

Article

Motivation, Academic Performance, and Homework in Compulsory Education: A Systematic Review

Yaiza Viñuela  & Ana María de Caso Fuertes 

Universidad de León, Spain

ARTICLE INFO

Received: March 24, 2025
Accepted: September 15, 2025

Keywords

Motivation
Academic performance
Homework
Compulsory education

ABSTRACT

The relationship between motivation, academic performance, and involvement in homework is a key factor in educational success. These variables depend on internal and external factors that influence learning and continuity of studies. Understanding these factors allows for improved teaching and learning processes and addresses issues such as school dropout and grade repetition. The overall objective is to analyze the relationship among motivation, academic performance, and homework completion in compulsory education students. To this end, 19 studies were selected through specific syntax searches in scientific databases, and a content analysis was performed to identify factors and relationships among the variables. The results highlight the fundamental role of families in motivation, academic performance, and involvement in homework, even above the role of teachers. Additionally, the way in which students manage time spent on homework appears to be an internal factor that fosters both commitment and academic performance. Consequently, it is necessary to promote teaching strategies that involve the entire educational community and encourage a positive attitude toward learning among students.

Motivación, Rendimiento Académico y Deberes Escolares en la Educación Obligatoria: una Revisión Sistemática

RESUMEN

La relación entre motivación, rendimiento académico e implicación en los deberes escolares constituye un factor clave en el éxito educativo. Estas variables dependen de factores internos y externos que influyen en el aprendizaje y la continuidad de los estudios. Comprenderlos permite mejorar los procesos de enseñanza-aprendizaje y enfrentar problemáticas como el abandono escolar o la repetición de curso. El objetivo general es analizar la relación entre motivación, rendimiento académico y la realización de deberes en alumnado de educación obligatoria. Para ello se seleccionaron 19 estudios mediante búsqueda en bases de datos científicas con una sintaxis específica, realizando un análisis de contenido para identificar factores y relaciones entre las variables. Los resultados resaltan el papel fundamental de las familias en la motivación, rendimiento académico e implicación en los deberes escolares, incluso por encima del papel del profesorado. Asimismo, la gestión que el alumnado realiza del tiempo invertido en la realización de los deberes aparece como un factor interno que favorece su compromiso y rendimiento académico. En consecuencia, se requiere promover estrategias de enseñanza que involucren a toda la comunidad educativa, favoreciendo en el alumnado una actitud positiva hacia el aprendizaje.

Palabras clave

Motivación
Rendimiento académico
Deberes escolares
Educación obligatoria

Introduction

In the field of education, it is necessary to understand the factors that influence students' academic success in order to optimize the teaching-learning process and reduce phenomena such as early school dropout and grade repetition, both indicators of poor educational performance. At the European level, the early school dropout rate is 9.5%, with percentages ranging from 2% to 16.6% (European Commission, 2023; Instituto Nacional de Estadística [National Institute of Statistics], 2023). However, in the Spanish context, according to the latest available data, the early school dropout rate is 13.7% (4.2 points above the European average), and the rates of repeating a school year are among the highest among the countries belonging to the Organization for Economic Cooperation and Development (OECD), with a rate of 2.1% in the case of primary education and 7.8% in secondary education (Ministerio de Educación, Formación Profesional y Deportes, [Ministry of Education, Vocational Training, and Sports], 2024a; 2024b).

Academic performance, and therefore academic success, is influenced by both internal factors within the individual and environmental factors. Internal factors include variables such as motivation, which is negatively affected by a lack of interest on the part of students in the content (Domínguez Espinoza, 2021; Verdeja Muñiz, 2022). Environmental factors also have an influence, such as the demand for homework by teachers or the family environment, as these affect the teaching-learning process (Borja Naranjo et al., 2021; Cerdeño-Triviño et al., 2022).

Focusing on internal factors, motivation is a psychological construct that can be defined as a process by which an individual's behavior is oriented toward satisfying their needs in order to achieve specific goals (Faisal & Al-Rasheed, 2021). Motivation acts as an internal force that drives behavior in a specific direction, linked to the desire to perform a specific action that allows those needs to be met (Faisal & Al-Rasheed, 2021; Wijayanto & Riani, 2021). Various theories explain the basis on which individuals maintain motivation.

Weiner's attribution theory (1974) explains that individuals attribute both their successes and failures in achieving goals to various reasons, which directly affects their motivation. This theory states that individuals attribute the results of their actions to different internal or external causes, whether these are stable or unstable, controllable or uncontrollable (Weiner, 1974). When an individual attributes success to internal and controllable causes, such as effort, their motivation tends to increase, as they feel they can replicate the positive result (Cuadro et al., 2023). Conversely, if the individual attributes failure to uncontrollable and stable causes, such as lack of skill, the individual will become demotivated (Cuadro et al., 2023). Thus, the attributions individuals make about their successes and failures affect their persistence in trying again to achieve the goal or task, in other words, in maintaining their behavior (Cuadro et al., 2023).

Within the framework of self-determination theory (SDT), motivation is classified into two types (Ryan & Deci, 2020): intrinsic and extrinsic. Intrinsic motivation emerges from the individuals themselves, who commit to performing a task out of personal interest and for the pleasure they derive from doing so (Prieto, 2020; Swiatczak, 2021). In contrast, extrinsic motivation is

based on the individual performing a task with the aim of obtaining external feedback; therefore, in this context, the activity becomes a means to an end (Di Domenico & Ryan, 2017). Ultimately, it is essential for students to feel motivated, whether through their involvement in school projects or through their own expectations of academic success, in order for them to continue their studies and complete their education (Verdeja Muñiz, 2022).

Depending on the type of motivation, the quality of students' engagement in completing homework varies (Regueiro et al., 2020). Homework is a traditional educational resource used to reinforce knowledge acquired in the classroom and promote fundamental skills such as responsibility, autonomy, self-assessment of knowledge, and time management (Cooper, 1989; Martínez-Vicente et al., 2020; Rodríguez et al., 2021). Among these skills, the importance of time management should be highlighted, as the quality of time spent on homework has a positive impact on academic performance (Eilam, 2001; Valle et al., 2015).

Academic performance is therefore a tangible indicator of students' learning and effort, reflecting both their understanding of the subject matter studied and the effect of motivation and homework completion (Núñez Hernández et al., 2018).

Therefore, performance is an indicator of the progress students make in relation to the established program objectives, measuring the degree and speed of their progress toward achieving optimal results (Núñez Hernández et al., 2018). This performance reflects the value or benefit that students obtain from all the educational and informal activities they encounter in their school environment (Núñez Hernández et al., 2018).

In short, understanding the relationship between motivation, homework completion, and academic performance is key to optimizing students' learning processes. Motivation, both intrinsic and extrinsic, influences students' involvement in their homework, which directly affects their academic performance (Regueiro et al., 2020; Verdeja Muñiz, 2022). This makes it necessary to conduct an in-depth analysis of the three variables mentioned above in order to identify areas for improvement that promote students' comprehensive development and academic success.

Based on the above, the research question posed is: how are motivation, academic performance, and homework completion related in compulsory education students? Derived from the research question, the general objective of this study is to analyze the relationship between motivation, academic performance, and homework completion to help teachers develop methodologies that promote student learning. To achieve the general objective, three specific objectives were established: 1) to identify the factors that may influence student motivation; 2) to clarify the indicators that affect academic performance; and 3) to analyze the variables that determine the completion, or lack thereof, of homework.

Method

A systematic review was conducted of empirical articles published in scientific journals that addressed at least two of the three variables under study: motivation, performance, and homework. Articles from the last 10 years (2014-2024) were selected, as recency of reviewed studies is a key criterion for determining the quality of systematic reviews, with publications from the past 5 to 10 years being optimal (Guirao-Goris, 2015).

Document Search Procedure

The document search was conducted in November 2024 using the international databases Scopus and Web of Science, as well as the Spanish database Dialnet to include as many Spanish-language studies as possible. Keywords related to the three variables of interest were used. Additionally, articles were searched using the Boolean operators "and," "not," and "or" with the following syntax in all databases:

TS=("academic performance" OR "educational outcomes" OR "school performance" OR "academic achievement") AND TS=("motivation" OR "intrinsic motivation" OR "extrinsic motivation" OR "achievement motivation") AND TS=("homework" OR "school assignments") NOT TS=("university" OR "college" OR "higher education") AND AB=("academic performance" OR "educational outcomes" OR "school performance" OR "academic achievement") AND AB=("motivation" OR "intrinsic motivation" OR "extrinsic motivation" OR "achievement motivation") AND AB=("homework" OR "school assignments")

In order to select the studies, the following inclusion criteria were established: a) descriptive articles, as they provide real data obtained using the scientific method; b) articles in English and Spanish; c) articles from the last 10 years; d) full-text studies; e) articles addressing at least two of the three variables; and f) articles whose sample is compulsory education students, since all students must attend these levels, even if they are low or completely lacking in motivation. The exclusion criteria applied were: a) review studies and/or meta-analyses, as they already compile results from descriptive studies, and could therefore duplicate information; and 2) studies focusing on higher education, since at this educational stage the teaching-learning methodology is based on the completion of assignments, especially group work (Fraile et al., 2020).

The application of these criteria yielded a total of $n=54$ studies in the three selected databases. The authors, title, and abstract of all studies were exported in a RIS file, and the full text was also exported. This information was entered into the "Rayyan" bibliographic manager to carry out the article selection process. After this first phase of study identification, three other phases followed, based on the flowchart guidelines established in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Page et al., 2021): a) elimination of duplicates using the Excel "remove duplicates" tool, b) reading of the titles and abstracts of the articles, and c) complete reading of the articles, applying the inclusion criteria mentioned above. The final sample of studies comprised 19 descriptive empirical articles, marked with an asterisk in the references (Figure 1). All of them are indexed in SJR (eleven in Q1, five in Q2, one in Q3, and one in Q4), except for one indexed in CIRC. It should be noted that of the articles reviewed, three focus on primary education, 13 on compulsory secondary education, and three on both educational stages.

In terms of the geographical distribution of the studies, most were conducted in Europe ($n = 12$), with Spain being the most represented country ($n = 11$). In contrast, four studies were identified in America, two in Asia, and one in Australia.

Data Analysis

To perform the data analysis, relevant information obtained from the studies was collected, organized, and synthesized. The process began with the extraction of information from the $n=19$ studies, coding the results collected in the "conclusions" section (or equivalent). These were organized in an Excel spreadsheet in which the following information was recorded: a) study authors; b) study sample; and c) results.

Once the data had been recorded, the information was coded into pre-established categories (level 1), i.e., the three variables under study: motivation, performance, and homework.

Based on this initial coding and the results obtained, two subcategories were differentiated within each level 1 category: external factors and internal factors (level 2). The first level 2 code refers to external factors, which include the sociocultural environment or the family environment (Almeida, 2022). The second level 2 code addresses internal factors, such as cognitive ability, prior knowledge, motivation, or attitudinal aspects (Almeida, 2022). A total of 134 segments were coded.

Results

The results obtained in the analysis of the studies are presented below, grouped into descriptive tables based on the variables analyzed. In all cases, the results are structured into external factors and internal factors. External factors refer to external conditions that students cannot control but that have an impact on the main variable, as they condition their attitudes and perceptions in order to achieve educational goals. Internal factors refer to the characteristics and psychological processes intrinsic to the individual that influence the main variable, such as self-efficacy, goal setting, emotion regulation, or time management.

Motivation

Among the external factors related to the motivation variable, four categories were identified in a total of 10 studies (Table 1). The most frequently mentioned factors include those associated with the family context ($n=4$) and environmental factors ($n=5$).

In the factors related to the family, it was found that establishing fluid communication, as well as specific expectations on the part of the family environment, was associated with higher motivation toward studies and better academic performance (Castrillón Mosquera & Soriano Ferrer, 2017; Martín et al., 2017). Conversely, low student motivation was associated with parental control strategies and unsolicited homework support (Park et al., 2023; Tunkkari et al., 2021).

For environmental factors, the results indicate that, in general, all variables generally relate to low motivation. Specifically, these factors include an unfavorable socioeconomic context (Martín et al., 2021) and the academic year in which the individual is enrolled, since motivation declines at higher grade levels, both in terms of academic interest in general and homework in particular (Regueiro et al., 2015, Rodríguez et al., 2021).

In relation to internal factors related to the motivation variable, six categories were identified in a total of 14 articles (Table 2). The

most frequently appearing factors are intrinsic motivation (n=7), goals (n=4), and time management and emotion regulation (n=3).

First, with regard to intrinsic motivation, differences related to the gender of the students have been found, with girls generally showing higher levels of intrinsic motivation (Rodríguez et al.,

2020; Vieites et al., 2024). Moreover, students displaying this type of motivation complete more homework, devote more time to it, and perform better academically (Estévez et al., 2018; Regueiro et al., 2020; Rodríguez et al., 2021; Suárez et al., 2019; Xu, 2023).

Figure 1

Flow Chart Based on the PRISMA Statement

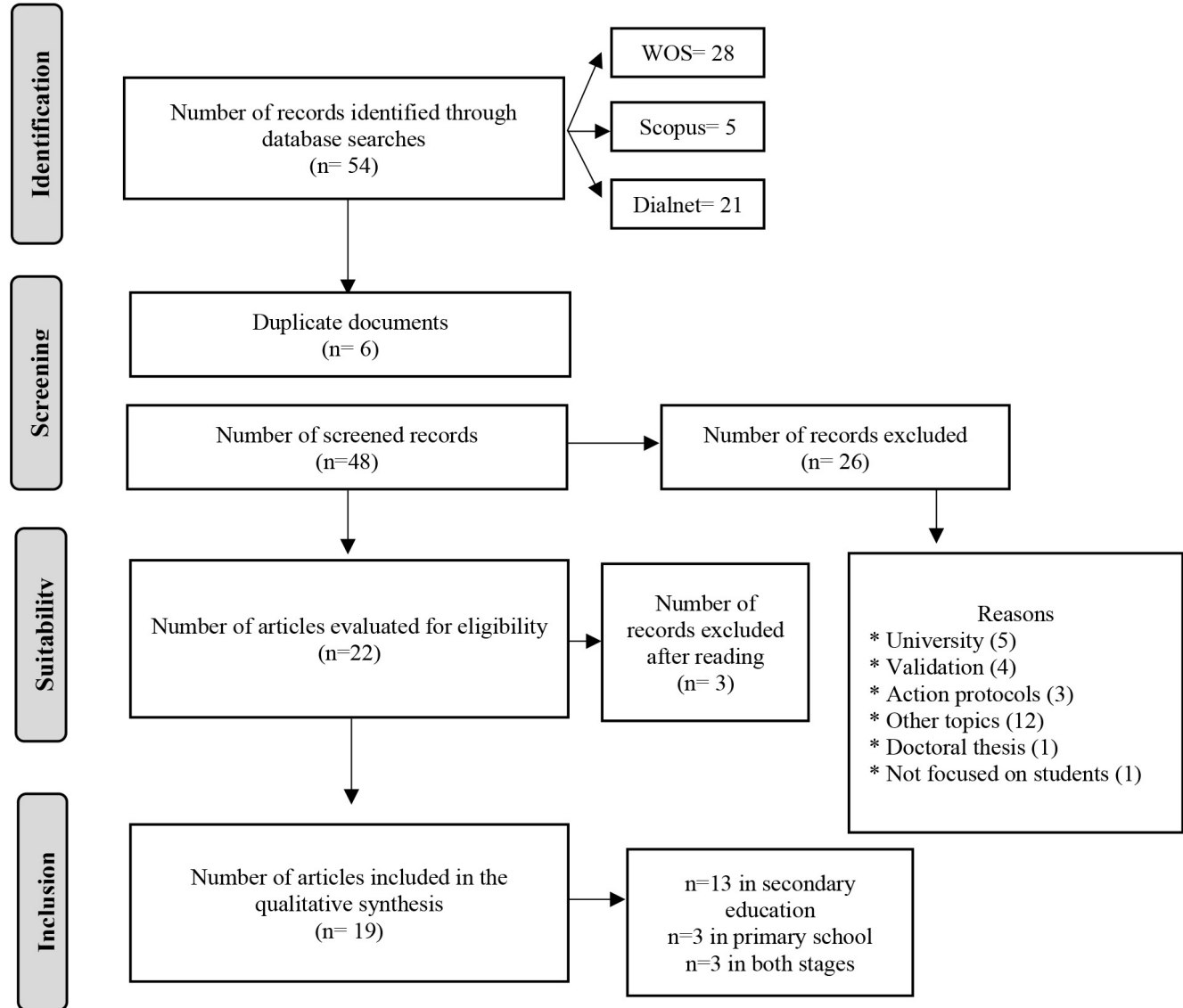


Table 1

Summary Table of External Factors Related to Motivation

Articles	Category	Result
Castrillón Mosquera & Soriano Ferrer (2017); Martín et al. (2017); Park et al. (2023); Tunkkari et al. (2021)	Family	Parental influence on student motivation depends on the quality of their involvement, the type of control they exercise, and how students interpret this involvement.
Martín et al., (2021); Regueiro et al. (2015); Rodríguez et al., (2021); Rodríguez-Pereiro et al. (2019); Vieites et al. (2024)	Environmental	Socioeconomic context and educational level significantly influence motivation and involvement in homework. The school grade level influences motivation and, therefore, student involvement and work approaches.
Regueiro et al. (2015); Yang et al. (2016)	Support	Support in completing homework and feedback from teachers significantly influence motivation and commitment to homework.
Yang et al. (2016)	Culture	Cultural and extracurricular activities carried out in free time, such as sports, influence students' motivation toward academic activities.

Table 2*Summary Table of Internal Factors Related to Motivation*

Articles	Category	Result
Estévez et al. (2018); Martin et al., 2021; Regueiro et al. (2020); Rodríguez et al. (2020); Rodríguez et al. (2021); Suárez et al. (2019); Vieites et al. (2024); Xu (2023)	Intrinsic motivation	Intrinsic motivation plays a fundamental role in students' commitment to homework, fostering academic responsibility and contributing to improved academic performance.
Dixon (2019); Martin et al. (2021); Xu (2023); Yang et al. (2016)	Academic goals	Setting academic goals influences student motivation and commitment, which in turn impacts their academic performance and achievement.
Estévez et al. (2018); Estévez et al. (2023); Yang et al. (2016)	Time management and emotion regulation	Time management and emotion regulation have an impact on motivation and academic performance.
Rodríguez et al. (2020); Rodríguez-Pereiro et al. (2019)	Biological characteristics	Differences in motivation levels have been found based on gender, with girls scoring higher.
Valle et al. (2016); Yang et al. (2016)	Interest	The quality of learning, time management, and academic performance are related to levels of interest and motivation toward learning.
Xu, 2023	Effort	Motivation is a variable that influences effort and engagement in homework.

Secondly, goal setting is conditioned by the degree of student motivation (Martin et al., 2021; Xu, 2023). Likewise, motivation management is influenced by students' self-perception of success and their ability to set goals, which in turn affects homework completion (Martin et al., 2017; Yang et al., 2016).

Thirdly, the efficient management of time and emotions influences students' degree of motivation. Those who manage their time spent on homework and their emotions well have higher levels of intrinsic motivation, interest in homework, and a better perception of its utility, while also showing lower levels of anxiety (Estévez et al., 2023; Yang et al., 2016).

Academic Performance

Regarding the performance variable, three categories were found within external factors across a total of 7 articles (Table 3). The categories identified in the greatest number of studies were prior grades obtained (n=4) and family (n=3).

On one hand, students with a better history of grades show higher levels of intrinsic motivation and interest toward homework (Regueiro et al., 2015; Vieites et al., 2024). Similarly, the higher the academic performance, the more homework students complete, the better they manage their time, and the more they improve their learning process (Regueiro et al., 2015; Rodríguez-Pereiro et al., 2019).

On the other hand, in terms of the family factor, studies indicate that balanced and non-intrusive parental involvement is positively related to students' degree of motivation and academic performance (Castrillón Mosquera & Soriano Ferrer, 2017; Tunkkari et al., 2021). However, intrusive support for the individual by families predicts lower academic performance (Park et al., 2023; Tunkkari et al., 2021). Another factor to consider is family structure, such as the number of siblings and the type of family. In this regard, students with better academic performance have a structured family unit from which they receive support and fewer brothers or sisters (Castrillón Mosquera & Soriano Ferrer, 2017).

With regard to internal factors, time management was the most frequently identified category (n=4) of the four factors identified in the five articles analyzed (Table 4). Students who obtain better grades, i.e., better academic performance, manage the time they spend on homework efficiently (Estévez et al., 2023; Valiente-Barroso et al., 2020; Valle et al., 2016). Students with good academic performance not only carry out good time management dedicated to homework, but also make good use of that time (Estévez et al., 2023; Estévez et al., 2018).

Homework

In relation to the external factors associated with homework, three categories were obtained across a total of 11 articles (Table 5).

Table 3*Summary Table of External Factors Related to Academic Performance*

Articles	Category	Result
Castrillón Mosquera & Soriano Ferrer (2017); Regueiro et al. (2015); Rodríguez-Pereiro et al. (2019); Vieites et al. (2024)	Previous grades	Prior academic performance affects student motivation, as well as their approach to work and the time they spend on homework.
Castrillón Mosquera & Soriano Ferrer (2017); Park et al. (2023); Tunkkari et al. (2021)	Family	If involvement is positive and geared toward fostering autonomy, it strengthens students' intrinsic motivation, commitment, and academic performance.
Martin et al. (2017)	Absenteeism	School absenteeism has a direct impact on academic performance.

Table 4*Summary Table of Internal Factors Related to Academic Performance*

Articles	Category	Result
Dixon (2019)	Self-efficacy	Students with high self-efficacy have higher expectations, work harder, and perform better academically.
Estévez et al. (2018); Estévez et al. (2023); Valiente-Barroso et al. (2020); Valle et al. (2016)	Time management	Students who combine good time management with adequate dedication achieve better academic results. The quality of time spent on homework has a greater impact on academic performance than the quantity of time.
Valiente-Barroso et al. (2020); Valle et al. (2016)	Goals	Students who set learning goals achieve better academic results.
Valiente-Barroso et al. (2020)	Learning strategies	Learning strategies are directly and positively related to academic performance.

Table 5

Summary Table of External Factors Related to Homework

Articles	Category	Result
Estévez et al. (2018); Martín et al. (2017); Regueiro et al. (2015); Regueiro et al. (2020); Rodríguez et al. (2021); Rodríguez-Pereiro et al. (2019)	Environmental	Participation, involvement in homework, and support at lower levels promote motivation and academic performance. However, in higher levels, although more time is spent on homework, the quality and depth of the work decrease. Furthermore, as they progress through their courses, both boys and girls reduce the amount of homework they do and manage their study time less effectively, which affects their performance.
Regueiro et al. (2020); Rodríguez et al. (2020); Valle et al. (2016)	Amount of homework	Completing more homework, making good use of time, and effectively managing study time lead to better academic performance.
Castrillón Mosquera & Soriano Ferrer (2017); Regueiro et al. (2015)	Family	Family support improves academic performance and motivation, especially in the early stages of education.

First, among the environmental factors (n=6), it is noteworthy that as students progress in their academic trajectory, an increase is observed in the time dedicated to completing schoolwork (Regueiro et al., 2015, Rodríguez et al., 2021; Rodríguez-Pereiro et al., 2019).

Second, with regard to the amount of homework completed (n=3), a greater amount of completed homework is positively related to academic performance (Regueiro et al., 2020; Rodríguez et al., 2020; Valle et al., 2016).

And thirdly, students in the early years of compulsory education who do their homework with support have a higher level of motivation, whereas students at higher levels tend to do their homework individually, which results in a lower level of motivation (Regueiro et al., 2015).

With regard to internal factors related to homework, six categories were obtained from a total of 14 articles (Table 6). Of these, the most frequent are time management (n=7) and value (n=6).

With regard to time management, students who manage their time effectively achieve better academic performance and lower levels of anxiety (Estévez et al., 2023; Estévez et al., 2018; Rodríguez et al., 2021; Suárez et al., 2019). However, poor use of the time devoted to completing homework by students has a negative impact on academic performance, as well as a tendency towards a more superficial approach to its completion, which occurs more frequently in higher grade levels (Regueiro et al., 2015; Rodríguez et al., 2021; Rodríguez-Pereiro et al., 2019). Likewise, the perception of the utility of homework influences students to manage their time better and become more involved in completing it (Suárez et al., 2019).

In relation to the value factor, students who perceive homework as useful and valuable show higher levels of commitment, adopt deep work approaches, and achieve better academic performance (Rodríguez et al., 2020; Suárez et al., 2019; Vieites et al., 2024). Conversely, a superficial approach to work is associated with a limited perception of the value of homework, which increases as students progress in their academic trajectory (Vieites et al., 2024).

Discussion and Conclusions

Based on the results and in response to the general objective of this study, which is "to analyze the relationship between motivation, academic performance, and homework completion," it is concluded that the family is the main external variable that influences motivation, academic performance, and homework. Therefore, it could be said that the family is the environment that has the greatest impact on students' academic trajectories. It is also worth noting that intrinsic motivation stands out as the strongest internal predictor of students' commitment to homework, directly influencing academic performance and the use of time spent on homework.

Despite the strong impact of the family on the three variables analyzed, internal factors present a greater number of determinants influencing students. This fact highlights the complexity of internal variables affecting students in educational contexts.

With regard to the first specific objective, external and internal factors that influence student motivation have been identified. In relation to external factors, the family environment plays an essential role as a moderating variable, coinciding with the study conducted by García and Tejena (2024), where they found that the

Table 6

Summary Table of Internal Factors Related to Homework

Articles	Category	Result
Regueiro et al. (2015); Rodríguez et al. (2020); Suárez et al. (2019); Vieites et al. (2024); Xu (2023); Yang et al. (2016)	Value	Perceiving homework as valuable improves performance and encourages a deep approach, while a superficial approach decreases academic performance.
Dixson (2019); Valiente-Barroso et al. (2020)	Self-efficacy	A low perception of self-efficacy reduces the willingness to participate in homework. A good self-concept is positively related to better academic results. Stress in the school context is inversely related to academic performance.
Estévez et al. (2018); Estévez et al. (2023); Regueiro et al. (2015); Regueiro et al. (2020); Rodríguez et al. (2020); Rodríguez et al. (2021); Suárez et al. (2019)	Time management	Students who manage their time efficiently complete more tasks and achieve better results.
Rodríguez et al. (2020); Rodríguez-Pereiro et al. (2019); Suárez et al. (2019); Valiente-Barroso et al. (2020)	Involvement	Greater effort and commitment to homework leads to better academic results.
Regueiro et al. (2020); Rodríguez et al. (2020)	Biological characteristics	Girls tend to perform better academically, perceive homework as more useful, and spend more time on it.
Suárez et al. (2019)	Attitude	A positive attitude toward homework has a positive influence on behavior and performance, although less so than intrinsic motivation and perceived utility.

family plays a key role in supporting students to maintain motivation at an early age, verbalizing academic expectations towards them. Along these lines, an unfavorable socioeconomic context and the school grade level have a negative impact on motivation. Regarding the latter variable, there is an inverse relationship between higher grade levels and motivation, also leading to a decrease in motivation toward homework (Llanes et al., 2021). These differences underscore the need to renew educational strategies, especially at higher grade levels, in order to foster interest in learning and attempt to maintain intrinsic motivation throughout the entire educational trajectory.

Furthermore, the role of teachers is essential in providing support and constructive feedback to students to encourage motivation. This fact is reinforced by the findings of Fong et al. (2019), who conclude that the use of feedback strategies contributes to the promotion of intrinsic motivation, as well as to the value that students place on homework.

In relation to internal factors, motivation—especially intrinsic motivation—stands out as a predictor of academic performance. The degree of student motivation also influences the completion of homework, with students with higher levels of intrinsic motivation spending more time on it. There are also differences between genders, with girls showing higher levels of intrinsic motivation, a finding that differs from the results reported by Tolano Fierros et al. (2024), where boys showed higher intrinsic motivation.

In relation to the second specific objective, among the external factors that affect students' academic performance, prior grade history is one of the predictors of future academic achievement. Furthermore, receiving support from the family environment positively affects academic performance (Ferraces et al., 2020). This may be because a structured family environment provides a stable environment for students, in which they receive both academic and emotional support (Nyirimanzi, 2024).

Among the internal factors, it is worth noting that good time management by students has a positive influence on academic performance in both primary and secondary education (Estévez et al., 2023; Xu, 2023). In this sense, it is not only good management of the time spent on homework that has an influence, but also the use of that time. It would also be useful to continue analyzing the influence of children's emotional well-being (in terms of stress and/or anxiety) on academic performance, as this variable has been little explored due to its complexity; Ramos Zamudio (2024) considers it to be a factor that promotes a successful academic trajectory.

Finally, with regard to the third specific objective, it is concluded that among the external factors, it is environmental factors—especially the academic grade level—that have an inversely negative impact on students' completion of homework, despite the fact that the time spent on it increases. This may be because as students progress through the educational stages, their perception of the value of homework decreases (Regueiro et al., 2015). Another factor to consider with regard to homework is the amount of homework that students have to do, as this has an impact on their academic performance. However, internal factors also play a role, such as the aforementioned time management by the students themselves when doing homework (Suárez et al., 2019).

Another aspect that should be considered is the support that students receive from their families in doing their homework, since, if this is done in a non-intrusive way, students' academic results and

motivation will improve (Park et al., 2023; Rodríguez et al., 2020). Therefore, the support that students receive from their families is fundamental, especially in the early stages of education, as family involvement promotes both motivation and academic performance (Castrillón Mosquera & Soriano Ferrer, 2017).

Continuing with the internal factors that influence homework, it can be concluded that students' perception of its utility favors greater involvement in its completion, so the value placed on homework should be promoted, which will ultimately improve academic performance (Suárez et al., 2019; Xu, 2023).

In summary, it can be concluded that motivation, academic performance, and homework are interrelated in a dynamic process, where motivation acts as the main driving force that encourages students to do their homework. This commitment to homework reinforces their learning process and, as a result, contributes to improving their academic performance.

There is also a connection between external and internal factors, as the variables interact with each other, affecting one another, such as the fact that higher motivation leads students to complete more homework.

This study has three main limitations. First, it includes research from the last ten years; thus, as not all studies on the subject have been analyzed, some factors may have been overlooked. Second, by focusing only on empirical studies that analyze at least two of the three variables (motivation, academic performance, and homework), the factors that influence each of them individually have not been considered. And third, the search for studies was conducted in three databases, which may have limited the resulting sample.

Despite these limitations, the implications of the study at the educational level show that comprehensive educational strategies should be used in teaching-learning processes. These strategies should aim to promote higher levels of intrinsic motivation among students, reinforcing the value of homework and supporting the development of internal skills such as time management and self-efficacy, thus ensuring students' academic success.

Based on these conclusions, future research could focus on exploring the factors that influence each of the three variables independently, investigating studies that address only one of the variables. Along the same lines, once these relationships among motivation, academic performance, and homework in compulsory education have been identified, it would be interesting to examine possible differences between primary and secondary education for each variable.

Conflict of Interest

The authors declare that in the preparation, authorship, and publication of this article, there is no conflict of interest, whether economic or otherwise, that could influence the results, interpretation, or integrity of the study.

References

- Almeida, S. M. (2022). Algunas causas del bajo nivel de la comprensión lectora en la educación actual. *Revista Científica de la Facultad de Filosofía*, 14(1). <https://revistascientificas.una.py/index.php/rcff/article/view/2717>

- Borja Naranjo, G. M., Martínez Benítez, J. E., Barreno Freire, S. N., & Haro Jácome, O. F. (2021). Factores asociados al rendimiento académico: Un estudio de caso [Factors associated with academic performance: A case study]. *Revista EDUCARE-UPEL-IPB-Segunda Nueva Etapa 2.0*, 25(3), 54-77. <https://doi.org/10.46498/reduipb.v25i3.1509>
- * Castrillón Mosquera, R., & Soriano Ferrer, M. (2017). Análisis del apoyo académico familiar en estudiantes de educación básica secundaria en instituciones educativas del municipio de Tuluá en Colombia [Analysis of family academic support in secondary school students in educational institutions in the municipality of Tuluá in Colombia]. *Revista Electrónica de Investigación y Docencia*, 17, 129-154. <https://doi.org/10.17561/reid.v0i17.3013>
- Cerdeño-Triviño, R. E., & Hernández-Velásquez, B. I. H. (2022). Factores externos que inciden en el aprendizaje de los estudiantes [External factors that influence student learning]. *Dominio de las Ciencias*, 8(2), 1483-1498. <https://dominiodelasciencias.com/ojs/index.php/es/article/view/2718>
- Cooper, H. (1989). *Homework*. Longman.
- Cuadro, A., Leibovici, G., & Costa-Ball, C. D. (2023). Diferencias en las atribuciones causales del rendimiento académico en alumnos de secundaria con dificultades de aprendizaje en función del tipo de dificultad y de su participación en otras actividades gratificantes [Differences in causal attributions of academic performance in secondary school students with learning difficulties based on the type of difficulty and their participation in other rewarding activities]. *Ciencias Psicológicas*, 17(1), 1-15. <https://doi.org/10.22235/cp.v17i1.3004>
- di Domenico, S. I., & Ryan, R. M. (2017). The emerging neuroscience of intrinsic motivation: a new frontier in self-determination research. *Frontiers in human neuroscience*, 11(145), 1-14. <https://doi.org/10.3389/fnhum.2017.00145>
- * Dixon, D. D. (2019). Hope into action: How clusters of hope relate to success-oriented behavior in school. *Psychology in the Schools*, 56(9), 1493-1511. <https://doi.org/10.1002/pits.22299>
- Domínguez Espinoza, I. R. (2021). La motivación como factor elemental para lograr el éxito escolar en instituciones de educación superior [Motivation as a fundamental factor for achieving academic success in higher education institutions]. *Revista Electrónica Científica de Investigación Educativa*, 5(2), 263-274.
- Eilam, B. (2001). Primary strategies for promoting homework performance. *American Educational Research Journal*, 38, 691-725. <https://doi.org/10.3102/00028312038003691>
- * Estévez, I., Regueiro, B., Rodríguez, S., Piñeiro, I., Souto, A., & González-Sanmamed, M. (2018). Why students of Secondary Education complete more homework? *EJIHPE: European Journal of Investigation in Health, Psychology and Education*, 8(1), 15-21. <https://dialnet.unirioja.es/servlet/articulo?codigo=6477851>
- * Estévez, I., Vieites, T., Regueiro, B., Rodríguez-Llorente, C., & Morado, T. (2023). Cantidad y calidad del tiempo dedicado a los deberes escolares en alumnado de Educación Secundaria: Un análisis de perfiles latentes [Quantity and quality of time spent on homework by secondary education students: A latent profile analysis]. *Revista de Investigación Educativa*, 41(2), 439-454. <https://doi.org/10.6018/rie.544491>
- European Commission. (2023). *Early leavers from education and training*. Eurostat Statistics Explained. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Early_leavers_from_education_and_training
- Faisal, S. A., & Al-Rasheed, A. A. H. (2021). Self-motivation and creativity in work. *Review of International Geographical Education Online*, 11(2), 154-165. <https://doi.org/10.33403/rigeo.800448>
- Ferraces, M. J., Lorenzo, M., Godás, A., & Santos, M. (2020). Students' mediator variables in the relationship between family involvement and academic performance: effects of the styles of involvement. *Psicología Educativa*, 27(1), 85-92. <https://doi.org/10.5093/psed2020a19>
- Fong, C. J., Patall, E. A., Vasquez, A. C., & Stautberg, S. (2019). A meta-analysis of negative feedback on intrinsic motivation. *Educational Psychology Review*, 31, 121-162. <https://doi.org/10.1007/s10648-018-9446-6>
- Fraille, J., Gil-Izquierdo, M., Zamorano-Sande, D., & Sánchez-Iglesias, I. (2020). Autorregulación del aprendizaje y procesos de evaluación formativa en los trabajos en grupo [Self-regulation of learning and formative assessment processes in group work]. *RELIEVE. Revista Electrónica de Investigación y Evaluación Educativa*, 26(1). <https://doi.org/10.7203/relieve.26.1.17402>
- García, L. B. A., & Tejena, D. M. M. (2024). Estrategias de estudio para un mejor rendimiento académico en los estudiantes del nivel medio [Study strategies for better academic performance in middle school students]. *Revista Científica Sinapsis*, 24(1). <https://doi.org/10.37117/s.v24i1.1009>
- Guirao-Goris, S. J. A. (2015). Utilidad y tipos de revisión de la literatura [Utility and types of literature reviews]. *Ene*, 9(2), 1-14. <https://doi.org/10.4321/S1988-348X2015000200002>
- Instituto Nacional de Estadística [National Institute of Statistics]. (2023, May 10). *Encuesta de Población Activa [Labor Force Survey]*. https://www.ine.es/ss/Satellite?L=es_ES&c=INESeccion_C&cid=1259944520169&p=1254735110672&pagename=ProductosYServicio/s%2FPYSLayout¶m1=PYSDetalleFichaIndicador¶m3=1259937499084
- Llanes, J., Méndez Ulrich, J. L., & Montané López, A. (2021). Motivación y satisfacción académica de los estudiantes de educación: una visión internacional [Motivation and academic satisfaction among education students: an international perspective]. *Educación XXI*, 24(1), 45-68. <http://doi.org/10.5944/educXXI.26491>
- * Martin, A. J., Ginns, P., Anderson, M., Gibson, R., & Bishop, M. (2021). Motivation and engagement among Indigenous (Aboriginal Australian) and non-Indigenous students. *Educational Psychology*, 41(4), 424-445. <https://doi.org/10.1080/01443410.2021.1879994>
- * Martin, T. G., Martin, A. J., & Evans, P. (2017). Student engagement in the Caribbean region: Exploring its role in the motivation and achievement of Jamaican middle school students. *School Psychology International*, 38(2), 184-200. <https://doi.org/10.1177/0143034316683765>
- Martínez Vicente, M., Suárez Riveiro, J. M., & Valiente Barroso, C. (2020). Implicación estudiantil y parental en los deberes escolares: diferencias según el curso, género y rendimiento académico [Student and parental involvement in homework: differences according to grade, gender, and academic performance]. *Revista de Psicología y Educación*, 15(2), 151-165. <https://doi.org/10.23923/rpye2020.02.193>
- Ministerio de Educación, Formación Profesional y Deportes [Ministry of Education, Vocational Training, and Sports] (2024a). *Panorama de la educación: Indicadores de la OCDE 2024. Informe español [Education at a Glance: OECD Indicators 2024. Spanish report]*. Instituto Nacional de Evaluación Educativa [National Institute for Educational Evaluation]. <https://acortar.link/PRuMsQ>
- Ministerio de Educación y Formación Profesional y Deportes [Ministry of Education, Vocational Training and Sports] (2024b). *Datos y cifras. Curso escolar 2024-2025 [Facts and figures. School year 2024-2025]*. Secretaría General Técnica, Subdirección General de Atención al Ciudadano, Documentación y Publicaciones [Technical General

- Secretariat, Sub-Directorate General for Citizen Services, Documentation and Publications]. <https://acortar.link/GCY61K>
- Núñez Hernández, C. E., del Salto, V. S. H., Camino, D. S. J., Flores, D. G. R., & Espinoza, M. W. N. (2018). Las habilidades sociales en el rendimiento académico en adolescentes [Social skills in academic performance in adolescents]. *Revista de Comunicación de la SEECI*, (47), 37-49. <https://dialnet.unirioja.es/servlet/articulo?codigo=6710734>
- Nyirimanzi, T. (2024). Intervenciones familiares y su impacto en el rendimiento académico de estudiantes en América Latina [Family interventions and their impact on student academic performance in Latin America]. *Pedagogical Constellations*, 3(1), 207-230. <https://doi.org/10.69821/constellations.v3i1.37>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., Thomas, J., ... Moher, D. (2021). The PRISMA 2020 statement: an uploaded guideline for reporting systematic reviews [The PRISMA 2020 statement: an updated guideline for reporting systematic reviews]. *Research Methods and Reporting*, 372(71), 1-9. <https://doi.org/10.1136/bmj.n71>
- * Park, D., Gunderson, E. A., Maloney, E. A., Tsukayama, E., Beilock, S. L., Duckworth, A. L., & Levine, S. C. (2023). Parental intrusive homework support and math achievement: Does the child's mindset matter? *Developmental Psychology*, 59(7), 1249-1267. <https://doi.org/10.1037/dev0001522>
- Prieto, J. M. (2020). Una revisión sistemática sobre gamificación. motivación y aprendizaje en universitarios [A systematic review of gamification, motivation, and learning in university students]. *Revista Interuniversitaria*, 32, 73-99. <https://doi.org/10.14201/teri.20625>
- * Regueiro, B., Martínez, R., Estévez, I., Piñeiro, I., Rodríguez, S., & Ferradás, M. D. M. (2020). Diferencias en la implicación en los deberes escolares en función del rendimiento académico [Differences in involvement in homework based on academic performance]. *Psicología Escolar e Educativa*, 24, 1-7. <https://doi.org/10.1590/2175-35392020192474>
- * Regueiro, B., Suárez, N., Valle, A., Núñez, J. C., & Rosário, P. (2015). Homework Motivation and Engagement throughout Compulsory Education//La motivación e implicación en los deberes escolares a lo largo de la escolaridad obligatoria. *Revista de Psicodidáctica*, 20(1), 47-63. <https://doi.org/10.1387/RevPsicodidact.12641>
- * Rodríguez, S., Pineiro, I., Regueiro, B., & Estévez, I. (2020). Intrinsic motivation and perceived utility as predictors of student homework engagement. *Revista de Psicodidáctica*, 25(2), 93-99. <https://doi.org/10.1016/j.psicoe.2019.11.001>
- * Rodríguez, S., Regueiro, B., Falcón, J., Rodríguez-Llorente, C., Vieites, T., & Piñeiro, I. (2021). Implicación de los deberes escolares y rendimiento académico en estudiantes de bachillerato [The impact of homework on academic performance in high school students]. *Bordón: Revista de pedagogía*, 73(1), 129-144. <https://doi.org/10.13042/Bordon.2021.80886>
- * Rodríguez-Pereiro, S., Regueiro, B., Rodríguez, S., Piñeiro, I., Estévez, I., & Valle, A. (2019). Rendimiento previo e implicación en los deberes escolares de los estudiantes de los últimos cursos de educación primaria [Prior performance and involvement in homework of students in the final years of primary education]. *Psicología Educativa. Revista de los Psicólogos de la Educación*, 25(2), 109-116. <https://doi.org/10.5093/psed2019a2>
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: definitions, theory, practices and future directions. *Contemp. Educ. Psychol.*, 61(101860). <https://doi.org/10.1016/j.cedpsych.2020.101860>
- * Suárez, N., Regueiro, B., Estévez, I., Ferradás, M. M., Guisande, M. A., & Rodríguez, S. (2019). Individual precursors of student homework behavioral engagement: The role of intrinsic motivation, perceived homework utility and homework attitude. *Frontiers in Psychology*, 10(941), 1-10. <https://doi.org/10.3389/fpsyg.2019.00941>
- Swiatczak, M. D. (2021). Towards a neo-configurational theory of intrinsic motivation. *Motiv. Emot.*, 45, 769-789. <https://doi.org/10.1007/s11031-021-09906-1>
- Tolano Fierros, E. J., López Araujo, L., Serna Gutiérrez, A., & Vega Orozco, S. I. (2024). Análisis de la motivación por la clase de Educación Física en escolares de nivel primaria [Analysis of motivation for physical education classes in primary school students]. *Sportis Sci J*, 10(2), 401-416. <https://doi.org/10.17979/sportis.2024.10.2.10679>
- * Tunkkari, M., Aunola, K., Hirvonen, R., Silinskas, G., & Kiuru, N. (2021). The interplay between maternal homework involvement, task-avoidance, and achievement among adolescents. *Journal of Family Psychology*, 35(7), 863-874. <https://doi.org/10.1037/fam0000686>
- * Valiente-Barroso, C., Suárez-Riveiro, J. M., & Martínez-Vicente, M. (2020). Rendimiento académico, aprendizaje y estrés en alumnado de primaria [Academic performance, learning, and stress in primary school students]. *Revista complutense de educación*, 31(3), 365-374. <https://dx.doi.org/10.5209/rced.63480>
- * Valle, A., Regueiro, B., Núñez, J. C., Rodríguez, S., Piñeiro, I., & Rosário, P. (2016). Academic goals, student homework engagement, and academic achievement in elementary school. *Frontiers in Psychology*, 7, 463. <https://doi.org/10.3389/fpsyg.2016.00463>
- Valle, A., Regueiro, B., Estévez, I., Pineiro, I., Ferradás, M., Freire, C. (2015) ¿Es diferente la implicación en los deberes según el rendimiento académico de los estudiantes? [Does involvement in homework differ according to students' academic performance?] *Revista de Estudios e Investigación en Psicología y Educación*, 2(2), 80-85.
- Verdeja Muñoz, M. (2022). Abandono escolar temprano y reenganche socioeducativo a través de programas de educación no formal: una investigación con entrevistas en profundidad [Early school dropout and socio-educational re-engagement through non-formal education programs: an investigation with in-depth interviews]. *Pulso: revista de educación*, 45, 123-140. <https://doi.org/10.58265/pulso.5287>
- * Vieites, T., Iglesias, A., Freire, F. M. D., Pita, L. D., & Llorente, C. R. (2024). Motivación, enfoques de trabajo en los deberes escolares y rendimiento académico en estudiantes de Educación Secundaria Obligatoria [Motivation, approaches to homework, and academic performance in compulsory secondary education students]. *Aula abierta*, 53(3), 229-237. <https://doi.org/10.17811/rifie.20555>
- Weiner, B. (1974). *Achievement motivation and attribution theory*. General Learning Press.
- Wijayanto, B. K., & Riani, A. L. (2021). The Influence of Work Competency and Motivation on Employee Performance. *Society*, 9(1), 83-93. <https://doi.org/10.33019/society.v9i1.290>
- * Xu, J. (2023). Taking a person-centered approach to student homework motivation: combining achievement goal and expectancy-value theories. *Current Psychology*, 42, 29893-29904. <https://doi.org/10.1007/s12144-022-04044-4>
- * Yang, F., Xu, J., Tan, H., & Liang, N. (2016). What keeps Chinese students motivated in doing math homework? An empirical investigation.

Teachers College Record, 118(8), 1-26. <https://doi.org/10.1177/016146811611800807>

Zamudio, R. R. (2024). Inteligencia emocional y rendimiento académico en educación en la última década: revisión sistemática [Emotional

intelligence and academic performance in education in the last decade: a systematic review]. *Revista Dilemas contemporáneos: Educación, Política y Valores*, 3, 1-20. <https://doi.org/10.46377/dilemas.v1i3.4136>