, 2014; Sadeghi & Attar, 2013). Meanwhile, there are few studies which examined the relationship between self-regulation and language learning strategies (Zarei & Gilanian, 2015; Erdoğan, 2018). Additionally, these two studies also investigated these terms within the context of tertiary level education like most of other studies on these subjects. Therefore, the current study aims to examine the relationship between self-regulation and use of language learning strategies in order to investigate the contribution of self-regulation to language learning in the context of elementary school. In line with this aim, this study tries to answer the research questions below:

1. How do demographic features of students influence self-regulation?
2. What is the level of language strategy use of the students?
3. What is the relationship between self-regulation and use of language learning strategies?

Methodology

Research Design

The research was a quantitative study which was carried out in comparative research method. Correlational scanning was employed in the study. It was done between March and May in 2018 at a foundation school which served at the secondary level in Erzurum province of Turkey.
Participants and Setting

The target population of the research included all the 6th, 7th and 8th grade students (N=308) who studied at secondary foundation school in the year of education 2017-2018 in the city centre of Erzurum province of Turkey. All of the students, who accepted to participate in the study, were incorporated in the study with simple random sampling. The research was completed with the participation of 264 secondary school students and 44 students were unwilling to participate in the study.

The school accepts all their students after an achievement exam, which includes multiple courses. English teaching is provided under the name of Main Course, which deals with all language skills. The students from grade 6 and 7 receive 8 hours of English (144 hours for each semester) and those from grade 8 receive 5 hours of English per week (90 hours for each semester). 6th grade students are assumed to be at A2 proficiency level while the rest were supposed to be at B1 level of proficiency.

Data Collection Tools

In this study 3 data collection tools were employed. Personal Information Form, Self-regulation Skills Scale and Strategy Inventory for Language Learning were used as the data collection instruments of the study. All of these tools were applied in Turkish considering the language proficiency levels of the students.

The Personal Information Form was prepared by the researchers and included 8 items which aimed to question socio-demographic features of the students such as age, grade level, socioeconomic status of the students, educational level of their parents and the place where they live.

Strategy Inventory for Language Learning (SILL) was developed by Oxford (1990). It is a questionnaire, which includes 50 items with a 5-point Likert scale. There are 50 types of language strategies for EFL learners. These strategies are classified as memory strategies, compensation strategies, cognitive strategies, metacognitive strategies, affective strategies and social strategies. Cesur and Fer (2007) investigated the validity and reliability of the Turkish version of SILL. Reliability coefficients of
the SILL was found .92 in their study. They showed that the Turkish version is valid and reliable to be used in research studies. The Cronbach’s alpha coefficient was found .93 in the current study.

Self-Regulation Skills Scale was developed by Arslan (2011) by making students write composition. He also benefitted from the self-regulated learning strategies which were put forward by Zimmerman (1989:17). It is a general scale and has just one dimension. It has 20 items with 5-point Likert type. The reliability of the scale was calculated as .87 through Cronbach’s Alpha coefficient by Arslan (2011). It was found .76 in this study.

Data Collection and Analysis

The data were collected by means of the 3 data collection instruments. The participants were asked to fill in them. During the analysis of the data SPSS 18.0 (SPSS Inc. IL, USA) was used. Descriptive statistics the the data were calculated. A t-test, Kruskal Wallis, Pearson correlation, Mann Whitney U and variance analysis were also used. The level of statistical significance was accepted as p<0.05.

Findings

The findings of the study were presented in this section. Demographic information about the participants of this study was presented in Table 1 below in detail.

<table>
<thead>
<tr>
<th>Features</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6th grade</td>
<td>99</td>
<td>37.5</td>
</tr>
<tr>
<td>7th grade</td>
<td>87</td>
<td>33.0</td>
</tr>
<tr>
<td>8th grade</td>
<td>78</td>
<td>29.5</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>104</td>
<td>39.3</td>
</tr>
<tr>
<td>Male</td>
<td>160</td>
<td>60.7</td>
</tr>
<tr>
<td><strong>Living place</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City/Town</td>
<td>263</td>
<td>99.6</td>
</tr>
<tr>
<td>Village</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Income status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balanced income</td>
<td>261</td>
<td>98.8</td>
</tr>
</tbody>
</table>

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The percentages of the participant students were close to one another, but the highest participation was from 6th grade students (37.5%). The number of male students was much higher than females (n=160). They lived in a city or town except for one student (n=263). Most of them had a satisfactory level of income (n=261). Majority of them lived with their families (n=254). When we looked at the educational status of their parents, most of the students’ mothers had an education at the level of high school and university (n=245). Similarly, most of the students’ fathers had an education at the level of high school and university (n=257).

Table 2 revealed the relationship between demographic features and self-regulation skill of the participants.

Table 2. The relationship between demographic features and self-regulation skill of the participants (n=264)

<table>
<thead>
<tr>
<th>Demographic features</th>
<th>Self-regulation skill</th>
<th>Test and p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X ±SD</td>
<td>r= -.130,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>p= 0.035</td>
</tr>
<tr>
<td>Age average</td>
<td>12.87±1.02</td>
<td></td>
</tr>
<tr>
<td>Grade level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6th grade</td>
<td>73.61±11.02</td>
<td>F=2.205</td>
</tr>
<tr>
<td>7th grade</td>
<td>74.29±11.27</td>
<td>p= 0.102</td>
</tr>
<tr>
<td>8th grade</td>
<td>70.92±10.15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td><strong>Living place</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City/Town</td>
<td>74.62±10.10</td>
<td>72.01±11.31</td>
</tr>
<tr>
<td>Village</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Income status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balanced income</td>
<td>73.08±10.91</td>
<td>63.00±00</td>
</tr>
<tr>
<td>Low income</td>
<td>62.66±1.52</td>
<td></td>
</tr>
<tr>
<td><strong>The people whom they live</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>73.18±10.93</td>
<td></td>
</tr>
<tr>
<td>Relatives</td>
<td>70.00±6.36</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>69.00±13.71</td>
<td></td>
</tr>
<tr>
<td><strong>Education level of the mother</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>65.33±2.51</td>
<td></td>
</tr>
<tr>
<td>Literate</td>
<td>82.00±00</td>
<td></td>
</tr>
<tr>
<td>Primary/Secondary school</td>
<td>77.46±7.35</td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>71.06±10.65</td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>73.67±11.21</td>
<td></td>
</tr>
<tr>
<td><strong>Education level of the father</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>65,33±2,51</td>
<td></td>
</tr>
<tr>
<td>Literate</td>
<td>64,00±0,00</td>
<td></td>
</tr>
<tr>
<td>Primary/Secondary school</td>
<td>75,66±14,97</td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>72,29±12,45</td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>73,26±10,73</td>
<td></td>
</tr>
<tr>
<td>N= 264</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It was identified that as the level of income of the students gets higher, their level of self-regulation increases (p=0.035). Additionally, as education level of mothers of the participants goes up, their self-regulation levels improve to the same degree (p=0.030). A weak and negative relationship between the age averages and self-regulation skills of the participants was identified (p=0.035, r=-.130). On the other hand, grade, gender, the living place and the people whom they live do not have an impact on self-regulation of the participants (p>0.05).

The self-regulation skill average score of the participants was found as 73.05±10.91 in this study. The lowest score which can be gained from the scale was 20 and the highest score was
100. As the average score increase which is got from the scale, the self-regulation skill gets higher. It was identified that the self-regulation skill of the participants was high.

Table 3. Strategy Inventory for Language Learning (SILL) mean scores of the participants

<table>
<thead>
<tr>
<th>Sub-dimensions of the SILL</th>
<th>Potential range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>X ±SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory Strategies</td>
<td>9-45</td>
<td>11</td>
<td>45</td>
<td>29.89±7.30</td>
</tr>
<tr>
<td>Cognitive Strategies</td>
<td>14-70</td>
<td>14</td>
<td>70</td>
<td>46.20±11.63</td>
</tr>
<tr>
<td>Compensation Strategies</td>
<td>6-30</td>
<td>6</td>
<td>30</td>
<td>21.42±4.85</td>
</tr>
<tr>
<td>Metacognitive Strategies</td>
<td>9-45</td>
<td>9</td>
<td>45</td>
<td>29.85±8.32</td>
</tr>
<tr>
<td>Affective Strategies</td>
<td>6-30</td>
<td>6</td>
<td>30</td>
<td>21.42±4.85</td>
</tr>
<tr>
<td>Social Strategies</td>
<td>6-30</td>
<td>6</td>
<td>30</td>
<td>18.74±5.95</td>
</tr>
</tbody>
</table>

Table 3 gave the SILL mean scores of the participants. They got 29.89±7.30 in memory strategies, 46.20±11.63 in cognitive strategies, 21.42±4.85 in compensation strategies, 29.85±8.32 in metacognitive strategies, 21.42±4.85 in affective strategies and 18.74±5.95 in social strategies. When we examined their averages for each type of strategies, we saw that their mean scores were at a medium level.

Table 4. The relationship between self-regulation skills and SILL sub-dimensions of the participants

<table>
<thead>
<tr>
<th>Self-regulation skill</th>
<th>Memory Strategies</th>
<th>Cognitive Strategies</th>
<th>Compensation Strategies</th>
<th>Metacognitive Strategies</th>
<th>Affective Strategies</th>
<th>Social Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r=,260</td>
<td>r=,215</td>
<td>r=0.66</td>
<td>r= ,270</td>
<td>r=-,017</td>
<td>r= ,116</td>
</tr>
<tr>
<td></td>
<td>p=,000</td>
<td>p=,000</td>
<td>p=,000</td>
<td>p= ,000</td>
<td>p=,785</td>
<td>p=,060</td>
</tr>
</tbody>
</table>

Table 4 showed the relationship between self-regulation skills and SILL sub-dimensions of the participants. When it was examined, a very weak correlation was found between self-regulation skill and social strategies. Self-regulation skill of the
participants also had a moderate level of relationship with cognitive strategies, memory strategies and metacognitive strategies. It had a high correlation with compensation strategies. However, it had a negative and weak correlation with affective strategies.

**Discussion**

The data, which were gained from the study, was interpreted in accordance with three research questions of the study and results gathered from similar studies in the literature.

The first research question examined the relationship between self-regulation and demographic features. It was seen that factors like level of income and educational status of mothers are important in the development of self-regulation skills of the students (Table 2). Age was found to have a weak and negative effect on self-regulation. This was a surprising result and may be due to the cognition of the participant students in this study. (This may also stem from the reality of the central exam which they have to take after graduating from elementary school. They may prefer leaving control to the teachers as they get closer to the exam). The relationship between income level and self-regulation can be understood as the effect of context in which students live and study. A satisfactory level of income which their parents get provides them with a suitable environment where they can focus on their learning. Mothers can be considered to have the utmost responsibility in caring their children in Turkish context. As it was seen in the findings of this study, they have an impact of the self-regulation of their children. It can be claimed that the children model the behaviours of their mothers and adjust their own behaviours in accordance with the role model. Gender was found irrelevant with self-regulation and this finding is in line with that of Čerešnik (2013). Grolnick and Ryan (1989) claimed that maternal influences can be seen in behavioural adjustment and achievement but fathers are not influential. According to Raver, Jones, Li-Grining, Zhai, Bub and Presler (2011), low income can influence children social and behavioural development in a negative way. Similarly, Lin (2012) viewed the issue from the perspective of Socio-cultural theory and regarded foreign language
learning as a practice affected by social and cultural factors like family and personal settings. These results are in line with the findings of the current study. Educational opportunities and maternal influence can create an impact on education of children.

The second research question dealt with the level of language learning strategy use of the students. It was found out that they had a medium level of language learning strategy use. Despite their low level of age and cognition, they are aware of using necessary language learning strategies. Language learning strategies contribute to learner autonomy. The students who participated in this study were identified to have a high level of self-regulation. Keeping this in mind, they can be expected to be strategic language learners. According to Karababa, Eker and Arık (2010), learners can do something related to autonomy as they feel themselves responsible for their learning. In contrast with the current study, Chen (2014) put forward that secondary school students did not often use metacognitive strategies. The difference may stem from the satisfactory level of self-regulation of the participants of current study.

The last research question was about the relationship between self-regulation skills and SILL sub-dimensions of the participants. It showed that social strategies had a very weak correlation with self-regulation skills of the students. Memory strategies, cognitive strategies and metacognitive strategies had a weak relationship with self-regulation. To my surprise, affective strategies had a negative correlation with self-regulation. Self-regulation is known to be influential in general learning. Therefore, we can expect that this comprises language learning as well. Self-regulated learners can organize their language learning. Memory strategies include keeping words and illustrations in mind and retrieving them when necessary. Cognitive strategies are very much related to students’ understanding and producing a language. Metacognitive strategies contain organizing one’s own learning, plan and monitor the learning process and determine their learning needs and styles. Compensation strategies can be seen as important in the flow and continuation of communication. Compensation strategies were found to have the highest correlation with self-regulation. This finding can be interpreted as
that self-regulation makes contribution to language learning. Furthermore, it fosters the improvement of communicative side of language learning. Likewise, Mahmoodi, Kalantari and Ghaslani (2014) stated that self-regulation facilitates language learning. Cazan (2013) suggested that metacognitive activities could be used for fostering self-regulation of students while she was dealing with the relationship between metacognition and self-regulation. Lavasani et al. (2011) stated that self-regulated learners control and assess their learning behaviours and tend to use various learning strategies. Self-regulation of students can even enhance their motivation and self-efficacy. Shirkhani and Ghaemi (2011) expressed that incompetence, low self-efficacy and social inhibitors can negatively affect self-regulation. Boekaerts (1999) stated that cognition and affective processes work together in self-regulation. The last one is partially in contrast with the current study. The negative correlation between affective strategies and self-regulation can be a result of students’ age and cognition level. The existence of a central exam at the end of elementary school may serve as a factor which inhibits self-regulation level of the students and guides them towards leaving authorities more control.

Conclusion and Suggestions

Self-regulation skills of students can be influenced by various factors depending on the context. This study revealed that level of income and education level of mothers are significant in self-regulation of children. Self-regulation is transferrable and children can be taught in a way which is suitable to their ages. Education starts at family. The current study showed that mothers have a role in the development of self-regulation of their children. They can provide good models for their children in their daily lives. Mothers candidates of the future should also be educated with the awareness of their influence on self-regulation levels of their children. The children can view self-regulation as a life skill and apply it in various areas including education. When it comes to the level of income, it can be beneficial in presenting children a suitable context which can be used for educational purposes. We can say that providing children with an environment
where they can get a quality education and organizing their learning can provide fruitful results including language learning. The ministry of education can support students who need financial support to improve the qualities of their educational context.

The participants of this study were secondary school students. Although they were young learners, they had some knowledge about language learning strategies. It can be said that teaching students self-regulation strategies at early ages can support their educational development and language learning. Teachers have an important duty in teaching language learning strategies to their students. They can model how to use such strategies to help their students.

The research showed the relationship between self-regulation and language learning strategy use. The highest correlation was at compensation strategies. This suggests that self-regulation contributes to flow of communication. Teachers can use self-regulation strategies to improve their students’ fluency in language education.

The present study had few limitations. It included 264 students who studied at a foundation secondary school. It was done with 3 quantitative data collection instruments. Another limitation of this study was that it included only quantitative data and offered only an overview of the issues under investigation. It lacked in depth information. Therefore, further studies can be carried out with a larger group of students. They can contain students at different levels and from different kinds of schools. They can employ many other data collection tools and research designs. Researchers can use more qualitative data to receive more insightful results.

**Acknowledgements**

A preliminary version of this research was presented at the SOSCON Conference 2019, Elazığ, Turkey.
References


Karababa, Z. C., Eker, D. N. & Arık, R.S. (2010). Descriptive study of learner’s level of autonomy: voices from the Turkish language classes. Procedia Social and Behavioral Sciences, 9, 1692-1698.


### APPENDIX 1: SELF-REGULATION SKILL SCALE

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<td></td>
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<tr>
<td>1. Before starting to study, I make a detailed plan about how to study</td>
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<tr>
<td>2. Before starting to study, I set goals about the subject</td>
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<td>3. Before starting to study, I ensure that the environment is suitable for this</td>
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<td>4. Before starting to study, I think how I learn a subject best</td>
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<tr>
<td>5. When I start to study, I cannot direct my attention completely</td>
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<tr>
<td>6. While learning a subject, I wonder whether I have made progress or not</td>
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<tr>
<td>7. I give up studying if I encounter with a very difficult subject while studying</td>
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<td>8. I do not study regularly every day</td>
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<tr>
<td>9. While studying a subject, I do not care about whether my studying method is effective or not</td>
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<tr>
<td>10. I use other methods if my current learning method is not effective</td>
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<tr>
<td>11. I try to speak English like a native speaker</td>
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<tr>
<td>12. I repeat sounds in English to learn them</td>
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<tr>
<td>13. I use the English words, which I learn, in different structures</td>
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<tr>
<td>14. I can start conversations in English</td>
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<tr>
<td>15. I try to learn English by watching programmes and movies in English</td>
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<tr>
<td>16. I read materials like book/newspaper etc. for pleasure</td>
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<tr>
<td>17. I can write notes, messages, letters and reports in English</td>
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<tr>
<td>18. I first read a text in English quickly, then more carefully from the beginning</td>
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<tr>
<td>19. I try to find similar words in my mother tongue to new English words</td>
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<tr>
<td>20. I try to understand the structures of sentences in English</td>
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</table>
## APPENDIX 2: LANGUAGE LEARNING STRATEGY INVENTORY

### PART A: MEMORY STRATEGIES

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<tbody>
<tr>
<td>1</td>
<td>I think of relationships between what I already know and new things I learn in the SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>I use new SL words in a sentence so I can remember them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>I connect the sound of a new SL word and an image or picture of the word to help me remember the word.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>I remember a new SL word by making a mental picture of a situation in which the word might be used.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>I use rhymes to remember new SL words.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>I use flashcards to remember new SL words.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>I physically act out new SL words.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>I review SL lessons often.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>I remember new SL words or phrases by remembering their location on the page, on the board, or on a street sign.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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### PART B: COGNITIVE STRATEGIES

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<tbody>
<tr>
<td>10</td>
<td>I say or write new SL words several times.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>I try to talk like native SL speakers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>I practice the sounds of SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13</td>
<td>I use the SL words I know in different ways.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>I start conversations in the SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>I watch SL language TV shows spoken in SL or go to movies spoken in SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16</td>
<td>I read for pleasure in the SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17</td>
<td>I write notes, messages, letters, or reports in the SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18</td>
<td>I first skim an SL passage (read over the passage quickly) then go back and read carefully.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19</td>
<td>I look for words in my own language that are similar to new words in the SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20</td>
<td>I try to find patterns in the SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21</td>
<td>I find the meaning of an SL word by dividing it into parts that I understand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22</td>
<td>I try not to translate word for word.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23</td>
<td>I make summaries of information that I hear or read in the SL.</td>
<td>1</td>
<td>2</td>
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### PART C: COMPENSATION STRATEGIES

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<tbody>
<tr>
<td>24</td>
<td>To understand unfamiliar SL words, I make guesses.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>25</td>
<td>When I can’t think of a word during a conversation in the SL, I use gestures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>26</td>
<td>I make up new words if I do not know the right ones in the SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>27</td>
<td>I read SL without looking up every new word.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>28</td>
<td>I try to guess what the other person will say next in the SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>29</td>
<td>If I can’t think of an SL word, I use a word or phrase that means the same thing.</td>
<td>1</td>
<td>2</td>
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### PART D: METACOGNITIVE STRATEGIES

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<tr>
<td>30</td>
<td>I try to find as many ways as I can to use my SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>31</td>
<td>I notice my SL mistakes and use that information to help me do better.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32</td>
<td>I pay attention when someone is speaking SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>33</td>
<td>I try to find out how to be a better learner of SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>34</td>
<td>I plan my schedule so I will have enough time to study SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35</td>
<td>I look for people I can talk to in SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>36</td>
<td>I look for opportunities to read as much as possible in SL.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>37</td>
<td>I have clear goals for improving my SL skills.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>38</td>
<td>I think about my progress in learning SL.</td>
<td>1</td>
<td>2</td>
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### PART E: AFFECTIVE STRATEGIES

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<tr>
<td>39</td>
<td>I try to relax whenever I feel afraid of using SL.</td>
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<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>40</td>
<td>I encourage myself to speak SL even when I am afraid of making a mistake.</td>
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<td>2</td>
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<td>4</td>
</tr>
<tr>
<td>41</td>
<td>I give myself a reward or treat when I do well in SL.</td>
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<td>2</td>
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<td>4</td>
</tr>
<tr>
<td>42</td>
<td>I notice if I am tense or nervous when I am studying or using SL.</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>43</td>
<td>I write down my feelings in a language learning dairy.</td>
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<td>3</td>
<td>4</td>
</tr>
<tr>
<td>44</td>
<td>I talk to someone else about how I feel when I am learning SL.</td>
<td>1</td>
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### PART F: SOCIAL STRATEGIES

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<tr>
<td>45</td>
<td>If I do not understand something in SL, I ask the other person to slow down or say it again.</td>
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<td>2</td>
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<td>4</td>
</tr>
<tr>
<td>46</td>
<td>I ask SL speakers to correct me when I talk.</td>
<td>1</td>
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<td>3</td>
<td>4</td>
</tr>
<tr>
<td>47</td>
<td>I practice SL with other students.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>48</td>
<td>I ask for help from SL speakers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>49</td>
<td>I ask questions in SL.</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<tr>
<td>50</td>
<td>I try to learn about the culture of SL speakers.</td>
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