

## *Self-regulation of Arabic Reading Comprehension of upper Elementary Students*

**Rania Abdo**

Saint Joseph University

[rania.abdo@usj.edu.lb](mailto:rania.abdo@usj.edu.lb)

**ORCID ID:** <https://orcid.org/0000-0003-1316-930X>

**Leyla Akoury Dirani**

American University of Beirut

[la55@aub.edu.lb](mailto:la55@aub.edu.lb)

**ORCID ID:** <https://orcid.org/0000-0003-1121-0989>

**DOI: 10.17398/1988-8430.31.229**

Fecha de recepción: 07/04/2019

Fecha de aceptación: 15/10/2019

Esta obra está publicada bajo una licencia Creative Commons



OPEN  ACCESS

Abdo, R., y Akoury Dirani, L. (2020). Self-regulation of Arabic Reading Comprehension of upper Elementary Students. *Tejuelo* 31, 229-258.

Doi: <https://doi.org/10.17398/1988-8430.31.229>

**Abstract:** This study examines the self-regulation processes of reading comprehension in Arabic of Lebanese students in upper elementary who perform poorly only in this language. The focus is on the cognitive and metacognitive strategies these students use, and on the motivational components of self-regulation. A questionnaire and two different semi-structured interviews were administered to fifteen elementary students and to their Arabic teachers, in a French-speaking school in Beirut. Participants do not self-regulate efficiently their Arabic reading comprehension and they tend to seldom use cognitive learning strategies. Self-regulatory processes are predicted by participants' lack of motivation that manifests itself mostly through perceptions of moderate self-efficacy of performance and low expectations of success. This is the first step towards understanding the learning processes of students poorly performing in Arabic reading. It can provide means that will help students in applying self-regulated content learning of not only texts in Arabic but readings in general.

**Key words:** Reading comprehension; SRL; Cognitive Strategies; Self-efficacy; Metacognitive Reading Strategies.

# **I**ntroduction

For some students, for whom decoding is easy, reading comprehension of informative texts may be hindered by deficient cognitive processes, including cognitive and self-regulation strategies. In a bilingual context, these difficulties are observed in one of the two languages (Abu shmais, 2002; Alsheikh & Moukhtari, 2011). Cognitive and motivational processes of self-regulation of reading comprehension have been widely studied in a monolingual context. It would be interesting to study them in a bilingual context.

## **1.- Context of the study**

In Lebanon, the native language/ mother tongue is Arabic. However, Lebanese children converse in dialect Arabic and French or

English at home and in society. Furthermore, education is at least bilingual since preschool that is, beside literary or classical Arabic, students learn either French in francophone schools or English in anglophone schools. Hence, students are expected to have the same level of fluency in two languages, with literary Arabic being one of them. However, difficulties in understanding informative texts have been empirically observed in only one of the two languages of instruction, in this case Arabic. Studying this phenomenon is crucial to understand and prevent failure in subjects taught in Arabic like history and geography.

## **2.- Reading Comprehension and Self-Regulated Learning**

Reading comprehension is essential for elementary students in order to prepare them to meet the requirements of the middle and high schools, where reading becomes an essential means of acquiring knowledge. According to Kintsch (1988), Stanovich (1994), Kamil, Mosenthal, Pearson, & Barr (2016), content reading comprehension has a learning function where self-regulation would be essential. Indeed, besides understanding simple meaning of text content, high level of comprehension of content relies on self-monitoring process and cognitive learning strategies. These include integrating new information to prior background knowledge, organization strategies, and elaboration strategies, namely synthesizing information from multiple texts and composing a well-organized statement (Pressley, 2002; Guthrie, Schafer & Huang, 2001).

Therefore, in order to fully understand / learn what s/he reads, the student must self-regulate the activity (Nelson and Manset-Williamson, 2006; Souvignier and Mokhlesgerami, 2006; Donker, De Boer, Kostons, Van Ewijk, & van der Werf, 2014). According to one of the most widely used definitions, Self-regulated learning refers to “self-generated thoughts, feelings, and actions that are planned and cyclically

adapted to the attainment of personal goals” (Zimmerman, 2000:14). Wherein the learner follows a cyclical model of self-regulatory learning (Butler & Winne, 1995; Zimmerman, 1998; Butler & Cartier, 2004; Pintrich, 2000; Vandervelde, Van Keer & Rosseel, 2013). In fact, self-regulated learners use metacognitive strategies, are motivated and have a strategic approach to learning tasks (Pintrich 2002; Zimmerman, 2008; Panadero, 2017).

Accordingly reading comprehension must include student's metacognitive strategies for planning, controlling and adjusting, and self-evaluating his or her comprehension and the effectiveness of the strategies used. In this specific situation, while the reader is searching for the meaning of the text, s/he must pursue an explicit goal of understanding that is learning (Pintrich, 2002; Cartier, 2007; Zimmerman, 2008). Throughout his/her reading, s/he judges the success of comprehension and, if necessary, adjusts it. Self-evaluation strategies help to ensure that the whole content is read, understood, and the task completed.

Moreover, when reading an informative text, the skilled reader must learn the important information through rehearsal, selection, elaboration and organization strategies (Van Dijk & Kintsch 1983; Weinstein & Meyer, 1986; Kintsch, 1988; Vauras, 1991; Pressley *et al.*, 1992; Cartier, 2007). The efficiency of choosing and using these cognitive learning strategies influences comprehension and, subsequently, learning text content (Palinscar and Brown, 1984, Souvignier & Mokhlesgerami, 2006, Spörer, Brunstein, & Kieschke, 2008, Donker *et al.*, 2014).

### **3.- Motivational components of Self-regulation**

The reader must not only know and regulate his cognitive reading strategies but must also be motivated to do so (Pintrich & De Groot, 1990; Zimmerman, Bonner & Kovach, 1996; Boekaerts, 1999:

Butler & Cartier, 2004; Nelson & Manset-Williamson, 2006; Schunk and Zimmerman, 2003, Guthrie *et al.*, 2004).

Several motivational factors mediate these strategies. These include the goals pursued, the interest in activity, the motivation to read, and the belief in personal efficacy (Pintrich & de Groot 1990; Bandura, 1993, Bandura, Barbaranelli, Capara, & Pastorelli, 1996; Stipek 2002; Schunk & Zimmerman, 2003; Boekaert & Corno, 2005; Panadero, Jonsson., & Botella, 2017). This motivation is manifested in the deployment of efforts to reach success, the pleasure of undertaking challenges, the use of appropriate learning strategies, the pursuit of explicit learning objectives, and a high level of self-efficacy (Schunk, 1994; Pintrich, 2000; Pintrich et Schunk, 2002). Some difficulties in reading comprehension, which have a negative impact on the use of cognitive and metacognitive strategies and on engagement and perseverance, are linked to the performance objectives pursued and to a negative perception of the efficacy of one's personal reading abilities.

The present research aims to study the self-regulation processes of Arabic reading comprehension of 4<sup>th</sup> and 5<sup>th</sup> grades Lebanese students performing poorly in this language. The focus is, particularly, on the cognitive and metacognitive strategies and on students' motivational components of self-regulated learning. Motivational variables targeted are perceived self-efficacy to perform an Arabic reading task, and its intrinsic value.

## **4.- Methodology**

In the absence of any previous similar study in Lebanon, an exploratory study based on fifteen cases is carried out. It relies on a quantitative and qualitative data analysis in order to identify as closely as possible the cognitive processes at stake.

### ***4.1.- Field and participants***

The research is conducted in the last quarter of the school year in May at the end of the second semester in a private francophone school in Beirut. The sample included 15 Lebanese native students, 5 fourth graders and 10 fifth graders, and their Arabic teachers (5 teachers). Each teacher was interviewed about her own students. There were 10 boys (66.6%) and 5 girls (33.4%) aged 9 to 11 years old.

All participants did their preschool and primary studies following the Lebanese bilingual program (Arabic / French). The selected students failed in Arabic and Arabic reading (Arabic general average below 9.5 / 20). However, they succeed in French (French general average higher than 10.5 / 20) and in all subjects taught in French (math and science). Academic performance was measured by collecting averages of the student performance on quizzes and exams since the beginning of the year.

Selected students had significantly lower averages on Arabic reading than on both French reading and general averages. Paired t-tests indicated a significant difference between the Arabic reading and the French reading averages ( $t(14) = -5.069$ ;  $p = 0.000$ ). Similarly, a significant difference was found between the Arabic average and the student general average ( $t(14) = -6.839$ ,  $p = 0.000 < 0.05$ ).

## **4.2.- Instruments**

### **4.2.1.- Questionnaire**

An adaptation of the self-report questionnaire: the Motivated Strategies for Learning (MSLQ) (Pintrich and DeGroot, 1990) was used. The MSLQ included 56 items divided into five 7-point Likert scale (1 = *not at all true of me* to 7 = *very true of me*) measuring 7th grade students' motivation, cognitive strategy use, metacognitive strategy use, and management of effort when learning science or English. It includes as well a final scale measuring test anxiety.

A French version of the MSLQ was constructed and adapted by the authors to the context of an Arabic reading task and to the age of the learners. It included four scales. Students were instructed to respond to the items on a frequency based 4-point Likert scale (*1 = never, 2 = sometimes, 3 = often, 4 = always*). It consisted of 43 statements. The 4 scales had a significant internal consistency Cronbach Alpha > 0.7.

The Self-Efficacy scale (SI,  $\alpha=0.796$ ) consisted of nine statements measuring student's expectancy and beliefs about their ability to perform an Arabic reading task.

The Intrinsic Value scale (SII,  $\alpha= 0.675$ ) was composed of 8 items assessing students' goals setting and beliefs about the importance and interest of the task, in addition to the importance of reading comprehension.

The Cognitive Learning Strategy Use scale (SIII,  $\alpha= 0.923$ ) consisted of 15 items pertaining to the use of rehearsal strategies such as re-reading and taking notes, selection strategies that is underlining key words, selecting main and secondary ideas of the text (Van Dijk & Kintsch, 1983; Pressley et al, 1992), organizational strategies such as finding links among text information and using prior knowledge,

elaboration strategies such as summarizing and paraphrasing, predicting (Van Grunderbeeck, 1994; Sprörer, Joachim, Brunstein, & Kieschke, 2009), and creating a mental image (Vauras, 1991; Kinnunen & Vauras, 2010).

The Self-Regulation scale (SIV,  $\alpha = 0.93$ ) consisted of 11 items. It measured task planning, self-monitoring of effectiveness and comprehension, and self-evaluation of performance. The scale assessed also effort management strategies that included persistence at difficult or boring tasks, in addition to adjustment of strategy to suit the amount of remaining time.

#### **4.2.2.- Interviews**

An interview with the 15 students. It aims to deepen the understanding of the answers to the questionnaire. It consists of 12 dichotomous and semi-open ended questions; these take up the themes of the questionnaire. As well, an interview with the five Arabic teachers was conducted. It aims to examine the teachers' perception of their students' vis-à-vis the same variables listed in the questionnaire. It consists of 16 questions, dichotomous and semi-open ended.

These three tools allow the triangulation of data collection (Van der Maren, 1996).

#### **4.3.- Procedure**

The research obtained the approval of the committee of ethics of Saint Joseph University, the consent of the school, as well as the consent of the children and their parents. For the piloting, the questionnaire and the interviews were administered to 5 students and 2 teachers. Their results were not included in the analysis and no changes occurred after the piloting.

The self-report questionnaire was filled in, at the same time, by all the participants who were later interviewed for 15-20 minutes, each at a time, by the researcher. All student interviews were conducted over a one-week period. The five teachers were interviewed about each of their students (each about each of hers) during 25-30 minutes.

Quantitative data was entered and processed by the SPSS 21 software. Qualitative data was recorded and transcribed verbatim and then grouped according to thematic units. The descriptive analysis was carried out on the frequencies of answers to the questionnaire. The values assigned to the responses were compiled as follows: never = 1; sometimes = 2; often = 3 and always = 4. The data are analyzed in relation to the self-regulated learning model.

Pearson's correlation coefficient, multiple and linear regressions examined relationships between cognitive learning and metacognitive strategies and between motivational orientation, self-regulated and cognitive strategies use. Fisher's exact test was used to measure the relationship of correlations between questionnaire data and interview data.

## **5.- Results**

### ***5.1.- Self-regulation processes***

Results show that participants self-regulate their reading activities with an average of 2.66 ( $s=\pm 0.735$ ). The analysis of the results indicates the following self-regulation profile: the students tend to moderately use planning since half take the time to make a plan of the method they will follow before they start reading. Just as 67% of students self-evaluate their reading comprehension and 61.5% adjust their way of doing things over time. In addition, 85.7% often adjust and manage their effort during reading, even if they find the text difficult, and 67% persevere even if they find the text boring. It should be noted that obtaining a good grade causes 67% to persevere in their reading and to continue working

until finished. Moreover, 80% do not stop during the reading to review what has already been read. Comprehension monitoring strategies are used by half (53%) of the participants.

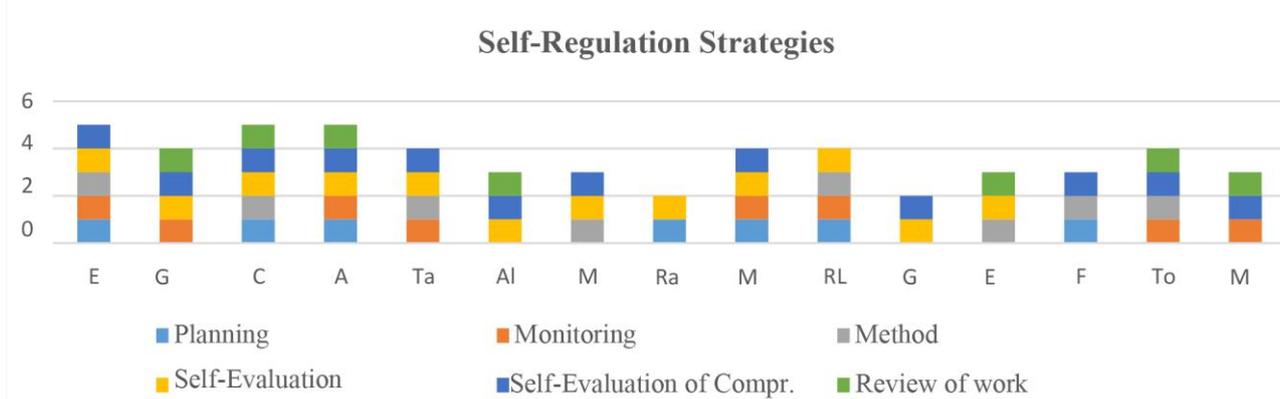
The Pearson correlation test demonstrated that students who make a plan before starting work is significantly correlated with how the students monitor the quality of their learning ( $r= 0.669$ ,  $p = 0.009$ ), adjust their work method ( $r= 0.658$ ,  $p = 0.020$ ) and effort ( $r= 0.575$ ,  $p = 0.040$ ); also, planning correlates with how often the students self-evaluate their understanding ( $r= 0.662$ ,  $p = 0.010$ ).

The results of the interviews with the 15 students are in accordance with those of the questionnaire. In sum, 7 out of 15 said that they make a plan before starting their reading. Seven students monitor their method of doing and their comprehension during reading; and when they are unsure of the quality of the performance of their work, they adjust their method and their lack of comprehension especially through the use of rehearsal (as a cognitive strategy). Moreover, 7 self-evaluate the quality of their work and a little less than half self-evaluate their comprehension.

Concerning self- assessment significant Fisher test (at  $p = 0.032 < 0.05$ ) shows finishing on time is a factor that is associated with the revision of work as well as self-evaluation.

Figure 1. shows that only 34% of students follow the complete self-regulation cycle as shown by the responses to the questionnaire as well as the interview. Others do not systematically use planning strategies, control, adjustment of understanding, nor self-evaluation effectively.

**Figure 1**  
Self-Regulation Strategies Used by Each Student (interview)



Source: own elaborated by the authors based on the results of the interview conducted with the students.

According to the five teachers, the majority of students (11 of 15) do not plan their time to complete the activity. The teachers' responses were almost equally divided concerning their students' self-evaluation of reading comprehension. Concerning the adjustment of the strategies and the working method in case of difficulties, the teachers affirmed that the majority (10 of 15) do not adjust the application of the chosen strategies, and that 8 of their students cannot adjust their working method in case of difficulties.

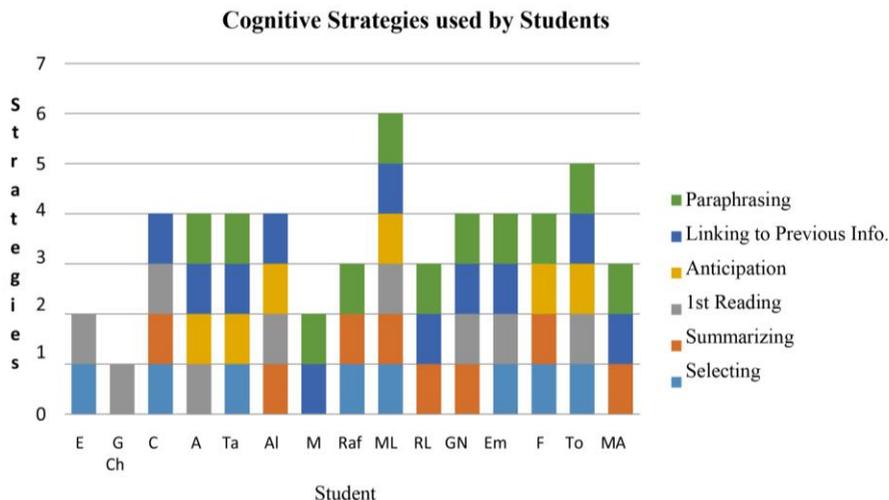
## **5.2.- Cognitive strategies**

As per the questionnaire, the Cognitive Strategies scale (Scale III) average was 2.47 ( $s = \pm 0.54$ ). In terms of organizing strategies, 76 % of students make links between the text and previous learning and knowledge, 67% try to find the links between the information in the text, and 35.7% make the link between the information explained in class and in the text. With respect to rehearsal strategies, 60% most often use the re-reading, 57% resort to the mental repetition of the details and important facts. The respondents use the strategies of elaboration in the following manner: imaging (60%), prediction (57%), paraphrasing (43%), and lastly summarizing the text (26%). Selection strategies were used by highlighting the important ideas of the text (38.5%) and selecting the main ideas (33.3%)

Figure 2. shows the results of the interviews with the students. It illustrates that nine students use at least 4 of the cognitive strategies and only one student uses them all. Most of the students use the elaboration where 11 of 15 respondents mainly use the paraphrasing, and notably use the organization by making links between new information and previous knowledge (9 students use both). Then 10 resort to re-reading (rehearsal), and only 5 select main and secondary ideas (selection).

**Figure 2**

*Cognitive Strategies Used by Each Student (interview)*



Source: own elaborated by the authors based on the results of the interview conducted with the students.

According to the teachers: only half of the students use reading strategies, especially those of selection (7/15) followed by those of rehearsal (re-reading, 7/15). Second, students seldom use the elaboration (summarize and paraphrase, 4/15) and the organization strategies (make a customized version of the information structure, 4/15).

The results also indicate that students' use of cognitive strategies depends significantly on the effect of their failing to self-regulate their Arabic reading ( $\text{MeanScaleIII} = 0.967 + 0.565 (\text{MeanScale IV})$  ( $p = 0.001$ ),  $r^2 = 0.586$ ). Indeed, the self-regulation of Arabic reading controls the choice and implementation of strategies.

### ***5.3.- The Motivational components of self-regulation***

Self-efficacy (Scale I). Students have limited expectations and average perceptions of their self-efficacy to perform an Arabic reading activity; the average score on the nine statements of the Self-Efficacy scale I is 2.49 ( $s = \pm 0.58$ ). The distribution of scale I responses reveals that participants neither perceive themselves to be good (8/13) in Arabic reading nor to have excellent ability (9/13) to study Arabic reading when comparing themselves to peers. Regarding self-efficacy, 9/15 students have a negative perception of their ability to understand the content of texts, 5/12 have a negative perception of their ability to learn the content of the texts, and 8/14 do not have a lot of knowledge about Arabic text subjects compared to other students in their class. On the other hand, their expectation of reading performance is rather positive as indicated by the responses to both concerned items (64.3 and 61.6%); however, when they compare with peers, this perception becomes negative. They do not expect to have a good grade in reading.

The data revealed by the questionnaire are confirmed in the interviews. Indeed, students have a negative perception of their skills in studying Arabic text. Eleven students of the 15 do not perceive themselves as good at Arabic reading and attribute their poor performance mostly to the difficulties they find there and to the language itself.

As for the feeling of self-efficacy, 12 of 15 children say that they can do better in Arabic reading. Eight students ensure they can improve their performance because they do either extra effort and work (6 students) or additional readings (2 students) in Arabic. The results of the interviews with the teachers go in the same direction as the previous results. Teachers perceive that 10 out of 15 participants have a negative perception of their Arabic skills, despite this 14 out of 15 are said to be able to do better and it is about "them being motivated to work".

According to their teachers, eight students are motivated to read Arabic. And this for extrinsic reasons like having a good grade to please parents and teachers or due to the encouragement and support of the teacher. As for those who are not, the reasons for this demotivation are mostly related to Arabic in itself. Motivational factors explain, at least in part, why some students lose interest in school activities and why in this context some people are convinced that they are incompetent (MEQ, 2003).

As for the intrinsic value attributed to the Arabic reading, the average score for the seven statements of scale II is 3.03 ( $s = \pm 0.58$ ), thus indicating a profile of respondents in compatibility with the components of this scale. Accordingly, students value Arabic reading and learning in this field. Nine of 15 students like what they learn in Arabic reading, 73.3% are aware of the importance of what they learn, and 73.3% of the usefulness of the learning they do there. 71.4%, of whom 64.3% always, value reading comprehension in Arabic. Indeed, 10 students claim that even when they do not do well in an Arabic text study, they try to learn from their mistakes. While 53.3% find interest in these learnings.

The correlation of the scale II inter-items of the questionnaire suggests that the perception of the importance of learning leads the participants to aim at mastery of learning in the study of Arabic texts ( $p = 0.026$ ), to be aware of the importance of understanding the subject of reading and making comprehension a challenge ( $p = 0.036$ ) that allows them to set goals for learning new knowledge in this discipline. They also show a significant link between the students' perception of the usefulness of learning in Arabic reading and their appreciation of it ( $p = 0.033$ ), which, in turn, seems to make them aware of the importance of understanding the reading subject ( $p = 0.04$ ).

In the interviews, first, among the 15 respondents, 10 reveal not to like Arabic and for 3 of them, said it depends on the text read: "if the content is interesting I like". These data are contradictory with the results of the statement (a) of scale II. Knowing that this statement deals

specifically with the content they are learning in Arabic reading. Without forgetting to take into account the social desirability factor. Second, 3 respondents found the Arabic reading useful for improving their understanding of Arabic, and 12 respondents shared the view that Arabic reading serves to improve performance in all academic areas of the Arabic language.

In the interviews, the teachers said that 9 out of 15 students did not like Arabic, which corresponds to the students' results. The following themes are recurrent in the interview: the lack of interest of students in Arabic and the difficulty of Arabic, which are either due to lack of skills or due to the difference between dialect and classical Arabic that creates difficulties in understanding Arabic; and the influence of family socio-cultural values.

Given that respondents had the opportunity to choose several types of objectives, their answers are presented in the Table 1. Fourteen students opted for the objective to learn the information of the text, 12 of them chose to form a general idea on the subject of reading, as well. Eleven chose the objective to understand the information read, and 10 participants picked to memorize details or important facts. According to the findings, no participant chose memorization of information as a single objective without having chosen either learning or understanding or both as reading objectives.

**Table 1**

Reading objectives as reported by Students vs. Teachers' report (N=15)

	% as per Teacher	% as per Student
Learning information	40	93.3
Having a general idea about a topic	–	80
Understanding what is read	46.7	73.3
Memorizing important details and information	33.3	66.7
Finishing the task as fast as possible	86.7	20

Only reading the text	73.3	13.3
Getting good grades	53.3	–

Source: own elaborated by the authors based on the results of the interview conducted with the students.

The most cited objectives by the teachers are: first, to finish reading as much as possible, then to only read the text and to please or impress other people, then to have good grades. As for the comprehension of the content, it is reported as the goal of a little less than half of the students. Noting that teachers mentioned learning information and remembering details or important facts as the last two objectives. Thus, the desire to understand and learn the content of the text remains a secondary goal for students. In addition, the teachers' opinions were split in half with respect to their students' aim to achieve high grades.

Table 1. shows that there was a discrepancy in the choice of objectives between the teachers' interview and that of the students. This shows that either teachers have a distorted perception of how their students interpret the reading task or that students are unable to reach their goals; taking into account the social desirability factor.

#### **5.4.- Regression and correlations**

**Table 2**  
*Correlation Matrix of means of scales*

	ScaleI	ScaleII	ScaleIII	ScaleIV
ScaleI		0.215 0.441	0.582* 0.023	0.425 0.115
ScaleII	0.215 0.441		0.573* 0.025	0.766** 0.001
ScaleIII	0.582* 0.023	0.573* 0.025		0.723** 0.002
ScaleIV	0.425 0.115	0.766** 0.001	0.723** 0.002	

Source: own elaborated by the authors based on the results of the interview conducted with the students (\*p<0.05; \*\*p<0.011)

The correlation matrix shows a positive, moderate ( $r = 0.582$ ) and significant ( $p = 0.023$ ) correlation between self-efficacy in Arabic reading (Scale I) and the use of cognitive strategies (Scale III). In addition, it shows that there is a positive, moderate and significant correlation between the reading value (Scale II) and the use of cognitive strategies (Scale III) ( $r = 0.573$ ,  $p = 0.025$ ). Moreover, there is a strong and significant correlation ( $r = 0.723$ ,  $p = 0.002$ ) between the intrinsic value of the Arabic reading (Scale II) and the self-regulation of Arabic reading comprehension (Scale IV) and, similarly, a strong correlation and positive between the use of cognitive strategies (Scale III) and the self-regulation of Arabic reading comprehension (Scale IV) ( $r = 0.766$ ,  $p = 0.001$ ). In short, Scale III is positively correlated with the other three scales.

The simple linear regressions between the two motivational variables and the cognitive strategies indicate that the use of these strategies depends significantly on the effect of the variability of self-efficacy in reading (Scale I), on the one hand, and of the effect of the value of Arabic reading (Scale II), on the other hand. The correlations between the continuous variables show respective associations with  $p = 0.023$  and with  $p = 0.025$ . Thus, task commitment and perseverance are expressed mainly through effort and the use of cognitive and metacognitive strategies.

The regression tests also show that self-regulation of Arabic reading comprehension depends only on the effect of the student's appreciation of Arabic language and reading as a motivational variable but not on self-efficacy (Scale I). The association is significant with  $p = 0.002$  between the intrinsic value (Scale II) and self-regulation of comprehension (Scale IV).

The analyses also show that the use of cognitive learning strategies (Scale III) depends on the effect of the student's self-regulation (SIV) of Arabic reading comprehension, with a significant association and  $p = 0.0001$ . Two multiple linear regression tests were run for each of the following dependent variables: use of cognitive strategies

and self-regulation of comprehension with the following motivational independent variables: self-efficacy in reading and the value of Arabic reading.

The MeanScaleIV is estimated at  $-787 + 0.358$  (MeanScaleI)  $+0.843$  (MeanScaleII) significant at ( $p = 0.004 < 0.05$ ). Thus, self-regulation varies according to the effect of the perception of one's personal efficacy in Arabic reading (Scale I) and the value of Arabic reading (Scale II). The estimated variation in self-regulation depends significantly on the effect of the intrinsic value of the Arabic reading ( $p = 0.004$ ), but not on the perception of self-efficacy ( $p = 0.158 > 0.005$ ).

## **6.- Conclusions**

This case study shows that students' failure in Arabic reading is related to their self-regulated reading comprehension as well as their motivation. Indeed, students do not systematically plan, monitor, adjust and self-evaluate their comprehension when reading an Arabic text. The majority do not pursue a complete cycle of self-regulation, which largely explains their failure. The pattern of learning strategies selected and deployed by the participants does not allow them to achieve the intended goal. That is, to achieve successfully the reading activity and to learn new information. These results are in line with previous studies (Abu shmais, 2002; Guthrie et al, 2004; Nelson & Manset-Williamson, 2006; Souvignier & Mokhlesgerami, 2006). The participants occasionally use selection and elaboration strategies while they often use organization and rehearsal strategies mainly re-reading. The limited use of selection strategies leads our learners to skip a large amount of important information which has a serious impact on the text content comprehension/learning. And limited use of paraphrasing strategies reduces reading comprehension (Hagaman, Casey & Reid, 2016)

According to a literature review by Gajria, Jitendra, Sood & Sacks (2007), young readers' difficulties in managing their reading comprehension are mainly due to their weak capacity to link new information to previous knowledge. But this last strategy seems to be quite used by our respondents.

The results indicate that the lack of comprehension is related to the participants' lack of strategic know-how that depends significantly on the effect of their deficient self-regulation processes of cognitive learning strategies. A failure of self-regulation processes prevents reading comprehension for several reasons. The student is (a) neither aware of his/her entire reading strategies repertoire, (b) nor able to choose the ones that would be appropriate to the demands of the current reading situation, (c) nor to monitor strategies implementation, (d) nor able to verify whether the use of the chosen strategies would lead to the intended goal or not. In fact, studies of middle and high school students show that lack of the comprehension of the content is attributed to the inefficient use of comprehension strategies (Pressley & Harris, 1990; De Corte, Verschaffel & Van de Ven, 2001; Pressley, 2002), knowing that reading comprehension skills reinforce between the first and the last elementary grades (Kinnunen & Vauras, 2010).

The issue of "time" was recurrently mentioned by the students: finishing their text study within the time limit assigned to the task, seems to be an obstacle. Similarly to "naive self-regulated learner", participants avoid self-evaluation by attributing their failure to lack of time rather than to lack of skills. In fact, attributing failure to lack of skills leads to avoiding negative self-reactions towards self-esteem and self-perception as a capable learner.

Moreover, our participants' profile is similar to that of "naive self-regulated learners" described in the literature. These students select inefficient learning strategies; they are unconscious of their competencies and limits and do not know how to use them according to task demands (Harris, Reid & Graham, 2004). They value the grade and the attention of the teacher (Butler & Cartier, 2004). They avoid negative self-reactions towards their capabilities and competencies as learners, etc. (Horner & Shwery, 2002). In addition, to their diminished sense of self-efficacy, lack of interest, and demotivation towards learning (Zimmerman, 2000; Archambalt & Chouinard, 2003). As a result, the self-regulation cycle is hindered in all its phases. Results showed also that strategic failure, cognitive and metacognitive, depends

on the predictive effect of lack of motivation. Intrinsic value emerged as the best predictor of self-regulation and self-efficacy as the best predictor of cognitive strategies. As for the lack of motivation, it could also explain the lesser resort to elaboration strategies which require more mental effort from our respondents. Guthrie *et al.* (2004) show that students who fail in reading are not motivated to read, they do not self-regulate effectively during reading, do not use cognitive strategies, and do not benefit from these strategies in meaningful or significant ways.

According to the results, the majority of the participants persevere in reading even if they find the text difficult and/or boring. They tend to be motivated by the desire to succeed and by the intention of completing the activity. Hence, deployment of effort is, in this case, related to their ambition to “obtain a good grade” in Arabic and the rather positive perception they have of their general abilities. Students with higher levels of academic self-efficacy demonstrate higher academic goal-setting and value academic achievement more (Maddux, 2016). Note also that participants have a good overall performance in subjects taught in French like Math and Science. They also pretend to be able to do better which might indicate that respondents always have expectations of success; for them, achieving a better performance is possible provided they deploy the necessary effort. People with high assurance in their capabilities approach difficult tasks as challenges to be mastered rather than as threats to be avoided; they set themselves challenging goals and maintain strong commitment to them (Maddux, 2016). They heighten and sustain their efforts in the face of failure, and they quickly recover their sense of efficacy after failures or setbacks. They attribute failure to insufficient effort or deficient knowledge and skills which are acquirable (Bandura, 1994). Furthermore, the encouraging optimism or discouraging pessimism of individuals depends on their self-efficacy beliefs (Bandura, 2001). Thus, students who feel capable of completing a task, work with perseverance and manage to achieve it better than those who doubt their abilities. Yet, having doubtful anticipated outcome of one’s ability to complete the activity successfully - which is the case of our students - can sometimes push the learners to mobilize their efforts (Bandura, 1993). In addition, because their personal sense of efficacy is moderate, the latter may be

fluctuating hence may increase the motivation to overcome difficulties and the confidence to perform demanding activities. This would explain this willingness of our participants to persevere and persist in the activity.

It is nevertheless interesting to note that according to the teachers, six students are demotivated to read Arabic texts for reasons related to the Arabic language itself. Similarly to low self-regulated learners who reduce their feeling of guilt through attributing their low performance to external causes (Zimmerman, 1998). Thus, they are no longer aware of the real effectiveness of their learning strategies (Archambault & Chouinard, 2003).

The study performed in a private accredited French-language school in Beirut. The sample consists of 15 students and their 5 Arab teachers. They are in 4<sup>th</sup> and 5<sup>th</sup> elementary in ordinary classes. Participants do not self-regulate efficiently their Arabic reading comprehension and they tend to partially use cognitive strategies without significantly benefiting from them, since the strategies selected and used do not lead to successful comprehension of these texts. Self-regulatory processes are predicted by participants' lack of motivation that manifests itself mostly through perceptions of moderate self-efficacy of performance and low expectations of success.

In addition, knowing that a good number of students are aware of the fact that understanding and learning text content is a must, which is correlated with the demands of the task, they all set performance as the ultimate goal. They also set distant and vague goals, such as the success of the school year and the future of work.

Participants tend to lack commitment and perseverance, and avoid activity. This could be related to 3 factors: the lack of planning and management of the task and time, the devaluation of Arabic, the difficulties encountered during reading and the lack of interest in texts.

By pushing a little further, possibly and following recurring failures, these students will develop more and more a weak sense of

self-efficacy of reading Arabic in addition their motivation for reading Arabic will diminish and self-regulation will be more and more influenced. As they will be easily subject to anxiety and will increasingly avoid learning opportunities in Arabic and related fields.

Not to forget the lack of perseverance due to the disinterest and devaluation of Arabic because of the difficulty of literary Arabic, the influence of the Lebanese bilingual social context and the teaching practices.

The results of this exploratory study on a limited sample and in a particular context cannot be generalized. The advantage of such an approach is to provide exhaustive data that deserves to be reproduced on a larger scale. Elucidating the self-regulatory profile of reading comprehension and illuminating the failure of cognitive and metacognitive strategies and motivational components, is a first step towards understanding the learning processes of students who fail Arabic reading. This study shows that cognitive strategies and their self-regulation must be at the heart of the reading class. The teaching of reading must, therefore, target the different aspects of the reading process. From this perspective, teaching should focus on the processes of comprehension and learning as well as on the code of language, syntax and morphological aspects of reading.

## Bibliography

Abu Shmais, W. (2002). Identifying the metacognitive reading strategies for arabe university students: a case study. *An- Najah Univ. J. Res.*, 16(2), 633-662.

Alsheikh, N., & Mokhtari, K. (2011). An examination of the metacognitive reading strategies used by native speakers of arabic when reading in english and arabic. *English language reading*. 4(2), 151-160.

Archambault, J., & Chouinard, R. (2003). *Vers une gestion éducatrice de la classe* (2<sup>nd</sup>Ed.). Montréal: Gaëtan Morin, Editeur.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational psychologist*, 28 (2), 117-148.

Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior*, Vol. 4, (pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], *Encyclopedia of mental health*. San Diego: Academic Press, 1998).

Bandura, A. (2001). Social cognitive theory: an agentic perspective. *Annual review of psychology*, 52, 1-26. doi: <https://www.annualreviews.org/doi/10.1146/annurev.psych.52.1.1>.

Bandura, A., Barbaranelli, C., Capara, V., & Pastorelli, C. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child development*, 67, 1206-1222. doi: <https://doi.org/10.1111/j.1467-8624.1996.tb01791.x>.

Boekaerts, M. (1999). Self-regulated learning: where we are today. *International journal of educational research*, 31, 445-457. doi: [http://doi.org/10.1016/S0833-0355\(99\)00014-2](http://doi.org/10.1016/S0833-0355(99)00014-2).

Boekaerts, M., & Corno, L. (2005). Self-regulation in the classroom a perspective on assessment and intervention. *Applied psychology: an international review*, 54 (2), 199-231. doi: <https://doi.org/10.1111/j.1464-0597.2005.00205.x>.

Butler, D., & Cartier, S. (2004). Promoting effective task interpretation as an important work habit: a key to successful teaching and learning. *Teacher's college record*, 106 (9), 1729-1758. doi: <http://dx.doi.org/10.1111/j.1467-9620.2004.00403.x>.

Butler, D. L., & Winne, P. H. (1995). Feedback and self-regulated learning: A theoretical synthesis. *Review of educational*

research, 65(3), 245-281. doi:  
<https://doi.org/10.3102/00346543065003245>.

Cartier, S. (2007). *Apprendre en lisant & élèves en difficultés d'apprentissage*. Les éditions CEC inc.

De Corte E., Verschaffel L. & Van de Ven, A. (2001). Improving text comprehension strategies in upper primary school children: a design experiment. *British journal of educational psychology*, 71, 531–559. doi: <https://doi.org/10.1348/000709901158668>.

Donker, A. S., De Boer, H., Kostons, D., Van Ewijk, C. D., & van der Werf, M. P. (2014). Effectiveness of learning strategy instruction on academic performance: A meta-analysis. *Educational Research Review*, 11, 1-26.

El-daly, H. M. (2010). Reading in a foreign language: The effects of culturally familiar and nonfamiliar materials on EFL learners' reading comprehension. *Journal of Language and Literature*, 3, 31-56.

Gajria, M., Jitendra, A., Sood, S. & Sacks G. (2007). Improving comprehension of expository text in students with LD: A research synthesis. *Journal of learning disabilities*, 40 (3), 210-225. doi: <https://doi.org/10.1016/j.edurev.2013.11.002>.

Guthrie, J. Wigfield, P., Barbosa, K., Perenchovich, Toboada, A., & Davis, M. (2004). Increasing reading comprehension and engagement through concept-oriented reading instruction. *Journal of educational psychology*, 96, 403-423. doi: <http://dx.doi.org/10.1037/0022-0663.96.3.403>.

Guthrie, J. T., Schafer, W. D., & Huang, C. W. (2001). Benefits of opportunity to read and balanced instruction on the NAEP. *The Journal of Educational Research*, 94(3), 145-162.

Hagaman, J. L., Casey, K. J., & Reid, R. (2016). Paraphrasing strategy instruction for struggling readers. *Preventing School Failure: Alternative Education for Children and Youth*, 60(1), 43-52. doi: <https://doi.org/10.1080/1045988X.2014.966802>.

Harris, K., Reid, R., & Graham, S. (2004). Self-regulation among students with LD and ADHD. In B. Wong (Ed.), *Learning about learning disabilities (3<sup>rd</sup> edition)* (pp. 167-195). Elsevier Academic Press. doi: <https://doi.org/10.1016/B978-012762533-1/50008-1>.

Horner, S. & Shwery, C. (2002). Becoming an engaged self-regulated reader. *Theory into practice*, 41(2), 102-109. doi: [https://doi.org/10.1207/s15430421tip4102\\_6](https://doi.org/10.1207/s15430421tip4102_6).

Kamil, M. L., Mosenthal, P. B., Pearson, P. D., & Barr, R. (2016). *Handbook of reading research, Volume III*. Routledge. doi: <https://doi.org/10.4324/9781315200613>.

Kinnunen, R., & Vauras, M. (2010). Tracking on-line metacognition: monitoring and regulating comprehension in reading. In A. Efklides & P. Misailidi (Eds.), *Trends and prospects in metacognition research* (pp. 209-229). Springer Link online. doi: [http://doi.org/10.1007/978-1-4419-6546-2\\_10](http://doi.org/10.1007/978-1-4419-6546-2_10).

Kintsch, W. (1988). The role of knowledge in discourse comprehension: a construction-integration model. *Psychological review*, 95 (2), 163-182. Ministère de l'Éducation du Québec (MEQ). (2003). *Les difficultés de l'apprentissage à l'école. Cadre de référence pour guider l'intervention*. Québec: Ministère de l'Éducation. doi: <http://dx.doi.org/10.1037/0033-295X.95.2.163>

Maddux, J. E. (2016). Self-efficacy. In S. Trusz & P. Babel (Eds.). *Interpersonal and intrapersonal expectancies* (pp. 41-46). Psychology Press.

Nelson, J. & Manset-Williamson, G. (2006). The impact of explicit, self-regulatory reading comprehension strategy instruction on the reading-specific self-efficacy, attributions, and affect of students with reading disabilities. *Learning disability quarterly*, 29(3), 213-230. doi: <https://doi.org/10.2307/30035507>.

Panadero, E. (2017). A review of self-regulated learning: Six models and four directions for research. *Frontiers in psychology*, 8, 422. doi: <https://doi.org/10.3389/fpsyg.2017.00422>.

Panadero, E., Jonsson, A., & Botella, J. (2017). Effects of self-assessment on self-regulated learning and self-efficacy: Four meta-analyses. *Educational Research Review*, 22, 74-98. doi: <http://dx.doi.org/10.1016/j.edurev.2017.08.004>.

Palincsar, A., & Brown, A. (1984). Reciprocal teaching of comprehension fostering and comprehension-monitoring activities. *Cognition and instruction*, 1, 117-175. doi: [https://doi.org/10.1207/s1532690xci0102\\_1](https://doi.org/10.1207/s1532690xci0102_1).

Pintrich, P. (2000). The role of goal orientation in self-regulated learning. In M., Boekaerts, P., Pintrich, Zeidner (Eds.), *Handbook of self-regulation* (p.451-502). San Diego, CA: Academic Press. doi: <https://doi.org/10.1016/B978-012109890-2/50043-3>.

Pintrich, P. (2002). The role of metacognitive knowledge in learning, teaching, and assessing. *Theory into practice*, 41(4), 220-225. doi: [https://doi.org/10.1207/s15430421tip4104\\_3](https://doi.org/10.1207/s15430421tip4104_3).

Pintrich, P., & De Groot, E. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of educational psychology* (82), 33-44.

Pintrich, P. & Schunk, D. (2002). Motivational and self-regulated learning components of academic classroom performance. *Journal of educational psychology*, 80, 33-40.

Pressley, M. (2002). *Reading instruction that works: The case for balanced teaching* (2<sup>nd</sup> edition). New York: Guilford.

Pressley, M., Beard El-Dinary, P., Gaskins, I., Schuder, T., Bergman, J., Almasi, J., & Brown, R. (1992). Beyond direct explanation: transactional instruction of reading comprehension strategies. *The elementary school journal*, 92(5), 513-555. doi: <https://doi.org/10.1086/461705>.

Pressley, M., & Harris, K. (1990). What we really know about strategy instruction. *Educational leadership*, 48(1), 31-34 ERIC Number: EJ413160.

Schunk, D., & Zimmerman, B. (2003). Self-regulation and learning. In W. Reynolds & G. Miller (Eds.), *Handbook of psychology: educational psychology*, 7 (pp. 59-78). New York, USA: John Wiley & Sons, Inc.

Schunk, D. (1994). Self-regulation of self-efficacy and attributions in academic settings. In D. Schunk & B. Zimmerman (Eds.), *Self-regulation of learning and performance: issues and educational applications* (pp. 631-647). Hillsdale, NJ: Erlbaum.

Souvignier E., & Mokhlesgerami, J. (2006). Using self-regulation as a framework for implementing strategy instruction to foster reading comprehension. *Learning and instruction*, 16, 57-71. doi: <https://doi.org/10.1016/j.learninstruc.2005.12.006>.

Spörer N., Brunstein J., & Kieschke U. (2009). Improving reading comprehension skills effects of strategy instruction and reciprocal teaching. *Learning and instruction*, 19, 272-286. doi: <https://doi.org/10.1016/j.learninstruc.2008.05.003>.

Stanovich, K. (1994). Constructivism in reading education. *The journal of special education*, 28(3), 259-274. doi: <https://doi.org/10.1177/002246699402800303>.

Stipek, D. (2002). *Motivation to learn: from theory to practice*, (4th ed). Boston, MA: Allyn and Bacon.

Van Der Maren, J-M. (1996). *Méthodes de recherche pour l'éducation*. (2<sup>nd</sup> ed). Paris, France: De Boeck Université. Van Dijk, T. & Kintsch, W. (1983). *Strategies of discourse comprehension*. New York: Academic Press.

Van Grunderbeeck, N. (1994). *Les difficultés en lecture, diagnostique & liste d'intervention*. Montréal, Canada: Gaëtan Morin Editeur.

Van Dijk, T., & Kintsch, W. (1983). *Strategies of discourse comprehension*. New York: Academic Press.

Vandevelde, S., Van Keer, H., & Rosseel, Y. (2013). Measuring the complexity of upper primary school children's self-regulated learning: A multi-component approach. *Contemporary Educational Psychology*, 38(4), 407-425.

Vauras, M. (1991). *Text learning strategies in school-aged students*. Helsinki: Academia.

Weinstein, C., & Mayer, R. (1986). The teaching of learning strategies. In M. Wittrock (Ed.), *Handbook of research on teaching* (3<sup>rd</sup> edition) (pp. 315-327). New York: Macmillan.

Zimmerman, B. (1998). Developing the self-fulfilling cycles of academic regulation: an analysis of exemplary instructional models: the role of social and self-regulatory processes. In D. Schunk & B. Zimmerman (Eds.), *Self-regulated learning: from teaching to self-reflective practice* (pp.1-19). New York, US: Guilford Press.

Zimmerman, B. J. (2000). Attaining Self-Regulation: A Social Cognitive Perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of Self-Regulation* (pp. 13-39). San Diego, CA:

Academic Press. doi: <https://doi.org/10.1016/B978-012109890-2/50031-7>.

Zimmerman, B. (2008). Investigating self-regulation and motivation: historical background, methodological developments, and future prospects. *American educational research journal*, 45 (1), 166-183. doi: <https://doi.org/10.3102/0002831207312909>.

Zimmerman, B., Bonner, S., & Kovach, R. (1996). Developing self-regulated learners: beyond achievement to self-efficacy. *Psychology in the classroom: a series on applied educational psychology*. Washington, DC, US: American Psychological Association. doi: <http://dx.doi.org/10.1037/10213-000>.