

Using Social Media to Develop Self-Regulated Learning Skills for the First Secondary Grade Students in History

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Abstract The research aimed to measure the effectiveness of using social media in developing self-regulated learning skills for the first secondary-grade students in history. The researcher followed the descriptive analytical design to construct the theoretical background on social media and clarify the importance and skills of Self -regulated learning skills, the researcher followed the experimental design to measure the effectiveness of using social media in developing the skills of Self -regulated learning skills for the first secondary grade students in history. The researcher prepared a self-regulated learning skills scale, in light of a list of the skills of self-regulated learning, a teacher's guide, and an activity student booklet were designed. The research was conducted on (68) first-grade secondary students, and the educational experimental approach with two groups was followed, where the sample was divided into an experimental group and its number is (34) students, and a control group of (34) students. The research applied the self-regulated learning skills Scale before teaching both the experimental and control groups and then teaching the unit (Civilization of Pharaonic Egypt) by using the applications of social media to the experimental groups, and by using the usual way to the control group, and then applying the self-regulated learning skills scale after teaching. The results showed that there was a statistically significant difference at the level of significance (0.01) between the mean scores of the experimental group and the control group students in the post-application of the self-regulated learning skills scale in favor of the experimental group. Results approved that using social media to teach history has helped students take

responsibility for their learning through assignments and tasks performed by students while studying individually or collectively, enabling students to continuously evaluate their learning process. The researcher made several recommendations such as modifying the content of the subjects to become more flexible when used in social media and training teachers to use social media in the teaching process of different subjects.

Keywords Social Media, Self-Regulated Learning Skills, Secondary Stage

1. Introduction

The global community is now witnessing rapid changes across the board. Information and communications technology (I.C.T) is one of the most visible manifestations of this change, Social media is at the forefront of second-generation web technologies that are increasingly being employed by those involved in the educational process at present due to the rapid spread of the coronavirus pandemic. "Covid-19", which has disrupted life and paralyzed all movements, most countries, have moved to continue the educational process remotely through electronic educational platforms, and to use modern learning patterns that serve the educational system in an innovative way that frees it from the constraints of time and space, E-learning has become a substitute for traditional education, making it necessary for learners to be

able to self-organize their e-learning skills to help them become more active and aware, to be able to use their knowledge sources more efficiently, and to provide them with important information about their effectiveness, thereby helping them succeed in accomplishing academic tasks easily. Because these skills inherent in self-organized learning involve setting goals and adopting strategies to achieve goals and using time management and performance orientation skills [1].

History is the mirror of nations, reflecting their past, translating their present, and inspiring their future, so that attention to it, its preservation, and its transmission to generations were correct so that it would be a prophet and guide for them in their present and future [2].

The increasing growth of I.C.T has helped to create more effective trends, methods, and teaching methods based on those modern technologies. These technological techniques need to be used to teach history to create interaction and engagement between teacher and learner.

This requires mastering the skills of the self-organization of e-learning, emphasizing the learner's role in controlling his or her learning, and controlling and regulating knowledge, motivation, behavior, and contexts surrounding the electronic learning environment [2].

Several studies, such as [3], [4], [5] have suggested that technological innovations should be used in curriculum teaching because they provide an interactive learning and learning environment with a range of activities that mimic the usual physicist classroom activities of a teacher and students separated by spatial barriers, but work together at the same time regardless of where they are located.

With the coronavirus pandemic (COVID-19) many universities in the United States have announced that all classes would be held remotely through the fall semester of 2019 – 2020. Moreover, there are thousands more universities and institutes around the world studying the possibility of continuing E-learning in the coming years, while in Egypt, the Ministry of Higher Education and Scientific Research has decided to launch school platforms that bring students together with teachers, as the student would be enrolled in a digital code allocated to him by the Ministry to allow him to join these platforms and receive lessons in order to sustain the educational process and not be affected by the crisis, but one of the essential difficulties that faced such a process and prevented the students from benefiting from online platforms is the weakness of their e-learning and self-organizing skills.

The current research problem could be identified in the weakness of the self-regulated learning skills of students in the first Grade secondary. Thus, the purpose of the current research was to measure the effect of using social media in teaching history to develop the self-regulated learning skills of students in the first-grade secondary. The main question of the research was:

What is the effectiveness of using social media in teaching history to develop self-regulated learning skills for first-year secondary-stage students?

The following sub-questions emerged from the main question:

- What are self-regulated learning skills necessary for first-year secondary stage students?
- What is the effectiveness of using social media in developing self-regulated learning skills for first-year secondary-stage students?

2. Materials and Methods

The current research aims to create a list of necessary self-regulated learning skills appropriate for first-year secondary-stage students, detect the effect of social media in teaching history on the development of self-regulated learning skills of students in the first grade secondary.

2.1. Research Delimitations

The current research is delimited to:

- Sample delimitation: the research sample included (68) students in the first grade at secondary boys school.
- The second unit (Civilization of Pharaonic Egypt) for first grade secondary school year 2020/2021
- Social media (What Sapp, Facebook, Edmodo, virtual classes, educational blogs).
- The research was also delimited to some of the self-regulated learning skills (Recitations - Extensive - Monitoring - Evaluation - Learning environment and time - Peer learning - seeking help)

2.2. Definition of Terms

Social Media: Procedurally, it is defined as an interactive learning environment that allows live interaction between teachers and students via the Internet and operates simultaneously similar to traditional classrooms by a teacher and learner but is separated by spatial barriers, while working together regardless of where they are, to help develop self-organizing learning skills for first-grade secondary students.

Self-regulation skills for learning: Procedurally known as a first-secondary grader's ability to determine the objective of learning history, and then try to plan, organize, control, and review his knowledge, motivation, and behavior to achieve the goal, by developing some of his learning self-organizing skills (Recitations - Detail - Learning Monitoring - Evaluation - Learning Environment and Time - Peer Learning - Ask for help)

2.3. Research Hypotheses

The current research answered the research questions by verifying the following hypothesis:

- There is a statistically significant difference between the average scores of the experimental and control

groups in the post-test of the self-regulated learning skills in favor of the experimental group.

2.4. Research Significance

The current research was expected to:

- Drawing attention to developing self-regulated learning skills for learners.
- Providing teachers with some modern methods of teaching based on the use of the technology available in the teaching process of the subject and improving such a process by moving from traditional teacher-centered education to effective student-centered learning by using social media.
- Contributing to guiding those involved in the preparation of curricula to pay attention to curriculum planning to suit the technological innovations and provide scientific material that helps students to develop self-regulated learning skills.

2.5. Research Theoretical Framework

(Social Media and History Teaching)

- The concept of Social media in Education

An interactive distance learning environment located on the Internet and this environment mimic the usual physiological class, in terms of its elements and the classroom interactions and teaching strategies used by the teacher to teach and learn particular curriculum e-learning tools such as e-mail, textile network, discussion groups, file transfer, participatory whiteboard [6].

Social media is also defined as: a set of communication and educational tools from 2.0 web apps, Facebook, Edmodo, WhatsApp, Twitter, Snapchat, blogs, YouTube, and Google and Instagram apps. These tools can be easily used in communication and learning processes provided students master the skills required to carry out teaching and learning activities using those tools and associated strategies [7].

Advantages of social media:

Social media has many advantages and benefits, including sharing experiences among teachers, improving the quality of education and learning, and increasing the effectiveness of learning by supporting collaborative work activities [8]. Learning through social interaction is centered on the learner, providing many educational tasks and activities suited to students' needs, allowing them to build their knowledge by innovating, using, adapting, and editing information and knowledge appropriate to their learning methods and patterns through more flexible and rewarding experiences for students [9].

- The teacher's role in the virtual classroom:

A good virtual classroom management system requires new roles for the teacher, represented in the following:

- The teacher transforms from a lecturer who explains lessons to an expert who provides students with educational resources, and from a transmitter of information to a leader of change and a participant in his students generating knowledge.
- The teacher is a designer of educational experiences who encourages his students to self-direction and to deal with topics with multiple visions
- Motivating students to learn and encouraging them to engage and participate in virtual classroom activities.
- Assigning students to carry out exercises, activities, and projects.
- Asking questions that develop understanding, thinking, and accepting answers, no matter how wrong they are.
- Organizing interaction and class discussions between him and his students and the students with each other.
- Providing academic help and guidance to students and solving their academic problems.
- Guiding students to additional learning resources on the network.
- Introducing students to how to find information through the Internet [10].

Self-regulated learning skills:

- The concept of self-regulated learning skills:

A series of operations that develop students with some skills, which remain active in learning, so that they support in a regular style of their cognitive processes and behaviors so that their activity will be long, and these skills are in (auditing - monitoring - evaluation - learning environment and time - - seeking help).

- The philosophical basis for self-organization of learning:

The theoretical interpretation of the self-organization of learning is related to the theory of social knowledge learning of Bandura that attempted to explain the self-organization of learning of educational skills, and learning occurs according to this theory as a result of the interaction between personal and environmental factors. In social knowledge learning, the learner is not affected by internal factors only or external influences only, where it is done. Use both external reinforcement and internal interpretation to learn how to learn from others [11].

- Self-regulating learning skills classifications:

Previous studies have revealed that the self-organization skills of learning are made up of many cognitive and metaphysical, motivated and social factors that affect the individual's learning and his ability to achieve academic goals and include the following skills:

- **Cognitive Skills:** Hearing, organization, and elaboration

- **Beyond Knowledge Skills:** Planning, Monitoring, and Evaluation
- **Source Management Skills:** Organize the learning environment and time, organize the effort, learn from peers, and seek help [12].

The researcher derived the following classification, to which the current study committed: (Recitations - Detail - Learning Monitoring - Evaluation - Learning Environment and Time - Peer Learning - Ask for help)

2.6. Experimentation Tools

- Checklist of appropriate self-regulated learning skills for the first secondary grade students: the checklist aimed to identify Self-organization skills of learning that can be developed in first-secondary grade students in history.
- It was derived from the nature of the history subject, previous Arabic and foreign studies conducted in the field, and a survey conducted by a group of specialists and experts in the field. The checklist was submitted to a Jury panel to assess its validity.
- Teacher's Guide to Teaching Module Using social media
- Synchronous virtual classroom for the second unit (Civilization of Pharaonic Egypt) by using Edmodo guide, including the introduction, philosophy of the guide, directions for the teacher, teaching methods,

strategies, assessment tools, and teaching scenarios. The guide was also submitted to the jury for validation.

- User's Guide for creating and using virtual Classrooms on the Edmodo site.
- Student activity booklet each lesson in the booklet included various groups of activities provided with pictures to guide the learner. The booklet was also submitted to a jury panel to validate the clarity of aims, variety of activities, and appropriateness to first-secondary grade students.

2.7. Measurement Tools:

Self-regulated learning skills Scale.

The following procedures were followed to prepare the scale:

- Setting the scale goals of the current research: the scale aims at measuring self-regulated learning skills for the first secondary grade students in history subject
- Determining the scale skills: previous literature and studies that dealt with self-regulated learning skills were reviewed. The current scale includes seven skills, namely (Recitations - Detail - Learning Monitoring - Evaluation - Learning Environment and Time - Peer Learning - Ask for help) and each of them is defined in the following Table 1.

Table 1. Self-regulated Learning Skills:

Skill	Concepts
Recitations	The learner's effort to memorize and remember information through repetition or practice.
Detail	The learner tries to clarify and detail the information, by making explanatory summaries, writing notes, and making shapes and detailed diagrams.
Learning Monitoring	Pay attention to the different forms of behavior that emanate from the learner and assess the relative proximity to the goals set for performance.
Evaluation	A skill that contributes to increasing awareness of thinking, and requires the learner to reflect on what has been accomplished, or what he has done in terms of work and practices, and what he has resorted to in terms of sources of information and what he has used in terms of devices and meetings.
Learning Environment & Time	Organize the learner's spatial environment, and schedule and divide the time into a picture that allows him to make optimal use of it.
Peer Learning	Learner participation in group activities and discussions to achieve a better level of learning.
Ask for help	The student asks for help from a loved one, teacher, or colleague to get help understanding the material or performing assignments.

Determining the scale dimensions:

The vocabulary of the measure is formulated in the form of a declarative phrase to answer to which the student chooses a response.

One of the three responses (always - sometimes - rarely) where the scale included (50) phrases representing the initial picture of the scale.

- Taking into account specific considerations in preparing the scale phrases; relating each phrase to a specific dimension, considering linguistic and grammatical rules, and matching the targeted participants' age and mental growth.

A key has been set up to distribute the scores of the measure so that it is divided into two types (Estimating positive grades and estimating negative scores) according to Likert's method of preparing the scale and the following Table 2 shows this.

Table 2. Key to distribute Self-Regulation Skills Scale Grades

Phrase	Always	Sometimes	Rarely
Positive	3	2	1
Negative	1	2	3

The overall score of the scale is calculated as follows:

Overall scale score = number of scale statements × number of responses

Total score = 50 × 3 = 150 degrees

- The scale validity: the scale was submitted to a jury panel to validate then modify and instructions were set
- Participants: the scale was applied to (30) participants of first-year secondary school students at Sedki

Suleiman Secondary School for boys, East Nasr City, Cairo governorate

- Scale duration: the scale duration was determined using the following equation;

The estimated time= (the fastest student time + the slowest student time ÷ 2)

The Fastest Student Time= 35

The Slowest Student Time= 45

- $55 + 35 = 90$

- $90 \div 2 = 45$

The researcher added (5) minutes for the students to read the instructions. Thus, the scale time became (50) minutes.

- Stability of the scale: was approved by re-application method and calculation of the coefficient. The researcher applied the scale on a sample of students twice with 14 days as an interval time between the two applications of the scale. Then, the correlation coefficient between the students' scores in both applications was calculated and was found to be (0.91) which indicated the high stability of the scale.

3. Methods

Research application procedures researcher used an experimental design based on two groups as homogenous as possible one experimental and the other an officer in order to achieve the goal of the research experiment. This design is characterized by increased internal honesty and serves to verify the impact of the use of social media on the development of learning self-organizing skills of first grade students by comparing the results obtained from the application of measurement tools both tribally and extraordinarily to the two groups. The following Figure 1 shows the experimentation steps followed in the research.

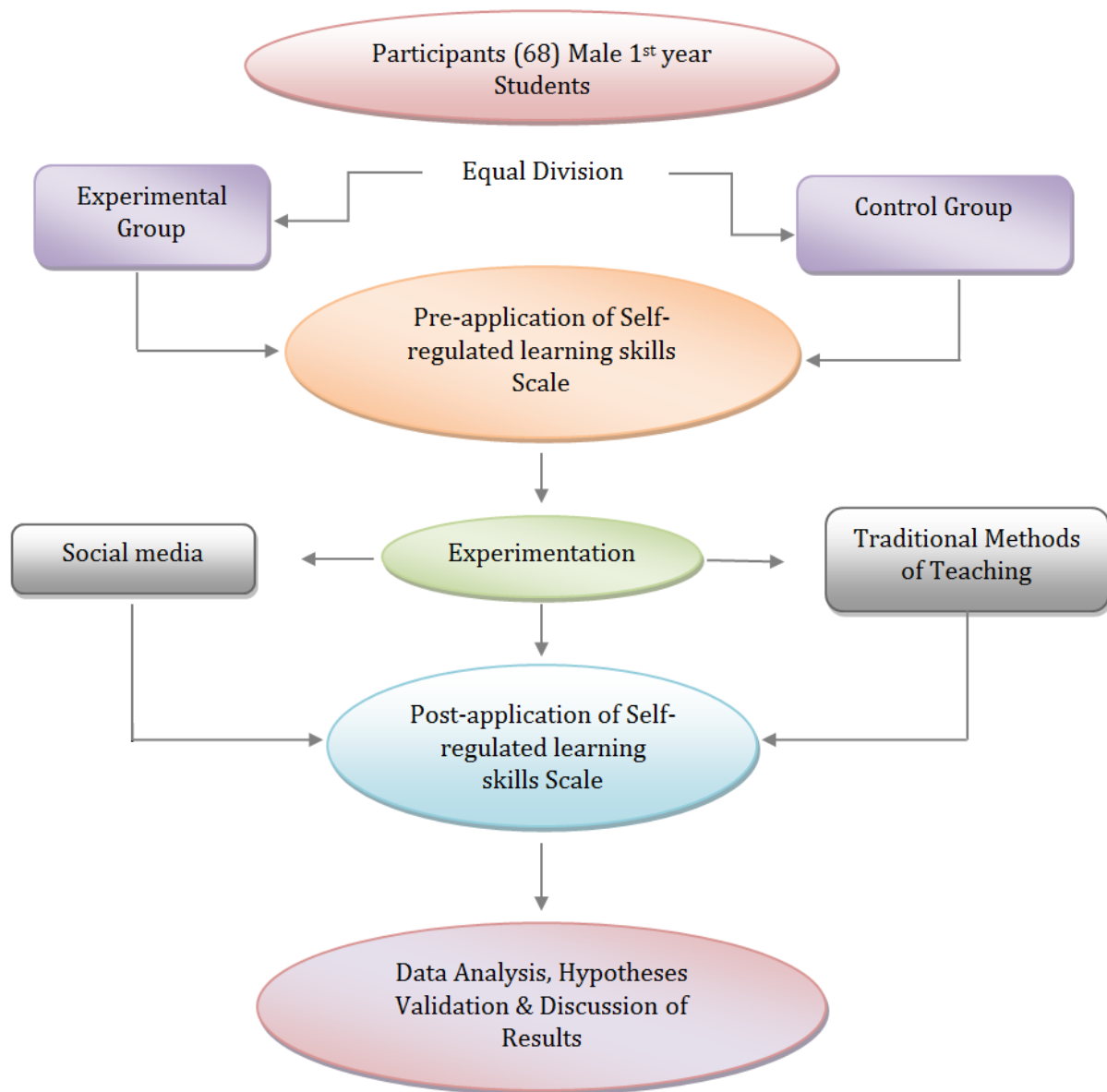


Figure 1. Experimentation Steps

Table 3. T-Test between the control group and the experimental group in the pre-test of the scale of self-regulated learning skills

Measurement Tools	Group	Students No.	SMA	S.D	T-Test			
					D.F	T. Value	Sig	
The scale of Self-regulated learning skills	Experimental	34	60.26	15.86	66	0.17	0.01	Not sig.
	Control	34	59.61	15.01				

4. Results

The scale of self-regulated learning skills was applied to both the experimental group and the control group during the second week of the second semester of the academic year 2021- 2022. Data were collected and processed and results were discussed as shown in Table 3.

Table 3 shows that the calculated "V" value is (0.17) and

disclosed at the indicator level of 0.01 and to the degree of freedom (66) In the distribution with two tails or two ends we find the connotation (2.660) and since (v) calculated (0.17) less than (v) tabular (2.660) be here Calculated as statistically irrelevant, "there are no statistically significant differences between the average scores of the experimental group and the average scores of the control group in the tribal application of the measure of self-organizing skills

for learning, thereby confirming the parity of the two groups in the level of self-organizing skills for learning. This shows that there is parity between the experimental and control groups in learning self-regulation skills.

4.1. Experimentation

A selected unit from the history book of the first-year middle-stage course was taught for both the experimental group (was taught using social media) and the control group (in light of the traditional methods) for ten sessions, each session continued for (45) minutes.

After the post-administration of the scale on both research groups and scoring the scale results, the researcher used the SPSS program to calculate the mean scores of the scores. Then, the researcher used two independent samples T-Test as a parametric statistical method for processing data and validating the hypotheses of the study. Results came as shown in the following Table 4.

As shown in Table 4, the calculated T. self-regulated learning skills scale score was (15.48) and the significant level is 0.00 which is lower than 0.01. This indicates that there is a statistically significant difference between the mean scores of the scale. As indicated in Table 4, T. values of each scale dimension between the experimental and the control group for the scale indicate that there is a statistical difference in favor of the experimental group.

According to data analysis of the previous results, the research hypothesis that “There is a statistically

The significant difference between the mean scores of the experimental group and the control group in the post-administration of the self-regulated learning skills scale at (0.01) level of significance in favor of the experimental group; in the scale, is accepted.

The following graphic illustrates the difference between the average grades between the control group and the experimental group in the post-test of the scale of Self-regulated learning skills.

The difference between the mean scores of the control and experimental groups in the post-enforcement of the

self-regulated learning skills scale

Table 4 and Figure 2 show that the average score of the experimental group in the dimensional application of the scale is (114.17647) °C (76.11%) of total scale grade and adult (150) degrees, and the average control group score in the dimensional application of the scale is (74.235) °C (49.49%) of the scale's total grade, meaning that the difference between the average test group score and the average control group score in the dimensional application of the scale is (39.94)°C (26.62%)

Based on the study results, the following findings can be made:

- Using social media to teach history has helped students take responsibility for their learning through assignments and tasks performed by students while studying individually or collectively, enabling students to continuously evaluate their learning process.
- The virtual class helped to diversify the sources from which students obtained information about the subject and linked that information to what they had previously learned, which helped to develop their elaboration skills and make them able to use external readings to improve their level of the subject
- Using multiple teaching strategies helped encourage students to engage and interact and increase their self-reliance and control in the learning process, making the learning process easier and faster and contributing to the development of observation skills and the control of the learning environment.
- One of the reasons for students' high self-organizing skills was peer learning and working in groups, which helped to create a process of complementarity among students in terms of exchanging information and ideas. This contributed to developing peer learning skills and increasing students' ability to manage peer learning, a feature of self-organized students.
- These results were also supported by other studies and research both Arabic and foreign; [13], [14], [15].

Table 4. T-test between the control group and the experimental group in the post-test of the scale of self-regulated learning skills

Self-regulated Learning Skills	Group	Students No.	SMA	S.D	D.F	T. value	Sig	
	Control	34	74.23	11.66	66	15.48	0.00	At 0.01
	Experimental	34	114.17	9.20				

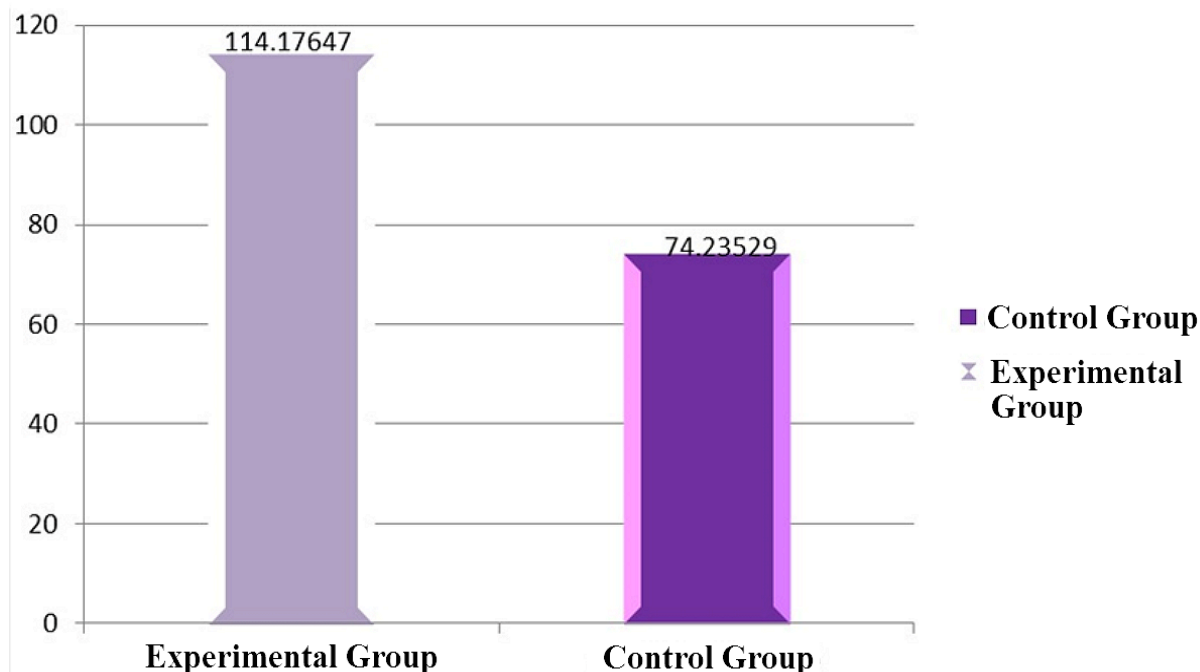


Figure 2. The differences between the mean scores of the control and experimental groups in the post-enforcement of the self-regulaed learning skills scale.

5. Discussion

Teaching using social media in the time of the coronavirus pandemic helped motivate students to learn, encouraged interaction between students and teaching subjects, and made it the focus of the educational process. The teacher became a mentor, and mentor and merely pursues students' work as these affected students' behaviors and encouraged them to become self-reliant and self-confident to achieve better education.

6. Conclusions and Suggestions

Through the current research result, the following recommendations can be made:

- Modifying the content of the subjects to become more flexible when used in social media.
- Equipping schools with modern computer rooms equipped with techniques that help to create and use virtual classrooms.
- Providing internet services at high speeds to schools to enable teachers and students to use social media.
- Training teachers to design interactive lessons to be easier to use in the virtual classroom
- Training teachers to use social media in the teaching of a different subject.

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