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The Effect of Using Self-Monitoring Strategies in Social Studies Course on Self-Monitoring, Self-Regulation and Academic Achievement

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Abstract

In an attempt to clarify the behavioral differences and a dimension of the individual's metacognitive processes, Snyder introduced the 'Self-Monitoring Theory' in 1974. According to the theory, individuals differ in the extent to which they control their self-presentation in social interactions. Some people can observe and control their self-presentation and expressive behaviors. Besides, they are sensitive to cues indicating what expression or behavior is appropriate in any case. This sensitivity has been called 'Self-Monitoring' skill (Snyder, 1974). In this study the effect of setting 'Self-Monitoring' strategies during and after the Social Studies course on self-monitoring, self-regulation and academic achievement levels of the students has been investigated. In the present study, a mixed methods approach was taken, and an experimental design with pre-test and post-test and control group was used in the study. The study was carried out with three groups (two experimental groups and one control group). In the qualitative dimension of the study, the opinions of 10 classroom teachers and 20 students were gathered using Fixed Format Questionnaire. Quantitative data were analyzed using the SPSS 15 program and qualitative data were analyzed through descriptive analysis. As a result of the study, it has been observed that self-monitoring strategies used in Social Studies course had an effect on the students' self-monitoring and development of academic performance levels, but they had no effect on their self-regulation skills. Conducting the courses or themes such as 'Me and others' taught in some countries in our country will help us to raise a happy, well-adjusted and productive individual. Thus, more and specific time can be devoted to raising individuals who can monitor themselves in a balanced way.

Introduction

Aiming at identifying the differences in student behaviors, Snyder introduced the theory of Self-Monitoring in 1974. According to the theory, individuals differ in the extent to which they control their self-presentation in social interactions. Some people can observe and control their self-presentation and expressive behaviors. Besides, they are sensitive to cues indicating what expression or behavior is appropriate in any case. This sensitivity has been called 'Self-Monitoring' skill (Snyder, 1974). In maintaining balance in this sensitivity, Self-monitoring is of great importance to get rid of negative behaviors which individuals will exhibit hypersensitively or without showing the necessary sensitivity. Self-monitoring theory is a theory that deals with individual's ability to control himself/herself and the events. The fact that individual pays attention to self-monitoring creates a high level of self-monitoring, whereas it creates a low level of self-monitoring if he/she is not inclined to monitor himself/herself (Gangestad & Snyder, 2000; Snyder & DeBono, 1985; Snyder M., 1974).

Individuals with high levels of self-monitoring are those who tend to closely monitor themselves. In general, they have high social sensitivity, follow social clues and care about social expectations, and even they care more than necessary**.** Those individuals with high levels of self-monitoring usually attempt to impress others, and to receive positive feedback from other people. They are socially pragmatists rather than individually (Gangestad & Snyder, 2000). They behave in accordance with the needs of the society rather than their individual wishes. They have difficulty in displaying skills such as 'self-confidence, courage and entrepreneurship. Individuals who are high in self-monitoring may behave more sensitively regarding mental processes, guiding people and identifying the events. They often try to exhibit behaviors consistent with their social status (DeBono & Packer, 1991). Individuals high in self-monitoring attempt to display their talents to their friends based on the skills they have and tend to improve themselves in this direction. Moreover, it can reach a point where they devote their

lives to this situation. An individual who often adjusts himself/herself according to other people's reactions may cause to become another personality that he/she doesn't want to be due to these reactions (Snyder, 1974). Then, such behaviors do not reflect true feelings and thoughts and the individual may have to compromise himself/herself for others or in certain circumstances (Kapıkıran, 2009).

When the friends of high self-monitors are asked what aspect they like about him/her, each friend may show different reasons that describe him/her or as a reason for liking. For instance, while one of his/her friends finds the individual high in self-monitoring friendly, another friend may admire him/her for his/her interest in athletics, another one for his/her political view, another one for his/her environmental consciousness and another one for his/her principled stance. Moreover, this appreciation, when necessary, may even incorporate the conflicts in itself. This tendency and behaviors make it difficult to make the right decisions and to move according to internal tendencies in high self-monitoring and increase the need for approval (Snyder & DeBono, 1985; Snyder, 1974). Having a high level of self-monitoring will cause the individual to be mistaken in feelings and thoughts about himself/herself and to feel incompetent most of the time. The individual will often be unaware of his/her skills and knowledge. Similarly, having a low level of self-monitoring, in case of a problem, will create a situation in which the individual can never identify his/her deficiencies, and a hollow and misleading sense of perfection. Through an ideal self-monitoring, the individual observes his/her strengths and weaknesses and also encounters fewer problems in his/her decisions he/she will make about himself/herself. High self-monitors play different roles towards the demands of the society they have joined rather than reflecting their inner world, while low self-monitors seem not to abstain from reflecting their inner world (Koç, 2009). Individuals with high levels of self-monitoring are inclined to scrutinize the events more compared to people with low levels of self-monitoring and they use subjective norms more heavily (DeBono & Omoto, 1993; DeBono & Packer, 1991).

Unlike high self-monitors, low self-monitors have an effective self-control. There is an internal tendency in the behaviors of low self-monitors. Individuals insist on a certain idea or habit, and thus there exists an actual self-state which exhibits steady behaviors. Individuals low in self-monitoring exhibit behaviors such as honesty and naturalness instead of internal feelings and behaviors in social interactions. Low self-monitors often choose people as friends with whom they share similarities in thoughts, feelings and behaviors. They have no concern or attempt to engage in social activities and to adapt to new situations or their concerns and attempts are extremely low. They engage in activities towards their own internal control more often (Gangestad & Snyder, 2000). They do not strive to observe and control their own behaviors. As a result, they do not regard many problematic issues either as a problem or they ignore them Snyder & Cantor, 1980).

What is desired or expected from the individual is that they have neither high nor low self-monitoring tendencies. He/she should monitor himself/herself to a certain extent (Snyder & Cantor, 1980). The fact that self-monitoring level is too high or too low indicates there are problems in learning and behavior processes or there may be problems in the future. Therefore, it is necessary to clarify the characteristics of individuals with high and low levels of self-monitoring (Gangestad & Snyder, 2000). Snyder (1974) matched the low self-monitoring with the concept of 'depth', whereas he matched the high self-monitoring with the concept of 'shallowness'.

Self-monitoring is categorized into two groups, namely behavioral and academic self-monitoring. Behavioral self-monitoring is more comprehensive in comparison with academic self-monitoring and has also a role in directing it (Snyder M., 1974). Individuals, who monitors, themselves behaviorally are much more likely to monitor themselves academically as well if there is no problem in their mental activities. In addition to internal processes such as motivation, self-confidence, self-management and self-regulation, external processes such as social life and cultural elements have an effect on the individual's ability to self-monitor behaviorally (Snyder, 1987). When it comes to academic self-monitoring, self-monitoring is also necessary in order to use the metacognitive strategies in academic learning. Likewise, self-monitoring is also a vital skill for the individual who can use learning strategies, regulate their own learning; that is to say, for the individual who has learned to learn. (Güvenç, 2011; Demir & Doğanay, 2009; Ekiz, 2006). Academic self-monitoring is also a necessary skill for affordable education. An individual who can monitor his/her academic aspects will realize his/her weaknesses and he/she will thereby take precautions against them. Spot-on processes that are economical and allow to allocate time to themselves will take the place of boring and tiring processes like revising all the subjects. In terms of acquiring, behavioral self-monitoring is both more difficult and more comprehensive compared to academic self-monitoring.

Self-monitoring consists of two dimensions. Self-observation, one of the two dimensions of self-monitoring, is a process in which individual examines himself/herself, his/her own spiritual, physical and mental processes,

feelings, behaviors and motives (Gangestad & Snyder, 2000). It will be difficult for the individual to think reflectively and to exhibit behaviors towards this aim without self-monitoring (Pinheiro, 2004). Also according to Pinheiro (2004), the number of people who will tell the individual what he/she is supposed to do in any case will decrease or they will no longer need to be taken into consideration through a good self-monitoring. Self-control , the other dimension, is a process in which the individual keeps the behaviors he/she has monitored with the aid of a tool or without tools into his/her mind so that the intended behaviors are repeated (Snyder, 1987). As the behavior or the knowledge kept in mind will later be used in the processes of reflection, it is a prerequisite for the beginning of all the self-processes (self-management, self-control and self-regulation etc.) and for the achievement.

There are individual plans used to increase self-help (independent functioning) in academic, behavioral, individual and social areas (Dunlap, 1995; Loftin, Gibb, & Skiba, 2005). These plans are called 'self-monitoring strategies. Here self-monitoring strategies are the independent variable of the study. Some of those are 'using control lists, using rubrics and rating scales, creating his/her own graphic, writing learning outcomes, critical writing, keeping a reflective diary, creating comparison (decision making) matrices and making a self-evaluation.

Self-regulation is one of the important concepts of Social Learning Theory developed by Albert Bandura. Bandura (1977) defines 'self-regulation' as adapting his/her behaviors to his/her criterion if the individual is required to make a judgement by observing his/her own behaviors and comparing them with his/her own criterion. In his 'Social Learning Theory', Bandura argues that human behaviors are not only controlled by external reinforcements or punishments but people can also self-regulate their own behaviors. An individual's ability to self-regulate involves the processes of planning, monitoring and evaluating (Zimmerman, 1998). Pintrich (2000) defines 'self-regulation' as an active and constructive process whereby learners set their own learning goals, attempt to regulate their cognition, motivation and behaviors, and they are guided and constrained by their goals and the contextual features of the environment.

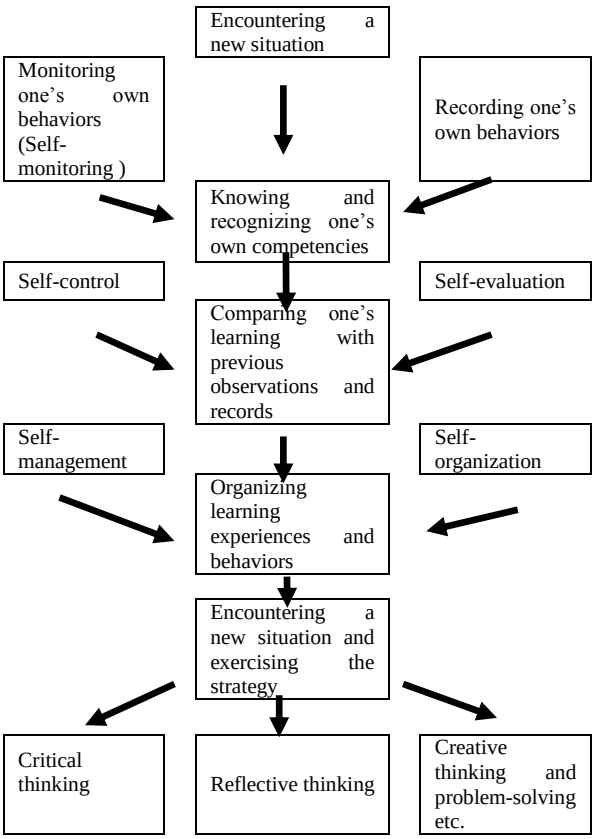

Figure 1. Relation between thinking, self-regulation and self-monitoring

It is necessary to learn cognitive strategies and use them properly in order to develop self-regulation (Pintrich & Garcia, 1991). This process won't be so easy as it requires skills development and a change in behaviors. Likewise, it will not be easy for an individual to take responsibility for his/her own learning, realize his/her potential and control his/her learning processes (Pintrich, 1995; Schunk & Zimmerman, 1994).

The main point that distinguishes self-regulation from self-monitoring is the implementation step. In self monitoring, the individual who monitors himself/herself creates a self-monitoring process by recording his/her behaviors. If this data is used at the right time and place, self-regulation skill becomes functional (Schunk & Zimmerman, 1994; Bandura, 1991). As it is understood here, self-regulation and self-monitoring are an inseparable and alternating process. We see there is widespread acceptance of the view that the process of self-regulation also includes the self-monitoring process (Pintrich, 2000; Schunk & Zimmerman, 1994; Bandura, 1991). It is seen that the individual has difficulty self-monitoring and exhibiting behaviors based on this monitoring both in areas of social life and educational environments which take an important place within these living environments. The necessity of both using social skills and also making minimal effort in academic learning has become indisputable.

The purpose of this study is to determine the effect of self-monitoring strategies used in Social Studies course on students' self-monitoring, self-regulation and academic achievement levels. In the study, the answers to the following five questions were sought. The first question of the study is 'Do the self-monitoring strategies used during and after the Social studies course have any effect on students' levels of self-monitoring according to teaching conducted by formal curriculum?'. The second question is 'Do the self-monitoring strategies used during and after the Social studies course have any effect on students' levels of self-regulation according to teaching conducted by formal curriculum?'. The third one is 'Do the self-monitoring strategies used during and after the Social studies course have any effect on students' levels of academic achievement according to teaching conducted by traditional formal curriculum?' The study also sought answers to the following question like 'What are the views of teachers and students regarding the self-monitoring strategies used in Social Studies course?'

Method

In the study, a mixed method approach in which quantitative and qualitative approaches were used together was taken. Mixed methods research can be defined as a process in which the researcher combines quantitative and qualitative methods or approaches within a study or consecutive studies (Büyüköztürk, 2002; Yıldırım & Şimşek, 2005). In this study, quasi-experimental design with pretest – posttest control group was used. The study was conducted on 3 groups, two experimental groups and one control group. All three groups were applied pre-tests before the experimental treatment. Self-monitoring scale (T1), Self-regulation scale (T2) and an achievement test about the units 'Step by step Turkey and Recognizing our region' in Social Studies course (T3) were applied to three groups as pre-tests. At the end of the experimental treatment, $\mathbf{T1_2}$, $\mathbf{T2_2}$, $\mathbf{T3_2}$ were reapplied to the groups as a post-test. In the study, the case study approach was used as a qualitative research design and data were collected using fixed format questionnaire.

5th grade students studying in a secondary school in Selçuklu district of Konya province were chosen as the study participants using purposive and convenience sampling technique. Views of some of the students and classroom teachers whose classes were surveyed were also included in the qualitative dimension. Participants (Experimental group 1, Experimental group 2, Control group) were selected among the eight classes attending the school. Firstly, the average scores regarding Social Studies course of these eight classes in the previous assessment year were taken into consideration and the two groups having the highest and lowest average were eliminated. Later, average scores of the remaining 6 classes regarding the Social Studies course in the previous year were compared with pre-test scores on the 'Self-monitoring scale', 'Self-regulation scale', and academic achievement test. After those with the closest scores (Class A, Class D and Class E) were selected, experimental and control groups were randomly assigned. Three branches and related statistics taken into account during the selection process are shown in Table 1. In Table 1, out of the eight branches, three branches having the closest average scores were selected as the study group. Branch A was randomly assigned as the control group, branch D as the first experimental group and branch E as the second experimental group.

Table 1. Study groups

Group	Branch	Social Studies Average Scores	The mean pretest score (Achievement)	The mean pretest score (Self-monitoring)	The mean pretest score (Self-regulation)
Control	A	85.15	17.25	9.2	51.41
Experimental 1	D	84.64	17.65	8.79	50.32
Experimental 2	E	84.68	18.83	8.73	49.23

The experimental study was conducted on 49 females and 47 males, a total of 96 fifth grade students. The first experimental group consists of 14 females and 16 males; the second experimental group consists of 18 females and 16 males; while the control group includes 17 female and 15 male students. The number of participants consisting of teachers and students interviewed (Fixed Format Questionnaire) and their characteristics are presented in table 10. During the qualitative dimension of the study, views of ten teachers and also of 10 students from each experimental group (experimental group 1 and experimental group 2) were collected through fixed format questionnaire. Data for both participant groups were obtained via four questions. Two out of 10 teachers are the teachers of the first and second experimental groups, while the other 8 teachers are composed of classroom teachers who are involved in and aware of the process.

Quantitative data in the study were analyzed using SPSS (15) data analysis program. Through this program, existing Excel data were converted into SPSS files and One-way ANOVA for independent samples was conducted on the converted data. In homogeneous groups, data were analyzed using Tukey test. One-way variance analysis (ANOVA) is a procedure used to determine whether the difference between the means of two or more unrelated samples is significantly different from zero and by which groups this difference is resulting from (Büyüköztürk, 2002). The qualitative data collected through fixed format questionnaire were analyzed through descriptive analysis. And the data obtained through this form were converted into the findings using percentage and frequency (Yıldırım & Şimşek, 2005). Besides, statements of several participants were also included in the findings.

Validity and Reliability of Measurement Instruments

Self-monitoring scale, motivated strategies for learning questionnaire and achievement scale were used as quantitative data collection methods in the study. Self-monitoring scale consists of 18 items. The value of KR-20 reliability test regarding the adaptation of the scale updated by Snyder (Snyder & Cantor, 1980) was found 0,82, and as a result of the test re-test reliability study, test re-test reliability was found as 0,81. KR-20 and Test-retest reliability coefficients were found acceptable in terms of the applicability of the scale in accordance with the statistical sources (Büyüköztürk, 2002), similar studies and expert opinions.

Motivated strategies for learning questionnaire (MSLQ) is a 44-item instrument originally developed by Pintrinch and De Groot (1990) and adapted into Turkish by Üredi & Üredi (2005). During the process of adapting the scale into Turkish, Cronbach's alpha values related to sub-scales were calculated and the result was found .84 in self-regulation; .92 in self-effectiveness; .88 in intrinsic value and .81 in test anxiety scale (Üredi & Üredi, 2005). In the study, data obtained from the items related to the sub-dimensions of self-regulation skills (9 items) were used.

The achievement test based on the second and third units in elementary school 5th grade Social Studies coursebook used in the study was developed by Kurnaz (2007). KR-20 reliability coefficient was found .904. In addition, interviews (fixed format questionnaire) were conducted in four sections, and they were presented as sections in the results section.

Results and Discussion

In the first experimental group, the effectiveness of self-monitoring strategies used during the class period on the level of self-monitoring; and in the second experimental group, the effectiveness of self-monitoring strategies used at the end of the class period on the level of self-monitoring were examined. The difference between the pre-test and post-test scores of the students concerning self-monitoring is shown in Table 2.

The experimental groups and the control group did not show any significant differences in terms of their pre-test scores, whereas there were significant decreases in both mean scores and standard deviations in post-test scores for the experimental and control group when compared to pre-test scores based on self-monitoring scale in the first and second experimental group. Self-monitoring scale results revealed a homogeneous appearance with a mean score close to the ideal value (9,5) and a low standard deviation in the first and second experimental groups. In the control group, a slight increase was observed in both the mean and standard deviation values on the post-test self-monitoring scores in comparison to pre-test self-monitoring scores. Thus, post-test self-monitoring scores for the control group were partially heterogeneous. According to the descriptive statistics, there occurred a slight decrease in both the mean and standard deviation in self-regulation scores of the first

experimental group. This decrease does not represent a significant difference. There was almost no difference in the second experimental group.

Table 2. Descriptive statistics of pretest and posttest scores

	Groups	N	Mean scores		Standard deviation	
			Pre-test	Post-test	Pre-test	Post-test
Self-monitoring	Experimental group 1	30	3.05	1.04	3.31	1.88
	Experimental group 2	34	6.31	1.39	7.78	1.85
	Control group	32	4.69	7.36	6.44	8.08
Self-regulation	Experimental group 1	30	51.41	48.75	7.65	6.85
	Experimental group 2	34	50.32	50.39	6.10	5.95
	Control group	32	49.23	47.00	6.59	8.89
Achievement	Experimental group 1	30	17.25	28.25	5.04	4.12
	Experimental group 2	34	17.65	30.11	5.55	3.93
	Control group	32	18.83	19.61	3.34	3.08

According to the data presented in Table 2, the average pre-test scores were found 17.25 for the first experimental group; 17.65 for the second experimental group and 18.83 for the control group. When examining the average post-test scores, it was found that the average score was 28.25 for the first experimental group; 30.11 for the second experimental group and 19.61 for the control group. Pre-test scores were close to one another in all three groups, while the first and second experimental groups showed a large increase in post-test scores in comparison to the control group. In the second experimental group, the increase in the average score was a little bit higher than that of the first experimental group (Pre-test: 17.25 and post-test 28.25 in the first experimental group; pre-test: 17.65 and post-test 30.11 in the second experimental group). There was no significant difference between the pre-test and post-test mean scores for the control group but there occurred a slight increase (Pre-test: 18.83 and post-test 19.61 in the control group). Analysis of the pre-test scores of experimental 1 and experimental 2 and the control group in terms of the self-monitoring, self-regulation and achievement test before the experimental treatment is shown Table 3.

Table 3. Comparison of the pre-test scores in terms of the study groups

Sources of Variation		Sum of squares	sd	Mean squares	F	p
Self-monitoring	Between-groups	169.44	2	84.72		
	Within group	3598.56	93	38.69	2.19	0.118
	Total	3768.00	95			
Self-regulation	Between-groups	73.13	2	36.57		
	Within group	4298.53	93	46.22	0.79	0.46
	Total	4371.66	95			
Achievement	Between-groups	41.81	2	20.90		
	Within group	2129.93	93	22.90	0.913	0.405
	Total	2171.74	95			

Firstly, the homogeneity test was applied to compare the study groups pre-test scores converted based on the ideal value of self-monitoring scale, and it was found that pre-test scores were homogeneous (($p=0.111>0.05$). According to the results of ANOVA conducted, the calculated F-value was found 2.19, whereas the resulting P-value was 0.118. Based on the $p<0.05$ criterion for statistical significance, it was observed that there was no significant difference between the pretest scores. To compare pre-test scores regarding the self-regulation sub-dimension of the Motivated strategies for learning questionnaire scale in terms of the study groups, the homogeneity test was applied and it was found that pre-test scores were homogeneous ($p=0.764>0.05$). According to the results of ANOVA conducted, the calculated F-value was found 0.79, whereas the resulting P-value was 0.46. Based on the $p<0.05$ criterion for statistical significance, it was observed that there was no significant difference between the pretest scores.

In order to compare the study groups pre-test scores regarding the Achievement Scale towards the Social Studies course, the homogeneity test was applied and it was found that pre-test scores were homogeneous ($p=0.697>0.05$). When the ANOVA results for the study groups pre-test scores regarding the Achievement

Scale towards the Social Studies course were examined, F-value was found 0.913, whereas the P-value was 0.405. As 0,405 is bigger than 0.05 (0.405>0.05) according to the p<0.05 criterion for statistical significance, it was observed that there was no significant difference between the pretest scores.

Findings related to the question – the first sub-problem of the study – 'Do the self-monitoring strategies used in the Social studies course have any effect on students' levels of self-monitoring?' are addressed in the following sections. ANOVA test results on the post-test scores for the study groups not showing any significant differences on pre-test scores are shown in Table 4.

Table-4: ANOVA (Tukey) Results of the self-monitoring scale's post-test scores for the study groups

Sources of Variation	Sum of Squares	sd	Mean Squares	F	p	Significant difference
Between-groups	706.17	2	353.08	14.67	.000	D1-K(0.00)
Within group	1950.07	93	24.08			D2-K(0.00)
Total	2656.24	95				

According to statistical results of ANOVA (Tukey) conducted to compare the post-test scores of self-monitoring scale for the study groups with the experimental and control groups not showing any significant differences between pre-test scores, the calculated F-value was found 14.67, while the resulting p-value was 0.00. The result is significant as p-value is less than the alpha value (p<0.05). It was observed that there was a significant difference both between the first experimental group and the control group, and between the second experimental group and the control group. That is to say, both the self-monitoring strategies used during the teaching period and the ones used at the end of the teaching period had an effect on students' levels of self-monitoring compared to the formal curriculum implemented in the control group. No significant difference was found between the first and second experimental group. In line with the statement 'What are the teachers' views regarding the self-monitoring strategies used in Social Studies course?' addressed in the qualitative dimension, teachers were first asked whether the checklists and rubrics, which are among the self-monitoring strategies (used during the class time) applied to students have any effect on the development of academic self-monitoring. The emphasis (N=7) that self-monitoring strategies applied during the process are academically effective and if enough time is allocated, they will also contribute to improving student behaviors has come to the forefront. In addition, it has been stated that teacher competencies (N=5) are vital in implementing these strategies. Secondly, when the teachers were asked about the effect of creating checklists and rubrics which are among the self-monitoring strategies (used during the process) applied to the students on the development of behavioral self-monitoring, the prevailing view was that behavior change would be hard to occur on such short notice (N=7). To the question "What are your opinions regarding the effect of making a self-assessment and creating their own graphic which are among the self-monitoring strategies (used at the end of the class period) applied to students, on the development of academic self-monitoring in students?", a majority of teachers (N=6) expressed that when used for its intended purpose, making a self-assessment contributes to high levels of learning for the students. The student creating his/her own graphic will become more skilled at identifying his/her weaknesses through teacher participation. This has highlighted the idea that it will contribute to students' academic achievement. Lastly, teachers were asked the following question "What are your opinions regarding the effect of creating their own graphic, and making self-evaluation, which are among the self-monitoring strategies (used at the end of the class period) applied to students and on the development of behavioral self-monitoring in students?". A great majority of them (N=8) expressed that the students realized that they received feedback through these instruments but they were also aware of their competencies before receiving feedback, and they did not make any strides towards their own improvement.

Findings related to the statement – the second sub-problem of the study – 'Do the self-monitoring strategies used in the Social studies course have any effect on students' levels of self-regulation?' are addressed below. ANOVA test results regarding the post-test self-regulation scores are shown in Table 5.

Table 5. ANOVA (Tukey) Results of the self-regulation scale's post-test scores for the study groups

Sources of Variation	Sum of Squares	sd	Mean Squares	F	p	Significant difference
Between-groups	161.21	2	80.61	1.50	.229	-
Within group	4353.93	93	53.75			
Total	4515.14	95				

According to the results of ANOVA conducted, the calculated F-value was found 1.50, whereas the resulting P-value was 0.229. Based on the p<0.05 criterion for statistical significance, it was observed that there was no

significant difference between the post-test scores. Under the present circumstances, there was no significant relation among the groups (first experimental and control group, second experimental and control group, first experimental and second experimental groups) according to post-test scores. The expectation that self-monitoring strategies will develop self-regulation skills (the second hypothesis of this study) has not been confirmed.

Findings related to the third sub–problem of the study – 'Do the self-monitoring strategies used in the Social studies course have any effect on students' levels of academic achievement?' are addressed in the following tables. ANOVA (Tukey) results of the post-test scores towards the Social Studies course Achievement Scale according to the study groups and Tukey test results showing the significance between-groups are shown in Table 6.

Table-6. ANOVA (Tukey) results of the post-test scores towards the Social Studies course Achievement Scale according to the study groups

Sources of Variation	**Sum of Squares**	**sd**	**Mean Squares**	**F**	**p**	**Significant difference**
Between-groups	1758.38	2	879.19	62.88	0.000	D1-K (.000)
Within group	1132.61	93	13.98			D2-K (.000)
Total	2890.99	95				

When the ANOVA results for the study groups post-test scores towards the Social Studies course Achievement Scale were examined, F-value was found 62.88, whereas the P-value was 0.000. As 0.000 is lower than 0.05 ($0.00<0.05$) according to the $p<0.05$ criterion for statistical significance, it can be said that there was a significant difference between the pretest scores. The independent variables of the study showed a significant effect on the dependent variable 'achievement'. This significant difference occurred both between the first experimental group and the control group, and between the second experimental group and the control group. Self-monitoring strategies (using self-monitoring checklist and rubrics) used during the Social Studies course indicated a significant difference on students' achievement levels according to teaching conducted by formal curriculum and were found to be successful. Self-monitoring strategies (creating his/her own graphic and making a self-evaluation) used at the end of the class period in Social Studies course revealed a significant difference according to teaching conducted by formal curriculum and were found to be successful. It was found that there was no statistically significant difference between the self-monitoring strategies used during the class period and those used at the end of the class period in terms of student achievement levels.

The statement "What are the students' opinions regarding the self-monitoring strategies used in Social Studies course?" was used to determine students' views through the questions in 4 sections and the findings tried to be addressed using descriptive analysis. The students were first asked the question "What are your views about the effect of using self-monitoring checklists and rubrics strategies applied to the course on your academic achievement in lessons?". Some of the students expressed they could remember and see some details they had already forgotten or ignored when they used self-monitoring checklists and rubrics (N=4). Secondly, they were asked the question "What are your views about the effect of using self-monitoring checklists and rubrics strategies applied to the course on your development of behaviors?". A majority of students interviewed (N=7) expressed there was no change in their behaviors. Thirdly, they were asked the question "What are your views concerning effect of creating your own graphic and making a self-evaluation applied at the end of the course on your development of academic achievement?". 4 of them expressed they could identify their weaknesses after creating a graphic and they weren't aware that they lacked such deficiencies in some fields. Lastly, they were asked the question "What are your views concerning the effect of creating your own graphic and making a self-evaluation applied at the end of the course on your development of behaviors?" and a majority of students (N=7) expressed that self-evaluations were already available, they filled them in their workbooks but they could not perceive any benefits. One of them (Student 3) opined that "Sometimes our teachers tell us even what we should write so that it won't take much time."

Conclusion

Self-monitoring strategies used in the Social Studies course have been found effective in the development of students' levels of self-monitoring. Yıldırım & Bozdoğan (2009) indicated that self-monitoring levels did not vary according to occupational groups. When compared to the outcomes of the study, it may be aimed that developing self-monitoring at a young age contributes to the development of professional competencies in the future. Ekiz (2006) argues that the individuals who cannot use their self-monitoring strategies effectively

experience problems with classroom discipline, time management and practical culture of teaching. It is thought that gaining the self-monitoring skill can make a major contribution not only to the increase in academic performance but also to the development of all dimensions of education.

Integral development of the individuals in terms of self-monitoring and similar skills will be possible through the use of educational processes in order to train effective individuals. Considering the fact that even studies covering 14-18 weeks have partial effects, research continuity related to this issue is of utmost importance for the child's future. Conducting the courses or themes such as 'Me and others' taught in some countries in our country will help us to raise a happy, well-adjusted and productive individual. Thus, more and specific time can be devoted to raising individuals who can monitor themselves in a balanced way.

Schunk (1995) argued that self-monitoring means the individual pays deliberate attention to his/her own behaviors, it is based on correct and positive self-evaluations and it is a component of self-regulation. Self-monitoring strategies used in Social Studies course did not have any effect on the development of students' levels of self-regulation in students. Also, a study conducted by Israel (2007) argued that there might be partial progress in self-regulation activities and also activities directly related to the improvement of self-regulation. The fact that self-monitoring instruments could not provide a significant increase in self-regulation can be presented as supporting evidence. Üredi &Üredi (2007) emphasize the importance of education and activities at an early age in order to give the students the self-regulation skill. Jawahar (2001), Kutlu, Balcı & Yılmaz (2004), Kavak et al., (2009) argue there is a significant relation between self-monitoring and ethical attitudes. It is thought that long term educational activities are needed to equip students with ethical attitudes, and to develop decision making and indirectly self-regulation skills together with the development of self-monitoring. Further studies can be done to gain self-regulation skills by using self-monitoring instruments at early ages. Comprehensive studies are required to determine the effect of self-monitoring strategies on the development of self-regulation skill.

Self-monitoring strategies used in Social Studies course have been found effective in the students' levels of academic achievement. In their studies which employed a single-subject research design, Sutherland & Snyder (2007) explored the effectiveness of self-monitoring on academic learning in special education as well. Similarly, Bowman (1994), and Carroll (2008) also showed the effectiveness of self-monitoring strategies on academic learning of the students with special needs. The effectiveness of self-monitoring strategies can be investigated in order to improve academic achievement in different courses (apart from Social Studies course).
Although the findings based on teacher opinions show that the individuals can acquire the self-monitoring skill or this skill already exists, it has been stated that they do not know where and for what purpose they will use these self-monitoring data. It has been found that self-monitoring strategies used in the teaching process have not made any changes on students' self-regulation skills. The statement (mentioned in teacher views) that change in behavioral self-monitoring will be hard shows compliance with the quantitative dimension from this aspect.

It can be said that the finding that self-monitoring strategies used during the class period will be effective, but teacher's competencies can limit this benefit has been achieved through teachers' opinions. As dealing with traditional ways is simpler and does not require a preparation process, it will be an approach to be preferred by teachers. Considering the findings based on teacher opinions, it can be said that students are aware of self-monitoring strategies as a feedback, but they do not use them in self-regulation. Thoresen (1974) argues that developing self-monitoring and equipping the students with this skill can contribute to creating a positive classroom atmosphere. That's why, it is thought that it will be beneficial to equip the teachers with the use of self-monitoring strategies. Hague & Walker, (1996) argue that it is vital self-monitoring checklists in education should be developed and used by teachers.

In the study, teachers expressed that instruments (checklists, rubrics, self-evaluation, and graphics) used in the development of self-monitoring are included in the course books, but they do not use them for their intended purpose or regard them as unnecessary. Thus, as well as knowing which programs, strategies, methods, techniques and instruments are used, competencies of the individuals who are supposed to use these instruments are of great importance.

As the students are not provided with a comparison of the effect of traditional learning and new approaches (self-monitoring strategies within this study), there exist problems and uncertainties about their effectiveness. Both tools, materials and strategies which are the independent variable in this study, and similar studies cause trial and implementation difficulties within intensive curriculum. Students are not properly and adequately informed about how and in what aspect the self-evaluations in their books will contribute to their own

development. Also, students are not adequately informed about how the use of many techniques used in the course contribute to them. Besides the view that academic performance can improve, the option that this performance improvement is also provided by traditional methods seems to be a dilemma for the students. It is thought that this kind of activity and similar activities cause implementation challenges within intensive curriculum. Van Blerkom & Van Blerkom (2004) argue that when students are taught the self-regulation strategies, this situation significantly contributes to reducing student-behavior problems and increasing academic achievement. Self-monitoring and self-awareness based on the qualitative data will increase the individual's effectiveness in terms of affective, cognitive and social factors.

Loftin, Gibb & Skiba, (2007) asserted that through a planned extrinsic self-monitoring intervention, there will be improvement in both academic achievement and social behaviors, and it will faciliate teachers to gain control over the class and also be effective in providing a disciplinary climate in education. It is seen in both the literature review and the study conducted that in addition to the problems having a low self-monitoring will create, having a high self-monitoring will also cause problems. It is obvious that there is a discord between the finding (obtained in the study conducted by Polat & Umay (2002)) that mathematics teaching requires high self-monitoring and the point (obtained in this study) that high self-monitoring prevents creativity. The fact that components of self-monitoring have been specified as behavioral and academic will also contribute to avoiding confusion in this sense. Equipping the individual with self-monitoring skill is important for him/her to recognize himself/herself. The individuals should be given support towards effectively using other metacognitive skills and learning strategies to transform self-awareness process into treatment.

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