





## The impact of the three-semester system on primary grade children's motivation: Perspectives from mothers

 Soha Badawy Mansour<sup>1\*</sup>

 Samia Mokhtar Shahpo<sup>2</sup>

 Hanaa Ali Abualsoud<sup>3</sup>

 Nuha Alfadil<sup>4</sup>

 Refka Makram Barsom<sup>5</sup>

<sup>1,2,3,4,5</sup>Department of Early Childhood, College of Science and Human Studies in Jubail, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia.

<sup>1</sup>Email: [sbmansoor@iau.edu.sa](mailto:sbmansoor@iau.edu.sa)

<sup>2</sup>Email: [smmali@iau.edu.sa](mailto:smmali@iau.edu.sa)

<sup>3</sup>Email: [haalsoud@iau.edu.sa](mailto:haalsoud@iau.edu.sa)

<sup>4</sup>Email: [nheffadel@iau.edu.sa](mailto:nheffadel@iau.edu.sa)

<sup>5</sup>Email: [rmbarsom@iau.edu.sa](mailto:rmbarsom@iau.edu.sa)



(+ Corresponding author)

### ABSTRACT

#### Article History

Received: 2 August 2024

Revised: 13 January 2025

Accepted: 27 January 2025

Published: 31 January 2025

#### Keywords

Children's motivation  
Ministry of education  
Mothers' perspectives  
Primary education  
Saudi Arabia  
Three-semester system  
Trimester system.

In the past two academic years, the Saudi Ministry of Education has implemented a three-semester system dividing the academic year into three 13-week terms instead of the traditional two-semester format. This study aims to explore the practical application of the three-semester system and its impact on primary grade children's motivation from their mothers' perspectives. This research involved 250 mothers of children in the first three grades of primary school in the Eastern Province of Saudi Arabia. A quantitative descriptive approach was used to systematically collect and analyze data regarding the phenomenon. Data were gathered through two questionnaires: one assessing the implementation of the three-semester system in primary grades and another evaluating children's achievement motivation. Findings indicate that the increased school duties and assignments under the three-semester system have significantly burdened children compared to the two-semester system. Additionally, no statistically significant differences were found in achievement motivation between boys and girls. Overall, most mothers expressed disagreement with the three-semester system reflected in an average rating of 0.24 and a standard deviation of 0.59. This study sheds light on the implications of the new system on children's motivation and highlights concerns raised by mothers.

**Contribution/Originality:** The study investigates how the three-semester system affects education, comparing it with the traditional two-semester system. It evaluates how each system impacts student academic performance and motivation while also identifying challenges students and teachers encounter. The results will help the Ministry of Education make informed decisions to enhance the education system and improve learning outcomes.

## 1. INTRODUCTION

Saudi Arabia has implemented considerable educational reforms in recent years as part of its Vision 2030 plan to modernize the nation's economy and society. These reforms have included adjustments to teaching strategies, curriculum development and the educational system. The Saudi Ministry of Education has split the academic year into three 13-week semesters rather than two terms over the past two academic years (2022–2023). In place of the

conventional two-semester, educational institutions use the three-semester system also known as the trimester system to divide the academic year into three terms or semesters (autumn, winter, and spring). With brief breaks in between, each semester normally lasts 13 weeks (Alqahtani, 2023).

This method was developed to address the issues with the yearly and two-semester systems which sometimes lead to students showing little interest because they only have one important test at the end of the year (Felton, Levin, La Paz, & Butler, 2022). Previous studies have demonstrated that the three-semester arrangement has both benefits and drawbacks. It provides flexible scheduling, early completion of less enjoyable courses, a decreased course workload, and two graduation opportunities per year. It also allows you to provide timely and corrective feedback to students, improve their learning experience, and identify children's educational strengths that are linked with their talents and preparation. Furthermore, it promotes consistency in the grading process and improves the effectiveness of learning. The three-semester system is consistent with Saudi Vision 2030 allowing the achievement of sustainable development goals, promoting human development and satisfying future demands. It also aligns with the expectations of twenty-first-century skills (Alqahtani, 2023; Ministry of Education, 2021).

. However, its downsides include a faster rate of learning and shorter intervals between courses (Alqahtani, 2023). Furthermore, previous research has shown that students in the three-semester system may experience high levels of anxiety and tension as a result of the system's demands which include not only theoretical tests but also the acquisition of scientific research skills, the use of modern technology in the learning process, daily assessments, and diligence in completing homework (Dijkstra, Van Der Vleuten, & Schuwirth, 2010; Singh, Anshu, & Modi, 2012; Solanki, 2019). One of the research gaps understands how the implementation of the three-semester system in the first three grades of primary education affects children's motivation for achievement particularly from the perspective of mothers who devote significant time to assisting their children with schoolwork and nurturing their skills and development. In addition, there is a dearth of awareness about the psychological difficulties these children suffer as a result of this system. Furthermore, the possible disparities in motivation between boys and girls in this system are unexplored. It is essential to examine how these changes affect students' incentive for achievement because of the crucial developmental stage of elementary school and its long-term implication. The primary goal of this research is to look at the implementation of the three-semester system and its impact on children's accomplishment motivation in the first three primary grades through the eyes of moms. It also seeks to determine the relationship between the three-semester system and children's perceptions of psychological pressure. Finally, it will investigate potential gender differences in accomplishment motivation within this framework. As a result, it is vital to investigate the impact of such a shift in early childhood education on achievement motivation.

The significance of this study lies in its potential to inform the Ministry of Education about the effectiveness of the three-semester system compared to the traditional two-semester system. The research provides valuable evidence for enhancing educational quality and guiding policy adjustments by evaluating its impact on children's achievement motivation and educational outcomes. It aims to support the development of more effective educational strategies by identifying the needs and challenges experienced by students and teachers under the new system.

### 1.1. Research Questions

This research aims to address this problem by answering the following questions:

1. Is there a relationship between applying the three-semester system and the motivation of children in the first three primary grades from the point of view of the mother?
2. Is there a relationship between applying the three-semester system and the child's feeling of stress from the mother's point of view?
3. Is there a statistically significant difference between male and female motivation achievement during applying the three-semester system?

## 2. LITERATURE REVIEW

### 2.1. Types of Educational Systems

An academic year also known as a school year is a period that schools, colleges, and universities utilize to measure the amount of study that is often divided into academic semesters. Throughout this duration, students participate in classes, examinations, and complete assignments. The academic year includes both school days and holidays. The length of school days, the academic year itself, and the timing of holidays can differ significantly worldwide. For example, there are an annual system, a semester system and a multisystem.

The annual system (one-semester system) is a traditional system that provides students with the opportunity to learn and study in a full year in which a series of courses are studied and a comprehensive exam is held at the end of the year worldwide. It allows for the discovery of talented students in different fields, provides an opportunity for students to understand the subjects and information more deeply and helps them to develop their academic skills (Khattak, Ali, Khan, & Khan, 2011). The annual system has some advantages such as allowing students to use various learning resources rather than relying on only one source. Similarly, this system helps reduce examination expenses and obtain more review time on subjects. Furthermore, under this system, the library becomes more effective and is visited frequently by students since they participate efficiently in activities associated with courses. This system also helps teachers provide students with knowledge as much as possible. It also increases positive interactions and allows for more periodic assessments after explaining different subjects (Pathak & Rahman, 2013). However, the annual system is highly suspicious since it does not help students to pay attention and take the learning process seriously due to the fact that the tests take place at the end of the year only once, and a large number of courses represent a mental burden for students (Khattak et al., 2011).

A semester system (two-semester system) is another type of academic year, where the year is divided into two sessions and usually, a semester lasts six months. In this system, exams are held half-yearly instead of yearly, namely after the end of the teaching work of the six months. There are some pros of the two-semester system such as providing students with a chance for continuous learning, assessment and feedback and enabling teachers evaluate students' performance twice a year. This system ensures students' regular attendance at school by enforcing a mandatory 80% attendance regulation. Moreover, students enjoy extended breaks for relaxation as they receive a semester break following the final exams of each semester. Nevertheless, there are several shortcomings in the two-semester system where students are limited to their course materials (restrictions to course contents). Moreover, students do not have time for extensive studies which narrows students' perspectives. Furthermore, some teachers may fail to complete the curriculum on time. In addition, late-joining students often encounter significant challenges in grasping the subject matter and completing revisions. The two-semester system also raises workload as the assessment process is conducted twice a year. The students thus won't have sufficient time for comprehensive understanding as the fast-paced nature of the semester system hinders students' ability to attain complete subject knowledge (Solanki, 2019). The last educational system is the multi-segmented system (more than two semesters). It is an educational system where an academic year is divided into multiple semesters or terms instead of just two. Unlike the traditional semester system which typically consists of two main semesters, the multi-semester system may include additional terms such as summer or trimesters. Faulkner (1997) explains that "the trimester system breaks the school year into three twelve-week periods instead of the conventional four-nine-week periods". In line with the best international practices, the Saudi Ministry of Education has adopted the three-semester system in response to the Kingdom's Vision 2030 since the academic year 2022-2023 (Hijri Calendar 1444 A. H) and across all stages of public education (kindergarten, elementary, intermediate, and high school). The Ministry of Education revealed that the academic calendar will transition from a traditional two-semester system to a three-semester system, each spanning 13 weeks. This change means that the new academic year will feature three semesters instead of two. Notably, the new academic calendar will include long weekends as well as breaks between semesters. This new change would hopefully help achieve "the goals of the Kingdom's Vision 2030 and the goals of

the Human Capability Development Program as well as meeting the needs of the future, the skills of the twenty-first century, and the requirements of the Fourth Industrial Revolution” (Ministry of Education, 2021).

In fact, many people in Saudi society including principals, teachers, parents and even students are against the three-semester system, and they have expressed that in social media. Saudi Minister of Education Yousef Al-Benyan said that the three-semester system that was introduced in public education during the academic year of 1444 AH is under the ministry’s evaluation and study. He revealed that the Ministry of Education is actively engaged in evaluating the three-semester system based on scientific and educational principles in collaboration with teachers, parents, and relevant authorities. They also stated that the Ministry will announce the results of this study upon its completion (Alekhbariya, 2024). Recent research revealed some advantages and disadvantages of the three-semester system. On one hand, it narrows the educational gap that may exist between teachers and students and enhances role integration between families and schools. Furthermore, the three-semester system can support and guide students' skills with curricula that align with the needs of the job market. In addition, it provides students with the opportunity to compensate for any failures that may have occurred in some subjects in previous semesters. Furthermore, dividing the curriculum into three periods helps students to alleviate the burden of the excessive workload and information they receive from the curriculum during two-semesters. Last, it aligns with the goals of Saudi Vision 2030 towards an ambitious nation, a vibrant society, and a thriving economy (AlBukhat, 2022). On the other hand, College Raptor Staff (2024) revealed some cons regarding the trimester system such as faster-paced learning, limited time for in-depth exploration of subjects of interest, schedule conflicts, increased textbook expenses, and greater susceptibility to burnout.

A recent study conducted by Al-Shammari (2023) examined the satisfaction levels of teachers and secondary school students regarding the three-semester system and identified their views on the benefits of this system and the challenges hindering its implementation. The sample included 703 participants, consisting of 302 male and female teachers, and 401 male and female secondary school students from the Hail region in Saudi Arabia. The researcher prepared a questionnaire to capture the perceptions of both teachers and students regarding the three-semester system. The results indicated that the satisfaction level of both students and teachers from secondary schools regarding the three semester system was moderate. Furthermore, the results revealed several positives of the system, such as promoting continuous review, updating study topics, and contributing to achieving educational outcomes characterized by efficiency and effectiveness. However, the results also highlighted various academic-related obstacles, including the students' limited possession of 21st-century skills such as information technology skills, critical thinking skills, and personal skills. Furthermore, there were societal obstacles such as the lack of consideration for individual differences among learners, limited participation of students, teachers, and the local community in identifying training needs that help leverage local resources, and administrative obstacles such as centralization in decision-making related to the educational process without involving students and teachers.

Another recent study was carried out by Al-Shammari (2023) to uncover the attitudes of teachers and parents towards implementing the three-semester system in the Kingdom of Saudi Arabia and to find developmental solutions and suggestions from the perspective of teachers and parents. The study followed an analytical descriptive approach. The study sample was randomly selected from 114 teachers from schools in the Makkah region, and 123 parents for a total of 237 participants. A questionnaire was used to collect the data. The following results were obtained: the average of teachers and parents suggesting the abolition of the three-semester system was about 80% while the rest believe it should remain with overall development including curriculum, school day hours, implementation mechanisms and the duration of vacations. They also see that the system needs to be developed in terms of curriculum alignment with the number of semesters and reducing school day hours. The results also showed that there were no statistically significant differences in the average responses between teachers and parents regarding the implementation of the three-semester system based on gender, experience, and educational stage variables.

## 2.2. Global Examples of Three-Semester Systems

The debate over whether a trimester or two-semester system is superior emerged in the early 1960s. Dr. Grayson Kirk, president of Columbia University and a supporter of the trimester plan argues that spending four years in certain educational environments often referred to as centers of learning may be enjoyable for young individuals along with their parents, educational institutions and the nation can no longer be afforded. Dr. Kirk further contends that the trimester system is cost-effective as it optimizes resource utilization while also benefiting students by allowing them to complete their college education in four years, thus enabling them to enter the workforce earlier (Alcade, 2022 cited in Alqahtani 2023).

In the fall of 1967, Humboldt State schools implemented the three-semester system. In 1969, a specialized committee was formed to study students' attitudes and preferences toward this system. The committee's report showed that 52.1% of students preferred to return to the two-semester system. A survey of faculty members showed that 37.5% preferred the three-semester system. In 1973, a survey showed that 79% of students preferred the trimester system, and in 1975, a survey of a sample of 1230 students showed that 82% preferred this system. In 1979, that system was generalized and adopted as a fixed educational system in schools. The three-semester system was also implemented in all schools in Iowa County, USA, after the semester system had been in place during the 1982-1983 academic year (Maynard, 1984). These studies indicated that any initiative or introduction of new things such as the three-semester system could often be met with resistance to change. According to Faulkner (1997) "the trimester system seemed a bit radical for a small-town school. After touring, interviewing, studying and talking with people from other schools, however, this seemed like a real plausible solution. Over time, it becomes apparent that students have expressed their preferences for it with the implementation of this system for many years.

The education system in the United States is one of the global educational systems based on the three-semester system since 1962. The educational administration in the state of Florida extended the class session time by 10 minutes compared to its counterpart in the two-semester system to provide students with more time to engage in educational activities commensurate with the amount of knowledge and topics covered in the three-semester system. Additionally, the United Arab Emirates (UAE) preceded Saudi Arabia in implementing the three-semester system. The UAE Ministry of Education divided the academic year for government and private schools into three academic semesters since 2010 (Wieczorek, 2008).

## 2.3. Achievement Motivation (Motivation's Theory)

Previous studies revealed that the trimester system has strengths and weaknesses that could influence students' learning motivation. In fact, achievement motivation represents one of the significant aspects in the system of cognitive motives that researchers in the fields of learning psychology and social psychology are interested in studying. Murray (1938) was the first to introduce the concept of the need for achievement in the study of personality dynamics, considering it one of its fundamental variables. He is credited with initiating the definition of this motive and laying down the foundations that can be used to measure it. Achievement motivation refers to an individual's ability to accomplish tasks that others perceive as difficult, to control both the physical and social environment, to manage and organize thoughts effectively, to perform tasks swiftly, to be independent, to overcome obstacles, to meet standards of excellence, to excel and compete with others, to surpass them and to take pride in and appreciate oneself through successful application of one's abilities.

Another seminal source that discussed achievement motivation is *Alfred Adler*. Adler developed "Motivational Theory" which is based on the idea that individuals are primarily motivated by pursuing excellence or self-improvement. According to Adler, the primary driving force behind human behavior is the desire to overcome feelings of inferiority and strive for excellence. Adler believed that individuals are influenced by their subjective perception of themselves and their social environment rather than by objective reality. He proposed that feelings of inferiority, stemming from childhood experiences, drive individuals to compensate by striving for excellence in

various areas of life such as Adler also emphasized the importance of social interest which refers to an individual's innate desire to contribute to the well-being of society and to form meaningful connections with others (Petri & Govern, 2004). In fact, the question of whether there is a relationship between applying the three-semester system and the motivation of children requires investigation. We need to look at whether students are internally motivated and enjoying work under this system or feel stressed. Referring to the aforementioned studies, the researchers found that there were studies that addressed educational systems in general or the three-semester system in secondary and higher education which showed a set of positives in applying the three-semester system and highlighted the satisfaction of teachers and students with the implementation of this system as well as the obstacles they faced when applying it. The current research differs from previous studies in terms of the sample focusing on the primary stage (the first three grades) and their achievement motivation which was not addressed in previous research. Additionally, the focus was on the perspective of mothers as they spend most of their time with children to help them with their schoolwork and develop their skills and aspects of growth. Thus, this study aims to examine the reality of applying the three-semester system and its relationship with children's motivation in the primary grades from the point of view of mothers.

### 3. METHODOLOGY

#### 3.1. Research Design

This study employed a quantitative descriptive approach to collect and evaluate measurable data and characterize the phenomenon under investigation. This technique seeks to provide a clear and succinct depiction of the subject under inquiry without necessarily aiming to establish causal linkages or make predictions. Researchers in quantitative descriptive study often collect data from a representative sample of the community using organized instruments such as questionnaires or structured observations. This type of research helps comprehend the traits, habits, attitudes, or opinions of a population which can guide decision-making and policy formulation surrounding the topic under consideration (Sidel, Bleibaum, & Tao, 2018).

#### 3.2. Research Population

A total of 250 mothers of children in the first three grades of primary school in the eastern province of Saudi Arabia participated in this study in 2022-2023. The questionnaires were distributed in the following areas: Jubail, Dammam, Khobar, Dhahran, and Qatif. Participants were recruited using a non-probability method where participants are selected based on their convenient availability or accessibility to the researchers. The following table shows the distribution of the sample in demographic data based on the gender of the child and grade:

**Table 1.** Distribution of sample to demographic data.

Variables	Groups	N	Percentage
Gender of the child	Male	103	41.2
	Female	147	58.8
Grade	First grade	92	36.8
	Second grade	105	42
	Third grade	53	21.2

From Table 1, we see that the sample consisted of 103 males representing 41.2% of the sample, and 147 females representing 58.8% of the total sample. About 36.8% of children were in the first grade, 42% in the second grade, and 21.2% in the third grade.

#### 3.3. Data Collection [Instrument]

Data were collected using two questionnaires. The first questionnaire is to measure the reality of applying the three-semester system in the first three primary grades with 14 items.

The second questionnaire measures the extent of children's achievement motivation in the first three primary grades with 38 items.

The answers to the questionnaire items were corrected as follows:

Agree = 2, somewhat agree = 1, disagree = 0 (for positive statements).

Agree = 0, somewhat agree = 1, disagree = 2 (for negative statements).

### 3.4. Data Analysis

All data analysis, including results, tables, and statistical tests were performed using the IBM SPSS Statistics 22 software package.

The research employed various statistical methods including descriptive statistics to summarize the data, measures of central tendency and dispersion to gauge the distribution of questionnaire responses among sample individuals and independent sample t-tests to identify differences based on the child's gender (male or female).

### 3.5. Validity and Reliability Tests

The psychometric validation of the questionnaires in the current study was taken into account for validity and reliability.

#### 3.5.1. First: Validity

Validity refers to the degree to which a study accurately measures or reflects the concept it claims to measure. It assesses whether a research instrument is measuring what it is intended to measure and whether the results obtained from it are meaningful and applicable to the research question. Validity was tested by calculating the Pearson correlation coefficient between

- The score of each item with the total score of the dimension it belongs to.
- The score of each dimension of the scale with the total score of the scale.

Table 2 shows that items or questions (32), (34), (38), (39), and (43) of the second dimension relate to the total degree of the non-functional dimension at 0.05 do not measure the scale for which they were set. Thus, these questions were excluded from the questionnaire.

It could be noticed that all the coefficients of the other items' interrelations with the dimension they belong to on the questionnaire related to measure applying the three- semester system and its relation to the child's achievement motivation in the first three primary grades from the mothers' perspective are significant at 0.01. Thus, it becomes clear that the questionnaire is valid and the questions measure what the questionnaire was designed for allowing its application in the current study.

From Table 3, it is evident that the Pearson Correlation Coefficients for all items of the questionnaire regarding applying the three-semester system and its relation to the child's achievement motivation in the early primary grades from the mothers' perspective along with the total scale score are significant at the 0.01 level. Thus, it becomes clear that the scale is characterized by validity allowing its application in the current study.

Table 2. Pearson coefficient values between each item and the dimension in which the questionnaire belongs (N = 250).

Dimensions of the questionnaire	Items number	Correlation coefficient	Items number	Correlation coefficient
Mothers' opinions about applying the three-semester system.	1	0.261**	8	0.766**
	2	-0.197**	9	0.589**
	3	0.830**	10	0.798**
	4	0.824**	11	0.435**
	5	0.817**	12	0.806**
	6	0.721**	13	0.809**
	7	-0.193**	14	0.745**

Dimensions of the questionnaire	Items number	Correlation coefficient	Items number	Correlation coefficient
Motivation of achievement for students in the first three primary grades.	1	0.428**	23	0.305**
	2	0.555**	24	0.318**
	3	0.676**	25	0.689**
	4	0.597**	26	0.578**
	5	0.639**	27	0.633**
	6	0.600**	28	0.666**
	7	0.595**	29	0.196**
	8	0.434**	30	0.591**
	9	0.570**	31	-0.209**
	10	0.537**	32	-0.082
	11	0.457**	33	0.155**
	12	0.597**	34	0.005
	13	0.699**	35	0.604**
	14	0.702**	36	0.533**
	15	0.691**	37	0.178**
	16	0.650**	38	0.048
	17	0.636**	39	-0.004
	18	0.602**	40	0.487**
	19	0.588**	41	0.566**
	20	0.729**	42	0.331**
	21	0.726**	43	-0.065
	22	0.313**	---	---

Note: \*\*Significant coefficients at the 0.01 level.

Table 3. The value of the Pearson correlation coefficients between the dimensions of the questionnaire.

Dimension	Correlation coefficient
Mothers' opinions on the application of the three-semester system.	0.627**
Motivation of achievement for students in the primary grades.	0.953**

Note: \*\*Significant at the 0.01 level.

### 3.5.2. Second: Reliability

Reliability refers to the consistency, stability, or repeatability of research findings or measurement outcomes. In other words, it's the extent to which a particular method or instrument produces the same results when applied repeatedly under the same conditions. The researcher employed split-half reliability and Cronbach's alpha coefficient to calculate the reliability of the questionnaire related to the three-semester system and its relation to the child's achievement motivation in the first three primary grades. Table 4 presents the results.

Table 4. Values of the reliability coefficient to calculate the reliability of the questionnaire.

Dimensions of study	Cronbach's alpha	Split half reliability
Mothers' opinions on applying the three-semester system.	0.834	0.772
Motivation of achievement for children in the primary grades.	0.938	0.833
Scale as a whole.	0.934	0.697

From Table 4, it is evident that the reliability coefficients of the total score and all dimensions of the questionnaire exhibit very good reliability coefficients. The reliability coefficients ranged between 0.697 and 0.938 indicating that the scale possesses an appropriate level of stability.

### 3.6. Ethical Considerations

The study ensured that privacy and confidentiality procedures were upheld throughout the process of gathering, analyzing, and presenting the research findings. The Ethical Committee of the Imam Abdulrahman bin Faisal University, Saudi Arabia approved this study on 15/05/2024 (Ref. No. IRB: 2024-28-274).



#### 4. FINDINGS

From 250 mothers participated in this study, the study findings indicated that school responsibilities and assignments under the three-semester system imposed a significant burden on children compared to the two-semester system. Moreover, no statistically significant differences in achievement motivation were observed between boys and girls. Most mothers expressed disagreement with the implementation of the three-semester system with an average score of 0.24 and a standard deviation of 0.59. The following section provides detailed statistical answers and discusses the three research questions. The researchers relied on the classification of the calculation averages as follows:

**Table 5** The direction of opinion on the three-point Likert scale

Scale	Agree	Somewhat agree	Disagree
Mean	2 – 1.36	1.35– 0.68	0.67 – 0

**Note:** (2). Expresses full applicability and (0) expresses non-applicability of the phrase.

Table 5 presents each viewpoint assigned a weight based on the order presented, and the arithmetic mean is calculated.

#### 5. DISCUSSION

The purpose of this study was to examine the implementation of the three-semester system and its relationship with children's achievement motivation in the first three primary grades from the perspective of mothers. It also aimed to identify the relationship between the application of the three-semester system and children's sense of psychological pressure. Last, it explores potential disparities in achievement motivation based on gender within this system. The following section addresses and discusses the research questions of this study:

**First Question:** Is there a relationship between applying the three-semester system and the motivation of children in the first three primary grades from the point of view of the mother?

To answer this question, the overall orientation of the sample members towards mothers' opinions on implementing the three-semester system and its relationship to achievement motivation among primary-grade students was measured. Table 6 displays the overall orientation of the sample members for the dimension of the views of mothers in applying the three-semester system.

It can be observed from Table 6 that the most agreed-upon statement among the study sample regarding mothers' views on implementing the system was statement (7) with an average of 1.64 and a standard deviation of 0.66. The sample agreed that *"increased duties and assignments in the three-semester system represent a child's burden compared to the two-semester system"*.

The least agreed-upon statement among the sample members was statement (6) with an average of 0.24 and a standard deviation of 0.59 where the sample disagreed with *"supporting the continuation of the three-semester system"*. Additionally, the overall trend for this dimension showed disagreement with an average of 0.66 and a standard deviation of 0.7. This results is not aligned with the declaration of AlBukhat (2022) who said that the three-semester system helps students to alleviate the burden of the excessive workload, information they receive from the curriculum during two-semesters.

An overwhelming workload could potentially result in reduced student motivation for achievement. Table 7 illustrates the overall trend of the sample members regarding the dimension of achievement motivation among primary-grade students.

Table 6. Overall orientation of the participants sampled.

#	Statement	Mean	Standard deviation	General direction	Rank
1	The three-semester system contributed to the reduction of the final leave period child.	1.50	0.76	Agree	2
2	Time constraints in performing duties and assignments in the three-chapter system.	1.48	0.75	Agree	3
3	The three-semester system helps improve the child's behavior.	0.48	0.74	Disagree	9
4	The three-semester system helps to provide the child with the mental and intellectual skills and abilities needed for his or her age within three classes.	0.62	0.77	Disagree	6
5	A child's pleasure in education in the three-semester system.	0.32	0.63	Disagree	12
6	I support the continuation of the three-semester system.	0.24	0.59	Disagree	14
7	Increased duties and assignments in the three-semester system represent a child's burden compared to the two-semester system.	1.64	0.66	Agree	1
8	The child has become full-time to spend increased time with the family under the three-semester system.	0.30	0.64	Disagree	13
9	The three-semester system ends faster.	0.76	0.85	Somewhat agree	5
10	The application of the three-semester system contributed to the quality of education and the child's understanding of the school content.	0.50	0.73	Disagree	8
11	Information is provided to the child quickly and intensively.	0.94	0.83	Somewhat agree	4
12	The three-semester system helped break down the boredom and stalemate resulting from the length of study in the two-chapter system.	0.42	0.71	Disagree	10
13	Throughout the school year, children enjoy a high level of good mental health.	0.37	0.63	Disagree	11
14	The three-semester system helped eliminate any educational gap in the child.	0.50	0.71	Disagree	7
	Dimension as a whole.	0.66	0.7	Disagree	

Table 7 showed that the most significant statement regarding students' motivation approved by the study sample was statement (24) with an average of 1.82 and a standard deviation of 0.45 where the sample agreed to "feel happy when he succeeds in a competition". The lowest statement in the level of approval among the participants was statement (37) with an average of 0.40 and a standard deviation of 0.64, which is "hates wasting time pointlessly". The researchers also note that the general trend of the dimension is "somewhat agree" with an average of 1.24 and a standard deviation of 0.7. Murray (1938) support these results when he stated that achievement motivation involves an individual's capacity to tackle challenging tasks, control environments, organize thoughts efficiently, perform quickly, act independently, overcome obstacles, achieve high standards, excel and compete, surpass others, and

derive pride and self-appreciation from successful use of abilities. The mother believed that their children hated wasting time and felt joy upon succeeding in a competition.

**Table 7.** Overall orientation of respondents towards students' achievement.

#	Statement	Mean	Standard deviation	General direction	Rank
1	My son seeks success to obtain respect.	1.45	0.70	Agree	8
2	My son is keen to set realistic goals for himself.	1.23	0.74	Somewhat agree	19
3	My son organizes school time from the beginning of the school year to achieve excellence.	1.23	0.77	Somewhat agree	20
4	My son is preparing for the exam well in advance.	1.21	0.73	Somewhat agree	21
5	Develop a plan for the implementation of the day-to-day.	1.11	0.75	Somewhat agree	26
6	It's hard for him to neglect duty.	1.34	0.75	Somewhat agree	16
7	The performance standards he sets for himself for the mandates required of him are very high.	1.07	0.72	Somewhat agree	32
8	Anxiety and discomfort over time waste.	1.08	0.76	Somewhat agree	31
9	I am keen to participate in activities that teach me new things.	1.28	0.72	Somewhat agree	17
10	I'm trying to know everything that's going on right around me.	1.48	0.65	Agree	7
11	My son wants to be successful among people.	1.76	0.48	Agree	2
12	Notice works very hard and diligently in doing something for fear of failure.	1.41	0.71	Agree	11
13	Eager to perform the tasks required of him.	1.53	0.63	Agree	6
14	Performs his mandate with focus.	1.38	0.71	Agree	15
15	He tends not to be interrupted in the course of his duties.	1.16	0.75	Somewhat agree	23
16	Characterized by a strong will.	1.39	0.68	Agree	14
17	He is keen to prove his efficiency among his colleagues.	1.53	0.64	Agree	5
18	He likes to participate in remote school activities that require special abilities.	1.11	0.80	Somewhat agree	27
19	He likes to be superior in his class.	1.64	0.59	Agree	3
20	Keen to develop a future plan.	1.09	0.75	Somewhat agree	29
21	If he starts a job, he doesn't leave until he completes it.	1.15	0.72	Somewhat agree	24
22	He likes to do work that doesn't take a long time.	1.58	0.60	Agree	4
23	Jealous of the success of other colleagues without trying to imitate them.	0.87	0.80	Somewhat agree	35
24	Feel happy when he succeeds in a competition.	1.82	0.45	Agree	1
25	Insists on completing the work no matter how difficult it is.	1.25	0.70	Somewhat agree	18
26	Endures the problems he faces.	1.15	0.68	Somewhat agree	25
27	Accomplishes the objectives entrusted to him correctly.	1.41	0.62	Agree	10
28	A great effort is being made to obtain advanced status.	1.40	0.68	Agree	12
29	He has a constant sense of frustration and a prediction of failure.	0.60	0.73	Disagree	37
30	He likes to do difficult activities that require great effort.	0.97	0.72	Somewhat agree	33
31	Boring shortly after the beginning of the memory.	1.40	0.65	Agree	13
32	He gets angry when he can't do the duties.	1.17	0.74	Somewhat agree	22
33	The organization applies to everything it exercises.	1.11	0.69	Somewhat agree	28
34	Pay attention to the teacher's explanation is the best.	1.44	0.64	Agree	9
35	His colleagues classify him as a negligent	0.40	0.64	Disagree	38

#	Statement	Mean	Standard deviation	General direction	Rank
	and uncommitted figure.				
36	He relies on himself to do his business without hiring anyone.	1.09	0.65	Somewhat agree	30
37	He hates wasting time pointlessly.	0.89	0.75	Somewhat agree	34
38	He considers that seeking help from others is not desirable.	0.78	0.75	Somewhat agree	36
	Dimension as a whole	1.24	0.7	Somewhat agree	

### 5.1. Second Question: Is there a Relationship between Applying the Three-Semester System and the Child's Feeling of Stress from the Mother's Point of View?

In response to this question, researchers analyzed the Pearson correlation coefficient between the implementation of the three-semester system and children's psychological stress. The results are given in Table 8. We note that Pearson's Coefficients were 0.361 which means that the relationship between implementing the three-semester system and the psychological aspect of the child is a moderate positive relationship (the child's stress levels increase with the implementation of the three-semester system). This finding is consistent with College Raptor Staff (2024) who identified drawbacks of the trimester system, including reduced time for deep exploration of subjects of interest and increased risk of burnout among students. Moreover, a study by Al-Shammari (2023) showed that the average of teachers and parents suggesting the abolition of the three-semester system was about (80%). This substantial rate of rejection of the three-semester system underscores the fatigue and pressure experienced by students under this system, reflecting dissatisfaction among both parents and teachers. Caregivers also see that this system needs to be developed in terms of curriculum and school day hours.

**Table 8.** Person's correlation between applying the three semester system and the child's psychological aspects.

Children's psychological aspects	Correlation coefficient Pearson	Significance
	0.361	<0.001

### 5.2. Third Question: is there a Statistically Significant Difference between Male and Female Motivation Achievement during Applying the Three-Semester System?

To address this question, researchers employed the "t-test" for independent samples to examine the mean differences in the implementation of the three-semester system and its correlation with motivation between males and females. The results of Al-Shammari (2023) also aligned with this study and showed that there were no statistically significant differences in the average responses between caregivers regarding the implementation of the three-semester system based on gender. Table 9 shows that the gender of the child does not affect the views of the mothers on the three-semester system and its relationship with the children's motivation. Figure 1 depicts these results.

**Table 9.** T-test to indicate differences between the three-chapter system's application averages and its relationship to male-female motivation of achievement.

Dimensions of study	Child's gender	N	Mean	Standard deviation	T	Df	Sig
Mothers' opinions on the three-semester system.	Male	103	10.1	5.3	0.196	248	0.845
	Female	147	9.9	5.9			
Children's motivation achievement.	Male	103	46.3	14.3	-0.533	248	0.595
	Female	147	47.3	14.7			
Total score.	Male	103	56.5	16.9	248	248	0.703
	Female	147	57.3	17.8			

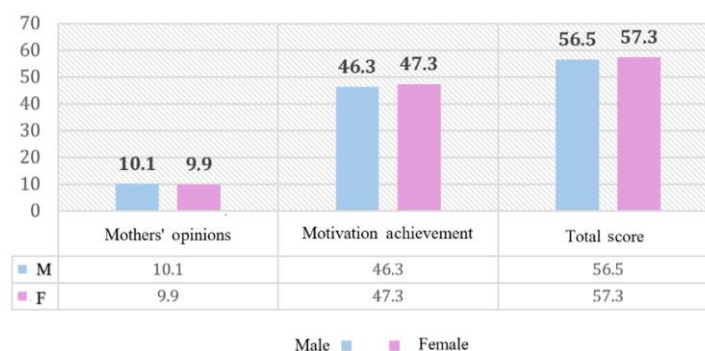


Figure 1. The three-semester system and its relationship to male-female motivation achievement.

## 6. CONCLUSION

This study investigated the implementation of the three-semester system and its effects on achievement motivation among first to third-grade primary school children as perceived by their mothers. It also examined the system's impact on children's psychological stress and potential gender-based differences in motivation. The research revealed significant concerns about the three-semester system with mothers expressing dissatisfaction due to increased perceived burdens on children. While some benefits of the three-semester system for academic motivation were noted, most participants preferred the two-semester system. Their concerns centered around psychological stress and its impact on children's emotional well-being. The study underscores the importance of supportive environments and the nurturing role in fostering children's resilience and overall well-being.

## 7. RECOMMENDATION

To improve the educational experience under the three-semester system, several recommendations are made based on mothers' insights regarding children's motivation and well-being. These include:

1. Policy Adjustment: Revise system policies to alleviate children's perceived burdens.
2. Parental Engagement: Enhance communication between schools and parents to address concerns and foster understanding.
3. Psychological Support: Introduce psychological support initiatives, like counseling and stress management to mitigate negative impacts on students.
4. Gender-Responsive Approaches: Continue to implement strategies ensuring equitable experiences for all students, recognizing that no significant gender differences in motivation were found.

## 8. LIMITATIONS

The study is based mainly on mothers' perspectives which may overlook insights from other caregivers or guardians, potentially introducing biases and limiting a comprehensive understanding of children's motivation in various caregiving contexts. Additionally, the sample may not fully represent all primary-grade children and mothers, as geographical, socioeconomic or cultural biases could affect the findings' generalizability. To gain deeper insights into children's motivation, incorporating qualitative methods and direct observation of children could be more effective than relying solely on subjective reports or questionnaires.

**Funding:** This study received no specific financial support.

**Institutional Review Board Statement:** The Ethical Committee of the Imam Abdulrahman Bin Faisal University, Saudi Arabia has granted approval for this study on 1 July 2022 (Ref. No. IRB-2024-28-374).

**Transparency:** The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

**Competing Interests:** The authors declare that they have no competing interests.

**Authors' Contributions:** All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

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