SELF-REGULATION IN YOUNG LEARNERS’ VOCABULARY LEARNING

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Abstract
Self-regulation provides an innovative frame to investigate learners’ activity in learning a language, and it is vital to give a comprehensive picture of learners’ strategic behaviour. Therefore, self-regulated language learning is in the focus of this paper from both theoretical and empirical perspectives. Since there is a strong link between strategic language learning and self-regulation, the components of young learners’ self-regulating capacity is understood as determinants of their strategic thinking. In the empirical research presented in this paper I discuss the extent of young learners’ self-regulation in learning vocabulary and illustrate age-related differences.

1. Introduction
Although self-regulation is a broadly-discussed field in educational psychology it seems to be a neglected area in language teaching. The reasons can be varied. While motivation has long been a well-delineated area, mainly because it can come from outside and thus the forms of extrinsic motivation are easy to identify, self-regulation is an inner effort and thus it is difficult to define. As a result, self-regulation strategies rarely stand in focus in connection with language learning, although there is a strict connection between strategic language learning and self-regulation. In this paper, I start to describe the main aspects of self-regulation and its relation to strategic language learning, present the components of self-regulating capacity and, finally, based on empirical research data I describe young learners’ self-regulation in vocabulary learning.

2. Self-regulation in language learning

2.1. Self-regulation and strategic language learning

Educational psychology describes the concept of self-regulation and self-regulated learning, which cover practises that help the human psyche control its functions, states and inner processes [1]. Language acquisition has taken over the notion of self-regulation from this field and research into the specific field of strategic learning has started to discuss the learning process initiated from the notion of self-regulation. In the frame of self-regulation specific beliefs and processes determine learners’ strategic behaviour to control their own achievements [2].

Obviously, there is a strict connection between self-regulation and strategic learning. A recent approach to learning strategies distinguishes between self-regulated learners who are strategic and those who are not [3]. In this view, learners’ innate self-regulatory capacities are emphasized, rather than the outcome of learning strategies, since self-regulation supports their
choice and use of certain strategies. Tseng et al. affirm that it is creative effort that make learners strategic and not what they do.

Dörnyei [4] claims that self-regulation is a more dynamic concept as learning strategy since it denotes the extent to which individuals are active participants in their own learning processes. According to Dörnyei, self-regulation is a process-oriented construct which includes cognitive, metacognitive, motivational, behavioural, and environmental processes learners rely on to increase their achievements. Based on the cooperation of the several integrated and interrelated microprocesses, self-regulation can be seen as a multidimensional construct. All in all, the discussion of learning strategies in relation to self-regulation has considerably broadened the perspective.

However, learning strategy use can be discussed as one of the dynamic components of self-regulation. A further aspect of self-regulation is motivational self-regulation, which is an ability that help learners control their attitudinal and motivational disposition [4] (p. 91). Self-motivational beliefs, such as goal orientation, intrinsic interest, outcome expectations, and self-efficacy, evaluation, self-reflection and satisfaction with one’s effort [5] are also the components of self-regulation. These constituents are along the line of self-regulated learning theories [6] [7]. It is widely accepted that self-regulated learners do not necessarily use a range of cognitive strategies, but have some knowledge about their own learning process which supports their choice of certain strategies and help them adapt to novel situations. Self-regulated learners are motivated by their confidence that they are able to succeed.

2.2. Self-regulatory capacity in vocabulary learning

The process oriented approach of self-regulatory capacity in vocabulary learning has been worked out by Dörnyei [4] based on Kuhl’s [8], and Corno and Kanfer’s [9] taxonomy of action control strategies, which were not restricted to vocabulary learning. The self-regulatory control strategies which Dörnyei [4] proposed for vocabulary learning cover the following items:

1. Commitment control strategies for helping to preserve or increase the learner’s original goal commitment (e.g., keeping in mind favourable expectations or positive incentives and rewards; focusing on what would happen if the original intention failed).
2. Metacognitive control strategies for monitoring and controlling concentration, and for curtailing unnecessary procrastination (e.g., identifying recurring distractions and developing defensive routines; focusing on the first steps to take in a course of action).
3. Satiation control strategies for eliminating boredom and adding extra attraction or interest to the task (e.g., adding a twist to the task; using one’s fantasy to liven up the task).
4. Emotion control strategies for managing disruptive emotional states or moods, and for generating emotions that are conducive to implementing one’s intentions (e.g., self-encouragement; using relaxation and meditation techniques).
5. Environmental control strategies for eliminating negative environmental influences and exploiting positive environmental influences by making the environment an ally in the pursuit of a difficult goal (e.g., elimination distractions; asking friends to help one not to allow to do something).

Based on these control mechanisms, Tseng et al. [3] created an instrument to measure self-regulating capacity in vocabulary learning (SRCVoc). Participants were required to indicate their degree of agreement on a six-point scale in which the answers were ranking between strongly agree and strongly disagree. Although the instrument had reliable psychometric properties and worked well, some apparent criticism [10], [11] claimed that it measured self-regulatory control mechanisms exclusively, and did not assist knowledge about strategy use, i.e. it provided only an understanding of the underlying self-regulatory capacity, and left out strategy use.

Similarly, Rose argued that reconceptualising strategic learning in the face of self-regulation is “throwing language learning strategies out with the bathwater” [11] (p.1). Nevertheless, self-regulation theory continues to gain access in strategy research and gives way to the rise of innovative models. Self-regulation is involved in the model worked out by Lin and Oxford [12], in

Based on all these models, it can be stated that self-regulating capacity is compatible with language learning strategies since they measure the same entity from different perspectives [16]. While self-regulation scrutinizes the initial driving forces of language learning, strategy research studies the outcome of these forces. Initiating from these ideas, in my basic research I examined vocabulary learning strategies in the frame of self-regulation [17], a segment of which – self-regulatory strategies – are discussed and analysed in the present study.

3. Methodology

3.1. Research questions

Proceeding from the theoretical framework of self-regulation and learning strategy research the following two research questions are addressed in this paper:
1. How much young learners are self-regulated in learning vocabulary in English?
2. Are there age-related differences in young-learners self-regulation?

3.2. Participants and settings

Since the present research relies on data from the author’s basic research, for detailed description of the participants and settings see the preceding work [17]. Young learners (N=481) from grades 3 to 8 in six primary schools in Kecskemét, Hungary took part in the investigation. The schools and learners were selected randomly. Participation was voluntary and anonymous. For processing, data was divided into three groups based on participants’ age.

3.3. The structure of the research

The results in this paper are presented in the order of data collection, which started with qualitative data elicitation, and processing. Preliminary results provided a strong base to develop a questionnaire that was used in the following research part for collecting quantitative data. Accordingly, first qualitative semi-structured interviews were conducted (N=27), and based on the initial data a structured questionnaire was created and used (N=12) which provided well-arranged data. Based on the qualitative data a Likert-scale was developed which gave way to collect quantitative data (N=331). The results are presented following the original order of data elicitation.

4. Young learners’ self-regulatory capacity in vocabulary learning

4.1. Results of the semi-structured open-ended interviews

Since self-regulation can be seen as a frame for strategic language learning, learners’ self-regulatory capacity helps to understand the learning process as a whole. In this research participants’ self-regulatory control strategies are presented and analysed following Dörnyei’s classification [4]. Data for the preliminary research was collected in semi-structured open-ended interviews with young learners. Based on the interview data the following examples reflect young learners’ self-regulated behaviour.

Commitment control strategies help maintaining or increasing the initial goal commitment in language learners.

Excerpt 1: Commitment control (Interview 14, grade 4, female)
‘Az ajtón van egy házirend, hogy... és akkor van szabad foglalkozás, ha kész van a lecke..., és egyből megyünk az asztalhoz ími.'
[There is a policy on the door that… and I can do anything free when the homework is done…, and we immediately go to the desk {after arriving home} to write it.]’

Excerpt 1 demonstrates how a learner can control time to be able to perform all the tasks and finds way for relaxing as well. By writing a regulation and keeping to it, the learner expresses a high degree of commitment control. However, the regulation can reflect parental inference which is an expression of external control. Still, keeping to the regulations assumes learners’ responsibility, which clearly shows the effort of applying commitment control.

*Metacognitive control strategies* help monitoring and controlling concentration, and restraining unnecessary procrastination.

*Excerpt 2: Metacognitive control (Interview 22, grade 8, female)*
‘I drink a glass of water and then…, after that I set up…’

Excerpt 2 shows how a learner gets ready for starting language learning. Preparing for learning this way is a metacognitive control strategy, which makes the learner aware of the duty. Drinking water before learning helps concentration and attunes to the activity.

*Satiation control strategies* help to eliminate boredom and adjoin extra attraction or interest to the task.

*Excerpt 3: Satiation control (Interview 4, grade 7, female)*
‘Well…, sometimes yes, sometimes no. It depends on what the topic is like or something like this…, also the mood…’

Excerpt 3 shows that the learner persuades herself about the importance of learning words even if she does not feel like learning them. Her mood to learn words is highly influenced by topic and she is aware of it and can eliminate the destructive feeling.

*Environmental control strategies* help to eliminate undesirable environmental influences and help to take advantage of constructive ones by creating a friendly environment to support learning.

*Excerpt 4: Environmental control (Interview 11, grade 8, female)*
‘I say to turn the TV down…, or I go upstairs, but there is silence, and it is not good either. That’s why I learn with my grandma, because I ask something, and then…’

Excerpt 4 clearly shows that the learner is aware of the environmental effects that help her concentrate or distracts her attention during vocabulary learning. Excerpts 3 and 4 illustrate learners’ preparation for learning, which is a crucial stage since it determines the success of the activity.
These for examples illustrate what kind of strategies young learners use to control their learning activity to be able to reach their goal. However, in these examples the learners are in class 7 or 8, except for Excerpt 1 in which learner’s control might be influenced by external interference. Although deductions cannot be drawn from this narrow database, it can project age-differences in applying self-regulatory control strategies.

4.2. Results of the structured interviews

In this part young learners’ replies concerning their self-regulatory capacity is quoted. Examples for all the self-regulatory strategies of Dörnyei’s [4] classification can be found in the database, i.e. participants’ responses cover all the components of self-regulating capacity ranging from commitment control strategies, through metacognitive, satiation, emotion control strategies to environmental control strategies.

1. If you do not feel like learning words, how do you persuade yourself to prepare for it?
   (self-regulating capacity: commitment control)
   I always feel like learning.
   I sit down and I get out a book or exercise books, and it helps.
   I listen to English music first.
   I learn something else instead, and later I get back to it.
   First I do something else, I play with my dog, and after that…

2. When you cannot concentrate on learning words, how do you turn your attention back?
   (self-regulating capacity: metacognitive control)
   I always concentrate.
   The teacher or my mom calls me upon.
   I put everything away from my desk, I only leave English there, for instance a dictionary.
   I concentrate better.
   I do something else and then I return to it.

3. If you are bored with learning words, how do you override the boredom?
   (self-regulating capacity: satiation control)
   I stop learning it for a while and then I turn back to it.
   I play or eat or drink something or speak to someone. I do something else.
   I try to learn it faster in order to finish it sooner. I speed it up.

4. If you feel stressed about learning words (e.g. word test), how do you get over stress?
   (self-regulating capacity: emotion control)
   I never feel stressed.
   I do learn the words.
   I tell it to myself that it will turn out well.
   With my self-confidence.
   I don’t think about it.
   My mom helps how to pronounce words.

5. How do you prepare or get ready for learning words?
   (self-regulating capacity: environmental control)
   I go into my room and look over what I have to learn.
   I take out the dictionary.
   I decide it in my mind that I may need it.
   I take some water with me.
   I sit down and get the book out.
   I turn down the radio.
   I switch off the TV.
The data clearly indicates that young learners do apply self-regulatory control strategies for learning vocabulary. Since these strategies fell in line with the results of the semi-structured interviews, besides validating the initial research, they entitle for examining the concept of strategic learning further in the frame of self-regulation. Therefore, proceeding from the results of the quantitative research parts, a four-point Likert type questionnaire was designed \[17\] to collect and process quantitative data. The results of this questionnaire is presented in the next chapter.

## 4.3. Results of the quantitative research

In table 1 the means and standard deviation of strategies of self-regulating capacity can be seen.

<table>
<thead>
<tr>
<th>Self-regulating capacity Environment control</th>
<th>MEAN</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.* When I start learning words I go into my room and take out my book, exercise book or vocabulary book.</td>
<td>3.24</td>
<td>0.84</td>
</tr>
<tr>
<td>33. When I start learning I make peace around me.</td>
<td>2.97</td>
<td>0.90</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self-regulating capacity Commitment control</th>
<th>MEAN</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. If I can’t pay attention to learning words, I put away everything, I leave out only English.</td>
<td>2.53</td>
<td>0.97</td>
</tr>
<tr>
<td>30. If I can’t pay attention to learning words, I try to concentrate better.</td>
<td>3.05</td>
<td>0.88</td>
</tr>
<tr>
<td>47. If I can’t pay attention to learning words, I do something else and later I return to it.</td>
<td>2.70</td>
<td>1.01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self-regulating capacity Satiation control</th>
<th>MEAN</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. If I am bored with learning words, I do something else instead (e.g. eat or drink, play, watch TV, etc.).</td>
<td>2.67</td>
<td>1.07</td>
</tr>
<tr>
<td>37. If I am bored with learning words, I try to learn faster to finish sooner.</td>
<td>2.57</td>
<td>1.04</td>
</tr>
<tr>
<td>54. If I am bored with learning words, I stop it for a while and then I continue.</td>
<td>2.77</td>
<td>0.97</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self-regulating capacity Emotion control</th>
<th>MEAN</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>25. If I feel stressed about learning words I learn more in order to know them better.</td>
<td>2.44</td>
<td>1.01</td>
</tr>
<tr>
<td>29. If I feel stressed about learning words I try not to think about stress.</td>
<td>2.75</td>
<td>0.95</td>
</tr>
<tr>
<td>42. I do not feel stressed about learning words.</td>
<td>2.97</td>
<td>0.98</td>
</tr>
<tr>
<td>51. If I feel stressed about learning words (e.g. because of written of oral test, etc.) I say it to myself that it will succeed.</td>
<td>2.97</td>
<td>0.93</td>
</tr>
</tbody>
</table>

N: 331, Min.: 1, Max.:4
Meaning of the Likert points: 1 “strongly disagree” 2 “disagree” 3 “agree” 4 “strongly agree”
*Since the strategies are taken out from the large-scale research (Hardi, 2014), original numeration is kept to help accidental orientation in the whole database.

All the means are around the scale value 3, which indicates that participants agree on the use of strategies represented in the table. The only exception, the lowest value is at strategy 25 (2.44), which suggests that young learners do not really reduce stress by learning more. This result coincides with the findings in Hardi [18], which indicate that learners rarely use strategies to overcome stress. The highest value is in the case of strategy 19 (3.24), which designates participants’ preparation for vocabulary learning.
5. 4 Age-related differences in young learners’ self-regulated vocabulary learning

Table 2 illustrates the means of young learners’ three age-groups. The tendency is that the youngest learners use the most strategies for self-regulation, and with age self-regulatory capacity is decreasing. This result is rather unexpected, since self-regulation is supposed to increase with age. Table 3 refines the results by illustrating that there is significant mean difference between age-groups 1 and the other two, and it is the youngest learners who formulate an individual group regarding self-regulatory behaviour in vocabulary learning.

Table 2: Descriptive statistics of the categories by age groups

<table>
<thead>
<tr>
<th>Category</th>
<th>Age group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>SRC</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Min</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Min</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Min</td>
</tr>
<tr>
<td>SRC</td>
<td>2.9</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2.8</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2.7</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 3: Mean differences of the age groups in the categories

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Age group</th>
<th>Subset for alpha = 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRC</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>SRC</td>
<td>3</td>
<td>2.71</td>
</tr>
<tr>
<td>SRC</td>
<td>2</td>
<td>2.81</td>
</tr>
<tr>
<td>SRC</td>
<td>1</td>
<td>2.93</td>
</tr>
</tbody>
</table>

There is significant mean difference between age group 1 and 3 (0.22*)

In Table 4 significant mean differences of self-regulating strategies can be seen. The different behaviour of age-group 1 is salient. Except for two strategies (SRC 21 “If I am bored with learning words, I do something else instead (e.g. eat or drink, play, watch TV, etc.).” and SRC 54 “If I am bored with learning words, I stop it for a while and then I continue.”) this age-group produced the highest means, demonstrating the highest level of self-regulation. The lowest means of the above quoted strategies also demonstrate that the youngest learners try to exclude strategies of avoidance.

Table 4: Mean differences of the age groups in each strategy

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Age group</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRC 18</td>
<td>3*</td>
<td>2.33</td>
</tr>
<tr>
<td>SRC 21</td>
<td>1*</td>
<td>2.36</td>
</tr>
<tr>
<td>SRC 25</td>
<td>3**</td>
<td>2.17</td>
</tr>
<tr>
<td>SRC 29</td>
<td>2*</td>
<td>2.59</td>
</tr>
<tr>
<td>SRC 21</td>
<td>1*</td>
<td>2.70</td>
</tr>
<tr>
<td>SRC 29</td>
<td>2*</td>
<td>2.63</td>
</tr>
</tbody>
</table>
Tukey B<sup>a,b</sup> Means for groups in homogeneous subsets are displayed.

- Uses Harmonic Mean Sample Size = 102,718.
- The group sizes are unequal. The harmonic mean of the group sizes is used.
- Type I error levels are not guaranteed.
- * next to the strategy means that mean differences are significant between all the age groups
- * next to the age group means that mean differences are significant between two age groups
- ** next to the age group means that mean differences are significant in this age group compared to another two age groups

### 6. Conclusion

First and foremost, the research questions are answered:

1. How much young learners are self-regulated in learning vocabulary in English?
   
   All in all, the results indicate that young-learners use a number of strategies for self-regulation in vocabulary learning, which result is very promising, since self-regulation considerably contributes to learners’ success in the long-run.

2. Are there age-related differences in young-learners self-regulation?

   Age-related differences in self-regulation highlight important issues. Clearly, there are significant differences regarding the use of self-regulating strategies between the age-groups. Although, self-regulation normally tends to increase with time, it is an unexpected finding that the youngest seem to be the most self-regulated in learning vocabulary.

   Based on this results and results of the main research [17] age-issue seems to infiltrate language learning in the primary school, i.e. the youngest ones (children in the lower primary) seem to be the most motivated and use more strategies to learn vocabulary than their older companions. Motivation can be the key notion in young learners' language learning, since motivational strategies assist language learning in the whole. Results indicate that at the beginning of language learning children are not only more motivated but tend to get more help than later. Teachers’ motivational strategies and external help might facilitate learners’ self-regulation as well.
References


