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Determinant Factors of the Subjective Perception of Educational Projects with European Funding

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Abstract

This paper investigates the subjective value perceived by teachers, defined as their overall appreciation of EU-funded educational projects in terms of usefulness, relevance, and impact on education, regarding projects implemented in Romanian schools during the period 2014–2022. The main factors influencing the perceived value were identified through a quantitative approach using a questionnaire-based survey, administered to a sample of 1050 teachers from various regions of the country. The results reveal that improvements achieved in various aspects of the educational environment quality have a positive influence on the analyzed indicator. These improvements can be grouped into two categories of factors that act at the level of school, on the one hand, and at the level of students, on the other hand, both having a significant impact on increasing the perceived value of EU-funded educational projects. The differences between schools that benefited from such educational projects and other schools were also addressed, as well as the influence of the dominant socio-economic status of children studying in different schools on the improvement of the quality of the educational environment. The conclusions highlight the strategic role of European funding in reducing educational disparities and the need to target support to vulnerable schools. The practical and managerial implications include strengthening infrastructure, adapting methodologies, and developing staff competencies, alongside interventions aimed at improving student progress.

Keywords: European educational projects; perceived value of educational projects; educational environment quality; educational disparities; reducing inequalities; socio-economic context; Romanian education

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1. Introduction

The present research aims to investigate how teachers perceive the value of educational projects implemented in schools, in the context of European funding carried out in Romania during the period 2014–2022. Specifically, the research seeks to assess the relationship between the value subjectively perceived by teachers and the perceived impact of the projects on certain components of the quality of the institutional educational environment.

Between 2014 and 2022, Romania benefited from substantial financial support from the European Union for the modernization and development of the education system, aimed at improving both quality and equitable access to education. According to official data provided by the European Union's Cohesion Open Data Platform [1], during the 2014–2020

period, the Romanian state accessed more than €1.5 billion in non-reimbursable EU funds for educational projects, with their implementation period extending until 2023. The focus was placed on supporting lifelong learning, with particular attention given to vulnerable groups, including children from Roma communities, rural areas, or socio-economically disadvantaged regions, through the implementation of complementary educational programs and the development of community-level partnerships. Overall, the European funds from 2014 to 2022 supported the strengthening of Romania's educational system, especially through integrated interventions targeting both human resource development and infrastructure.

These funds were allocated through various operational programs, the most important being the following:

Erasmus+ was the main instrument for financing education in the European Union, also implemented in Romania. The program supported activities for skills development, social inclusion, and the modernization of educational systems through international mobility and cooperation projects. It also aimed to promote the internationalization of education, lifelong learning, the transition to digital education, active citizenship, and democracy [2];

"Regional Operational Programme" (ROP)—funded significant interventions in the field of education, aimed at improving educational infrastructure and reducing regional disparities. The projects focused on the modernization, rehabilitation, expansion, and equipping of educational institutions [3];

"Operational Programme Human Capital" (OPHC) was the main European funding instrument dedicated to the development of human capital in Romania, with a strong focus on education. The supported interventions aimed to improve the quality of education and reduce disparities in access to and participation in education. The program's main objectives were as follows: reducing early school leaving; aligning the education system with labor market requirements; creating an equitable educational framework based on inclusion and equal opportunities; professionalizing teaching staff; and promoting lifelong learning [4].

"The European Economic Area (EEA) and Norway Grants"—aimed to reduce economic and social disparities in the European Economic Area and strengthen international cooperation. In the field of education, they supported projects for social inclusion, equal opportunities, improved access to education, and strategic partnerships [5];

"Horizon 2020"—was the European Union's framework program for research and innovation, aimed at supporting scientific excellence, technological development, and addressing major societal challenges. Its objectives included applied research, supporting international collaboration, and promoting innovation in education and science [6].

Educational projects funded by European funds generally had a multi-regional scope, being implemented at the national level, and targeting all regions of Romania [7]. The access of educational institutions to these funds was possible through competitive procedures [2–6]. The funding process involved selecting open calls for funding, drafting project proposals according to the specific requirements of each program, and sending them for evaluation. The selection of schools that benefited from non-refundable funding was based on clear criteria, such as educational relevance, the needs of the local/school community, and the degree of alignment with the strategic objectives of the funding program.

The objective of this paper is to investigate the subjective value perceived by teachers regarding EU-funded educational projects implemented in Romanian schools during the period 2014–2022, using a questionnaire-based survey administered to a sample of 1050 teachers from various regions of the country. In this study, subjective perceived value

refers to the appraisal expressed by teachers regarding EU-funded educational projects, grounded in their direct and indirect experiences and their judgments about the relevance and impact of these initiatives on the educational system. This construct is distinct from objective evaluations, such as cost–benefit analyses or measurable educational indicators. To attain this objective, the paper is organized as follows: Section 2 presents a literature overview, showing the way in which researchers were concerned with studying how EU-funded projects impacted European education. Section 3, presenting the factors that influence the perception of value in education, explains how the variables were selected in this study. The research methodology represents the Section 4. Then an analysis and interpretation of results are provided, followed by discussion and concluding remarks.

2. Literature Overview

The body of literature consulted for this study can be framed around the following key dimensions: Europeanization of education and lifelong learning, innovation and modernization in education, limits of quantitative evaluations, quality of the institutional educational environment, and teachers' perceptions and professional motivation.

2.1. Europeanization of Education and Lifelong Learning

The Europeanization of education has been widely analyzed in relation to the accession of Central and Eastern European (CEE) countries to the European Union. Halász (2015) [8] emphasizes the decisive role of lifelong learning as a policy engine that strengthened the contribution of education to social and economic development in the region. Similarly, Lawn and Grek (2024) [9] argue that the European educational space has been shaped through decades of actions, networks, and policy frameworks, leading to both convergence and diversification in educational practices across Europe. In Romania, Tusa (2023) highlights how EU accession triggered structural reforms aligning national education with European models, while the European Commission (2021) [10] documents confirm Romania's gradual compliance with EU strategies. These studies demonstrate the transformative role of EU membership and policy frameworks, yet they focus predominantly on system-level integration, with limited attention to the lived experiences and perceptions of educators.

2.2. Innovation and Modernization in Education

Another recurring theme in the literature concerns the modernization of education through EU-funded initiatives. Norouzi Larsari (2022) [11] identifies six key indicators of innovation in European and Czech primary education, framing them as a holistic response to contemporary challenges. At the national level, Ion and Barbatosu (2024) [12] emphasize how EU programs contributed to improving infrastructure, introducing digital technologies, and enhancing learning conditions, thereby promoting quality education. Popescu (2020) [13], in turn, focuses on community-level perspectives, highlighting the perceived positive impact of projects in advancing sustainable education. While these contributions demonstrate the modernization potential of EU funding, they primarily conceptualize innovation as material or infrastructural outputs. The extent to which these outputs translate into subjective value for teachers and sustainable practices in classrooms remains underexplored.

2.3. Limits of Quantitative Evaluations

In Romania, official evaluations of EU-funded educational projects have focused almost exclusively on quantitative indicators, offering an incomplete image of their real efficiency. This reliance on administrative and infrastructural outputs risks producing an "illusion of efficiency," while obscuring sustainability and neglecting the deeply con-

textualized, subjective perceptions of the actors directly involved in educational practice. This evaluative bias leaves a significant gap in understanding how teachers, as the main mediators of reforms, perceive the relevance, value, and usability of EU-funded projects.

2.4. Quality of the Institutional Educational Environment

A broader body of literature conceptualizes the quality of the institutional educational environment as a multidimensional construct that integrates both infrastructural and psychosocial factors. UNESCO and OECD frameworks underline the importance of adequate learning spaces, materials, and facilities, which influence student performance and attendance. The climate of participation and curricular adaptability are factors positively correlated with student engagement, motivation, and involvement, learning efficiency, school performance, as shown by recent OECD research [14,15], and academic engagement studies [16–18].

The OECD (2025) report [19] further stresses the interplay of infrastructure, digital access, relational climate, and curricular adaptability in fostering participation and learning outcomes.

School climate is a broad, multidimensional construct that represents the quality and character of school life [20]. School-level decision-makers can use school climate assessments, based on perceptions, including those of students, as valid tools to measure, improve, and support practices that strengthen institutional capacity and support school improvement [21]. Complementing these insights, Wang and Degol (2016) [22] describe school climate as a set of interdependent dimensions—curricular standards, pedagogical support, professional development, relational interactions, safety, leadership, and organizational clarity—that shape teachers' attitudes and levels of engagement. These dimensions are also supported by other studies that include the academic component, reflected through curriculum standards, pedagogical support, and professional development opportunities [23,24]; the relational or community dimension, defined by the quality of interactions among teachers, students, administration, and parents [25,26]; the component of physical and emotional safety, associate with a predictable and stress-free institutional climate [27,28]. In this regard, [29] emphasizes the importance of a stable, cooperative, and safe school climate in supporting school performance. Also integrated is the organizational-institutional dimension, which concerns the clarity of internal procedures, transparency of decision-making processes, leadership effectiveness [30–32], and resource availability [33].

Improving school climate can optimize educational performance and should be considered a key strategy for improving both the effectiveness of schools and their long-term sustainability [34].

Current educational models increasingly emphasize inclusion, diversity, and combating inequalities, emphasizing the role of "inclusive school leadership" in creating an equitable educational environment [35]. And the available resources, including funding and infrastructure, significantly influence school performance, especially in disadvantaged areas [33]. Improving these components through educational projects can contribute to shaping a favorable institutional climate, which can influence teachers' perception of European-funded projects, determining the extent to which they are considered relevant, sustainable, and beneficial for professional and institutional development.

Assessing teachers' perceptions of school climate is essential, as teachers offer a unique perspective, different and complementary to that of students or parents, on the educational environment. Recent studies propose an in-depth analysis of teachers' and school principals' perceptions of the value of their profession, their well-being and work-related stress, and their satisfaction with working conditions [36]. In a systemic approach, which considers the school as a set of interdependent levels, teachers' perceptions reflect both institutionalized

classroom practices and organizational culture, directly influencing how school climate is constructed and sustained. Therefore, a realistic and balanced understanding of climate requires including teachers' perspectives in the assessment [37].

While this literature demonstrates that institutional environment and school climate are both structural and perceptual, research seldom links these dimensions explicitly to EU-funded educational projects. The tangible improvements delivered by such projects—such as digital resources, infrastructure, or pedagogical support—may influence how teachers perceive the institutional climate, yet this connection has not been systematically investigated in Romania.

2.5. Teachers' Perceptions and Professional Motivation

A growing body of research positions teachers' subjective perceptions as critical predictors of professional motivation and reform sustainability. Studies highlight that perceived value enhances commitment and involvement in innovation processes [38–41]. The Education and Training Monitor (2023) [42] reinforces this finding by showing that while more than 90% of teachers value autonomy and involvement in decision-making, only 17.7% feel truly appreciated in their profession. This discrepancy illustrates the risks of neglecting teachers' subjective perspectives: without a positive and internalized sense of project usefulness, reforms remain superficial and unevenly implemented [43–46]. Teachers' perceptions, therefore, provide unique and essential insights into the functionality and sustainability of reforms, complementing student- or parent-centered evaluations.

The reviewed literature converges on several key points. First, EU-funded projects have contributed significantly to the modernization and Europeanization of education in Romania and other CEE countries. Second, infrastructure, digitalization, and school climate are widely recognized as critical factors for quality education. However, across these strands, there is a consistent neglect of teachers' perceptions of EU-funded interventions. Quantitative evaluations dominate official assessments, while the subjective dimension—the degree to which teachers perceive these projects as relevant, sustainable, and valuable for professional and institutional development—remains insufficiently addressed.

Taken together, the literature highlights a paradox: while EU-funded educational projects have delivered substantial infrastructural and policy achievements, their sustainability depends on how they are perceived by teachers, who act as the primary mediators of educational change. By focusing on teachers' perceptions of the subjective value of EU-funded projects, this study seeks to fill a significant gap in the Romanian and European educational research landscape.

3. Factors Influencing the Perception of Value in Education

The selection of variables used in the present research was based on recent literature on school effectiveness, the sustainability of educational interventions, and the professional perception of teaching staff. Each of these variables represents a key aspect frequently associated with successfully implementing educational projects in the school environment.

Students' learning performance constitutes a fundamental indicator of educational outcomes and is recognized as an essential proxy for the quality of teaching and institutional support [47]. Studies show that teachers' perceptions of students' progress directly influence the evaluation of the effectiveness of any curricular or pedagogical intervention [48,49].

At the same time, numerous studies show that adequate financial support can lead to significant improvements in school performance, especially in disadvantaged communities. For example, in North-East England, a program aimed at reducing educational barriers led to substantial improvements in grades and a decrease in absenteeism, with notable progress

in mathematics and reading, and a positive impact on the whole school [50]. Similarly, the 1994 reform in Michigan, which increased financial support for regions with the lowest per-student spending, had a clear effect on students' performance [51], being associated with higher university enrollment and graduation rates [52]. In the long term, sustained investments in education have been linked to higher incomes and a reduced risk of poverty among students from low-income backgrounds [53].

International experiences also highlight the same trend. In Indonesia, financial support in the form of scholarships was correlated with better academic performance by reducing the financial pressure on students [54].

In South Korea, additional funding directed toward underperforming schools significantly reduced the number of students below the average level [55], and in Kenya, private funding proved most effective in boosting human capital [56].

However, not every increase in funding automatically guarantees improved performance. In Nigeria, although the government increased budgets for secondary education, students' performance remained below expectations due to insufficient budgetary allocations and the lack of alternative funding sources [57]. Post-1990 reforms in the United States have shown that increased funding in low-income districts leads to gradual improvements in student performance [58]. Conversely, cuts in education funding during the Great Recession coincided with stagnating academic progress and widened inequalities between social groups [59].

School enrollment reflects the attractiveness and accessibility of the educational institution for the community. It is a widely used indicator in monitoring inclusion and equity in education, being an integral part of SDG indicators 4.1 and 4.5 on quality education and reducing inequalities [60–62].

Studies show that early educational interventions profoundly influence individuals' later development, and the effectiveness of these interventions depends on their quality and funding [63]. Those who benefit from early educational programs tend to achieve higher levels of education, have better job matching, and develop the ability to learn independently [64] —factors that positively influence continued schooling and enrollment rates in subsequent stages. High-quality early education, based on sustainable pedagogies that encourage reflection and initiative, is considered a cornerstone in promoting accessible and relevant education [65].

Moreover, the way a society educates its younger generation is essential for achieving sustainable development, and inclusion in the educational system depends on the existence of coherent access and funding policies [66]. In this context, school enrollment reflects not only the physical accessibility of education but also its attractiveness to families, which is decisively influenced by the quality and resources provided. Economic studies also show that investments in early childhood education yield the highest social returns compared to investments made in later stages of a child's life [67].

Absenteeism and early school leaving are early warning signs of systemic dysfunctions [68,69]. Recent studies highlight the link between reduced absenteeism and increased curricular relevance, as well as the quality of the school–student relationship [70,71]. Teachers perceive these aspects as expressions of the success (or failure) of educational transformations.

Absenteeism is closely linked to socio-economic factors and the quality of educational interventions, and its effects extend far beyond the time spent in school. Research shows that students from disadvantaged backgrounds are more likely to be absent than those from higher-income families, reflecting structural inequalities in access to education [71,72]. This type of absenteeism directly contributes to widening the educational performance gap between socio-economic groups [73,74]. Moreover, absenteeism is also associated with

declines in academic performance [73], affecting both the student–teacher relationship and the connection between school and family [70].

The negative effects of absenteeism are also felt in the long term, influencing future participation in the labor market and the socio-professional success of individuals [68]. Students from disadvantaged backgrounds are also more vulnerable to these negative effects [73]. In this regard, interventions that reduce absenteeism [75] can increase graduation rates and help reduce educational gaps [69]. Among these interventions are after-school and extracurricular programs, which have led to improved academic performance and reduced absenteeism [76,77]. However, the impact of these programs varies, and their effectiveness depends on the context of implementation [78,79]. Additionally, policies such as providing free or reduced-price meals have positive effects on school attendance, demonstrating that indirect social support plays an important role in sustaining student participation [74].

Early school leaving is a global challenge with far-reaching economic and social consequences, necessitating coherent interventions in both educational policy and funding [80]. Its determinants are diverse, encompassing social, economic, and relational factors. For instance, students are particularly likely to leave school during periods of educational transition, often due to the limited concrete opportunities provided by the education system [81]. Moreover, poverty and family structure exert a significant influence on dropout rates [82].

In this context, effective interventions must incorporate family support and integrated services to foster a healthy and motivating school environment [83]. Positive examples come from Tanzania, where educational programs supporting rural girls have also benefited boys, highlighting the spillover effects of well-targeted investments [84]. Similarly, in Indonesia, close collaboration between families, schools, and communities has proven effective in preventing dropout by creating an inclusive and equitable educational climate [85]. The importance of family support is further underscored by studies showing that parental involvement and the maintenance of a stable, nurturing environment help reduce absenteeism and dropout, whereas conflict and lack of supervision increase the risk of early school leaving [86]. Preventing early school leaving requires sustainable financial investments and educational strategies that address both the structural and relational needs of students, with a focus on equity and community support [80].

Student satisfaction has been recognized in the international literature as a prerequisite for authentic and sustainable learning. The quality of educational services—such as facilities, learning resources, and instructional support—is a major determinant of student satisfaction, underscoring the importance of adequate funding for these components [87]. Teacher presence, course structure, and consistent interaction are factors that directly influence student satisfaction [88]. Similarly, the social and academic climate of the classroom, built through positive relationships and support, contributes to higher levels of satisfaction with school [89]. Furthermore, students' positive perceptions of teaching quality, the organization of learning, and the assessment system lead to greater satisfaction with the educational process as a whole [90]. These findings highlight that student satisfaction is not a random outcome but rather reflects investments in infrastructure, human resources, and pedagogical training, all made possible through adequate and sustainable funding for education.

Student engagement [91,92] is closely linked to intrinsic motivation and a sense of belonging [93,94], and teachers often assess the impact of projects through the lens of these observable responses.

Studies show that students' perceptions of the educational environment significantly shape their levels of emotional, cognitive, and behavioral engagement, with these forms

of engagement being directly linked to academic performance [95]. Student engagement is conceptualized as a dynamic, multidimensional construct that integrates behavioral, emotional, and cognitive dimensions of participation in the educational process [96]. The concept of the educational environment encompasses not only the physical aspects of the school space but also social interactions, organizational culture, and digital infrastructure—all of which shape students' experiences, perceptions, and learning [97].

The literature clearly highlights the significant influence of teachers on student engagement, underscoring the central role of educators in fostering authentic and sustained involvement in the learning process [96]. Research shows that high-quality teacher–student relationships contribute to reducing problematic behavior, improving academic performance, and increasing school engagement [98]. Moreover, engagement, classroom interactions, and loyalty to the school are positively associated with perceptions of educational quality [99].

Low engagement is frequently observed during the transition from primary to secondary education, making it not only an indicator of classroom climate quality but also a mediator of academic outcomes [100]. At the same time, students' perceptions of the school climate directly predict their engagement in learning activities [101]. Enjoyment of attending school has been shown to have a positive impact on academic performance, supported by social integration and a favorable learning environment at home [102]. Active participation is positively correlated with students' well-being at school [103], underscoring that engagement holds not only academic value but also emotional and social significance. Teachers can enhance student engagement by providing informational and emotional support, which in turn fosters positive peer interaction [104].

At the same time, unequal educational support, determined by students' socioeconomic status, leads to lower engagement and more modest educational outcomes. Children from disadvantaged backgrounds receive less support, which negatively affects school enjoyment, achievement, and social integration [102].

Results from national assessments and exams constitute a standardized measure of educational impact and are considered relevant for the objective evaluation of school progress. Educators recognize that national assessments provide valuable data regarding students' preparedness, and their perceptions of the usefulness of these results serve as an important indicator of the effectiveness of implemented educational support measures [105]. Teachers in Chile and Norway have reported that standardized test results do not always accurately reflect what students have learned, suggesting that perceptions of test validity are relevant when judging the effectiveness of national assessments [106].

School effectiveness is a complex concept influenced by resources, environment, and educational policies, and can be evaluated through indicators such as academic performance, student engagement, and teacher satisfaction [33].

Standardized tests are increasingly used internationally as tools to evaluate the quality of education, the effectiveness of governmental policies, and the positioning of schools within educational hierarchies [107]. At the same time, contemporary theories of school effectiveness have evolved to emphasize effective leadership, positive school culture, adaptation to the needs of diverse students, as well as the correction of systemic inequalities and the promotion of social justice [33]. In this context, exam results cannot be viewed in isolation but must be correlated with each student's educational and social background. Factors such as parental income, educational level, health status, and family structure play a crucial role in determining student performance [108].

At the same time, teacher quality—particularly effective interaction, adaptability, and high qualifications—is associated with better student performance, regardless of other contextual factors [109]. Student motivation, teacher competence, school environment, and

family support are also strongly correlated with exam results, demonstrating that the educational process is influenced by a network of interdependent factors [110]. Furthermore, other studies highlight the significant effects of the interaction between the curriculum and national examinations on student performance, emphasizing the importance of coherence between school programs and assessment methods [111].

Infrastructure (construction, renovation) constitutes a fundamental element for creating a safe and effective educational environment. The quality of infrastructure has a direct impact on school attendance, professional satisfaction, the quality of teacher–student interactions, as well as student performance, especially in socioeconomically disadvantaged settings [112].

A well-designed learning environment, which includes natural lighting, adequate ventilation, ergonomic furniture, and the integration of outdoor spaces, contributes significantly to students' well-being and educational success [113]. This relationship is also confirmed in the context of Ecuador, where school infrastructure such as art laboratories, medical services in schools, and access to utilities are positively associated with academic performance, especially in rural areas [114].

In Nigeria, stark disparities between urban and rural school infrastructure negatively impact the educational opportunities of students in underfunded areas, underscoring the urgent need for equitable investment policies [115]. Additionally, absenteeism is more frequent in schools with poor infrastructure, especially in impoverished areas or primary schools, highlighting the need for strategies to improve school conditions [116]. The necessity to modernize educational buildings is further emphasized by inefficient energy profiles, which involve resource losses and inadequate learning environments [117]. Moreover, poor air quality in classrooms is another factor that diminishes student performance, demonstrating that infrastructural aspects have a tangible influence on academic outcomes [118].

Overall, the quality of the indoor environment—including air quality, lighting, and acoustic comfort—plays an essential role in the educational process. In schools in Romania, issues such as lack of ventilation, inadequate temperatures, absence of cooling systems, and improperly sized spaces have been identified [119].

Thus, factors such as clean air, adequate lighting, safety, building maintenance, and thermal comfort influence students' health, psychological well-being, and performance. Therefore, decision-makers should pay increased attention to the impact of school infrastructure on the quality of learning and student outcomes [120].

Facilities (equipment, work tools)—findings from various studies suggest that several institutional variables, such as equipment, laboratories, and teaching resources, including access to school libraries, facilitate instructional effectiveness and learning motivation and are positively and significantly correlated with the academic performance of primary school students in the public system [114,121]. Schools represent fundamental spaces for shaping future generations, which is why providing a healthy and comfortable environment should be a priority in educational policies [119]. A pleasant learning environment, equipped with ergonomic furniture, stimulating colors, and appropriate acoustic and thermal conditions, directly contributes to students' well-being and performance [113].

International studies indicate that well-equipped schools, with access to modern educational materials, digital equipment, and high-speed internet, achieve higher scores on international assessments such as PISA, demonstrating the direct impact of facilities on learning quality [122]. Similarly, research in contexts as diverse as Pakistan shows that teaching mathematics through interactive approaches increases student engagement, enhances content comprehension, and improves exam performance, thereby justifying the allocation of additional funds for such resources [123].

Additionally, the availability of educational resources, such as computers or laboratories, has a direct and significant impact on outcomes in primary and secondary education [124]. Studies suggest that approximately 16% of the variation in academic progress can be explained by the physical characteristics of the learning environment, highlighting the importance of access to safe, clean, and functional spaces [125].

There is a proven positive correlation between the use of classroom equipment and students' academic performance, confirming that not only the presence of resources but also their effective utilization matters in the learning process [126]. Moreover, school facilities contribute to reducing gaps caused by socioeconomic differences, providing equal opportunities for all students regardless of their background [127].

***The educational offer (study programs, curriculum,* etc.)** influences the school's relevance to local and societal needs. A national curriculum cannot be applied uniformly across all classrooms. Educators frequently adapt the official curriculum to suit their specific circumstances. In the context of challenges related to student diversity and local needs, recent research confirms that initiatives supporting curriculum diversification in a flexible and adapted format—including the integration of AI technologies—are possible only through the active involvement of teachers with professional expertise and pedagogical autonomy [128]. Such initiatives significantly contribute to increasing school retention and reducing dropout rates [129]. Through ongoing professional development and structural collaboration, teachers become agents of curricular change, directly contributing to transforming schools into inclusive and relevant environments.

Studies show that the direct allocation of funds to schools for the development of new academic programs can lead to significant decreases in the number of underperforming students, highlighting the essential role of adequate funding in improving school performance, especially in low-achieving educational institutions [55]. Additionally, the structure and pace of the curriculum determine the extent to which the educational offer is tailored to students' needs. A proper alignment between school programs and students' learning pace is crucial for maximizing educational benefits [130]. Moreover, reforms of curricular programs and policies at the national level have a measurable impact on student outcomes, regardless of the education level or subject studied [131]. This underscores the importance of maintaining an updated and contextually relevant educational offer that reflects social and economic realities.

Procedures and working methods reflect the pedagogical culture of the school. Changes at this level indicate a genuine commitment to educational innovation. Studies highlight that teachers evaluate positively projects that support student-centered methods, active learning, and autonomy. Mel Ainscow (2015) [132] emphasizes the importance of adopting collaborative and reflective working procedures in education, with a focus on inclusion and equity.

Students who have well-trained teachers with high teaching standards tend to achieve better academic results, regardless of other contextual factors [109]. Moreover, varied and integrative pedagogical strategies contribute to the development of students' competencies and play a crucial role in enhancing the quality of the educational process [133].

Teaching methods and programs differ significantly in practice, and this diversity highlights the direct influence teachers have on student performance through their methodological choices [134]. The procedures and methods teachers apply in the classroom not only support learning and understanding but also contribute to increasing students' motivation and engagement, which are essential factors for educational success [135]. This demonstrates that working methods need to be adapted and supported through appropriate educational policies.

Moreover, student engagement plays a mediating role between teaching practices and academic outcomes [136]. Additionally, feedback provided by students in primary and secondary schools has a significant impact on the quality of teaching [137], indicating the need for reflective pedagogical practices that are adapted according to the needs and perceptions of the direct beneficiaries of education.

Teaching staff skills, including pedagogical knowledge, self-efficacy, and teaching enthusiasm, represent a key variable in institutional effectiveness. They directly contribute to the quality of teaching and are positively correlated with student interest and performance [138]. Developing teachers' digital competencies should be a strategic priority in educational policies, through initiatives that consistently invest in continuous professional development. Such interventions are perceived by teachers as more relevant and valuable [139], directly contributing to the strengthening of professionalization in the teaching career. According to TALIS data [36], participation in well-structured training programs is associated with higher levels of competence, professional autonomy, and job satisfaction among teachers.

Teachers play a central role in creating a favorable educational environment, motivating students, and facilitating the learning process, which directly contributes to institutional effectiveness [133].

There is a clear relationship between teachers' professional competencies—such as self-efficacy, emotional intelligence, enthusiasm, and content knowledge—and the quality of the educational process, which positively influences both student engagement and performance [138,140]. Furthermore, recent educational models demonstrate that factors like the "adversity quotient," supported by emotional intelligence and positive organizational behavior, contribute to strengthening teachers' professional competence [141].

School management performance directly influences organizational culture, the efficiency of internal processes, and staff satisfaction. Organizational relationships, including school leadership and teacher collaboration, contribute to motivating teaching staff, the effective implementation of educational projects, and the enhancement of institutional performance [142]. Transformational educational leadership helps improve the organizational climate by strengthening collaboration and collective engagement in institutional development [143], and it is associated with the sustainability of reforms and the maintenance of results over time [144]. Effective school leadership is correlated with better academic outcomes and higher graduation rates, underscoring the central role of leadership in school success [145].

Successful leadership has a significant, though often underestimated, impact on student learning and is considered a key factor in the effective implementation of large-scale educational reforms [145]. Principals of high-performing schools contribute to improving the quality of learning through their values and competencies, as well as through the effective application of change and institutional development strategies [146]. Furthermore, a positive and collaborative school culture, supported by effective management, creates a conducive learning environment where all members of the school community are motivated to pursue common goals, thereby strengthening the school's overall effectiveness [147].

4. Methodology

The research approach was guided by the following question: What are the determining factors of the subjective value perceived by teaching staff regarding European-funded educational projects, and how are these influenced by their experience of participating in the implementation of these projects?

To address the aim of this study, the following objectives were established:

O1. To find out how various improvements in the quality of the educational environment influence the subjective value perceived by teaching staff regarding the EU-funded educational projects.

For this objective, the following statistical hypothesis was formulated:

H1. *Teachers' attitudes towards improvements achieved in various aspects of the educational environment quality positively influence the perceived value of EU-funded educational projects.*

O2. Determining the extent to which the evolution of the components characterizing the quality of the educational environment can be attributed to the intervention of funding programs.

For this objective, the following statistical hypothesis was formulated:

H2. *There are significant differences between the schools that implemented EU-funded projects and the other schools in terms of improvements in the quality of the educational environment.*

O3. Determining the extent to which teachers' perceptions towards improving the quality of the educational environment vary in relation to the dominant socio-economic status of children studying in different schools.

H3. *There is a relationship between the dominant socio-economic status of students and the perceived improvements in the quality of the educational environment.*

To achieve these objectives, a quantitative marketing research was conducted, based on a survey among teachers teaching in primary, middle, and high school classes in Romania. Data was collected by using a questionnaire applied online in April 2023. The research population was represented by 171,477 teachers.

The sampling process was carried out by combining several specific methods. To select the educational units from which the responding teachers were extracted, two random techniques were applied: proportional stratified sampling and simple random sampling. Since it was not possible to apply a random mechanism also for the selection of teachers from the already selected schools, at this stage, a non-randomized sampling method was used, namely voluntary selection.

The sample obtained was checked from the perspective of representativeness, considering both the levels of education and the residential environment of the participating teachers. To avoid over-representation of certain schools, a maximum of six questionnaires was administered in each school to teachers at different educational levels. Also, given that only teachers with relevant experience can provide valuable information for this research, the final analysis included only responses from teachers with a minimum of three years of teaching experience.

After completing these steps, the sample size obtained was 1050 people. The confidence interval was set at 95% ($\alpha = 0.05$ Given that the standard deviation is unknown, it was estimated by considering the maximum value of the standard deviation in the situation where there is equality between the number of favorable and unfavorable responses, according to the Cochran method [148–152]. Under these conditions, the maximum estimation error associated with the sample was calculated at $\pm 3.02\%$, which provides a high degree of precision and external validity of the results obtained.

Regarding the structure of the sample, 62.6% of the respondents come from urban areas, while 37.4% come from rural areas. The distribution by educational levels shows that 28.1% of the interviewed teaching staff teach in primary education, 37.3% in secondary education, 28.5% in high schools and colleges, and 6.1% in arts and vocational schools. To

verify the degree of similarity between the structure of the sample and that of the target population based on the area of residence, a *t*-test for comparing proportions was applied using the IBM SPSS software. The test result (*p*-value = 0.579, for a significance level of 0.05) indicates that there are no statistically significant differences between the proportions observed in the sample and those in the reference population. Therefore, with a 95% confidence level, the sample is representative from the perspective of the residence variable, which confers robustness and validity to the research results. Consequently, it was not necessary to apply any adjustment or weighting techniques to the sample.

The data collection process was carried out through the application of an original questionnaire, designed by the authors. The questionnaire was pre-tested on a number of the teaching staff. During the testing process, all issues related to the understanding and interpretation of the questions' content were resolved, thus ensuring content validity for large-scale administration.

The questionnaire was preceded by an information letter detailing essential aspects such as the research topic, data collection methods, as well as a statement on ensuring the anonymity and confidentiality of responses. Informed consent was obtained individually by completing a special section before starting the questionnaire itself. Data collection and processing were carried out in compliance with the rules of personal data protection.

The questionnaire started with a question aimed at identifying the subjective value perceived by teaching staff regarding the EU-funded educational projects. Respondents expressed their agreement with a statement regarding the improvements they have brought to the education system. The measurement was carried out using a 5-level equally distanced numerical scale from (−2 points) expressing total disagreement to (+2 points) expressing total agreement.

The questionnaire also included a series of questions regarding the improvements observed in the last three years in the quality of some aspects of education, namely: increase in learning performance, improvements in school enrollment, reducing absenteeism, reducing early school leaving, increase in student satisfaction, increase in student engagement, better results in national assessments and exams, infrastructure improvement (construction, renovation), facilities improvement (equipment, work tools), educational offer improvement (study programs, curriculum, etc.), improving of procedures and working methods, improvements in teaching staff skills, improvements in school management performance.

In total, thirteen items were evaluated using a 5-level equally distanced numerical scale from 1 point (the situation has worsened considerably) to 5 points (the situation has improved considerably). This scale allowed for a nuanced assessment of subjective perceptions regarding the evolution of the institutional educational environment, both at the level of the teaching process and in terms of the structural and organizational dimensions of the school.

The questionnaire also included a question aimed at identifying the implementation of EU-funded educational projects in the period 2014–2022 in the school represented by each respondent. This variable was measured on a dichotomous scale, allowing the establishment of two groups depending on the existence or non-existence of direct exposure to such interventions.

In the final section, the questionnaire included a series of socio-demographic and contextual questions, used to characterize the respondents: the dominant socio-economic status of students, the area of residence (urban/rural), as well as the educational cycle at which the respondents teach (primary, secondary, high school, or vocational education). These variables were subsequently used to identify differences between the perceptions of different groups and to verify the representativeness of the sample.

The data obtained were processed using the IBM SPSS—Statistical Package for Social Sciences, version 28.0.1.0 (15).

The analysis began with the assessment of the internal consistency of the scale proposed to measure teachers' attitudes towards improvements in the quality of the educational environment. For the thirteen items analyzed, the Cronbach's Alpha coefficient was calculated. The value obtained was equal to 0.93, above the minimum threshold recommended by the literature (>0.70). The values obtained by eliminating any of the items fell between 0.92 and 0.93, which confirms the internal consistency of the items in the scale. The item–total correlations also have values higher than 0.5.

To identify the general trends and variations between the analyzed aspects, the mean values and standard deviations were also calculated for each item. The cluster-robust standard errors were considered instead of a multi-level model, as the actual affiliation of teachers with a certain school was not taken into account.

An analytical approach regarding the multidimensionality of the evaluated aspects was carried out by using an Exploratory Factor Analysis, based on Principal Component Analysis. Two components were, thus, identified that reflect qualitative improvements at the student level, respectively, at the school level. These components were used to test the hypothesis H1, regarding the influence of teachers' attitudes towards improvements achieved in various aspects of the educational environment quality on the perceived value of EU-funded educational projects. A Multiple Linear Regression Model with Stepwise selection was used for testing this hypothesis.

Next, to assess the influence of projects financed by European funds, the results obtained by schools in which such projects were implemented were compared with those of schools that did not benefit from these interventions. The differences between the means of the analyzed items for these two types of schools were tested using Student's *t*-test for independent samples. The test results were complemented with a suggestive graphic representation of the differences between the two groups to facilitate the visual interpretation of the identified impact.

The main limitations of the study stem from the fact that the research is based exclusively on the perceptions of teachers, which may introduce a degree of subjectivity in the impact assessment. Another limitation concerns voluntary sampling, which may generate a certain bias by over-representing individuals who are more interested or more actively involved in the projects; consequently, the results should be interpreted with caution since no sensitivity weighting was applied. The study also relies on teachers' perceptions without triangulating the data with objective indicators such as student performance or detailed financial indicators of the projects. The limited temporal context (2014–2022) and the focus on a single national education system may restrict the degree of generalization of the results to other countries or periods.

5. Analysis and Interpretation of the Results

O1. To find out how various improvements in the quality of the educational environment influence the subjective value perceived by teaching staff regarding the EU-funded educational projects.

To achieve the first objective of the research, O1, the subjective value perceived by teaching staff regarding the EU-funded educational projects was measured with a 5-level equally distanced numerical scale from −2 points to 2 points. The mean value obtained is equal to 0.8829 points, which reveals a good perceived value (Table 1).

Table 1. Descriptive statistics for the perceived value of EU-funded educational programs.

EU-Funded Educational Programs in Romania in the Period 2014–2022:	The Number of Respondents (N)	Mode	Mean	Std. Deviation	95% Confidence Interval for Mean	
					Lower Limit	Upper Limit
brought important improvements to the education system	1050	1	0.8829	1.066	0.8183	0.9474

Source: SPSS database.

To evaluate the improvements in the quality of the educational environment, 13 items measured with a 5-level scale (5 points = high level of improvement) were used.

Among the aspects analyzed using a scale from 1 point (the situation has worsened a lot) to 5 points (the situation has improved a lot), the highest mean was recorded for Improvements in School Management Performance (V1) (3.9781 points), and the worst evolution was recorded for Increase in learning (3.27331 points), as presented in Table 2.

Table 2. Descriptive statistics.

	N	Mean	Std. Deviation
V1—Improvements in school management performance	1050	3.9781	0.86147
V2—Improvements in teaching staff skills	1050	3.9771	0.77093
V3—Facilities improvement (equipment, work tools)	1050	3.9000	0.88763
V4—Improving of procedures and working methods	1050	3.8610	0.77969
V5—Infrastructure improvement (construction, renovation)	1050	3.7676	0.96719
V6—Educational offer improvement (study programs, curriculum, etc.)	1050	3.7629	0.77862
V7—Improvements in school enrollment	1050	3.5724	0.88683
V8—Increase in student satisfaction	1050	3.5676	0.91576
V9—Increase in student engagement	1050	3.4257	1.04827
V10—Reducing early school leaving	1050	3.3981	0.96931
V11—Better results in national assessments and exams	1050	3.3971	0.91351
V12—Reducing absenteeism	1050	3.2752	0.99256
V13—Increase in learning performance	1050	3.2733	0.95592
Valid N (listwise)	1050		

Source: SPSS database.

The results obtained indicate that, overall, at the level of the school units represented by the respondents, all the analyzed dimensions recorded a positive evolution, but some of them have a moderate amplitude.

Relating the means to the neutral point of the scale (3 on a 1–5 scale), the results indicate a positive evolution, with moderate effects for V1–V6, small to moderate effects for V7–V8, while V9–V13 fall within the range of small effects. To reduce the number of dimensions of the scale used, an exploratory factor analysis with Varimax rotation was applied. Thus, two main components were obtained, which explain 68.91% of the total variation. The analysis is statistically significant (KMO = 0.914, Chi-square = 10,327.1, $p < 0.001$), as presented in Table A1.

The two components can be labeled according to the significance of the items that significantly contribute to their formation, as follows: C1—Qualitative improvements at the student level (Student progress); C2—Qualitative improvements at the school level (School progress).

To evaluate to what extent the subjective value of EU-funded educational projects perceived by teachers is influenced by the two obtained components that reflect the improvements in the quality of the educational environment (C1-Student progress and C2-School

progress), a multiple linear regression was applied, using the stepwise selection method to avoid the phenomenon of multicollinearity. The two components were considered independent variables, and the dependent variable was the value perceived by teachers (PV) regarding the effect of the educational projects (see Table 3). As the EFA was conducted to uncorrelated factors, the results of the multicollinearity test indicate the absence of this phenomenon (VIF = 1). The heteroscedasticity is also not present according to the Breusch–Pagan test ($p > 0.05$).

Table 3. Coefficients [a].

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.883	0.031		28.119	0.000
	School progress	0.321	0.031	0.301	10.206	0.000
2	(Constant)	0.883	0.030		29.113	0.000
	School progress (School)	0.321	0.030	0.301	10.567	0.000
	Student progress (Student)	0.265	0.030	0.249	8.740	0.000

[a]. Dependent Variable: Perceived value of EU-funded educational projects (PV). Source: SPSS database.

The multiple linear regression model that returned the best results by using a stepwise method is the following:

$$PV = -0.883 + 0.321\ School + 0.265\ Student + \varepsilon$$

The results reveal that both independent variables have a significant positive effect on the perceived value ($p < 0.001$). The analysis of variance (ANOVA) indicates that the model is globally significant ($F = 94.02$, $p < 0.001$). The findings also emphasize that improvements at the school level have a stronger impact on perceived value compared to those at the student level. According to these results, the first hypothesis of the research (H1), regarding the positive impact of the improvements achieved in various aspects of the educational environment quality on the perceived value of EU-funded educational projects, was confirmed. Nevertheless, the value of the R-square coefficient (0.152) indicates a range of other variables have a significant influence on the perceived value of educational projects.

O2. Determining the extent to which the evolution of the components characterizing the quality of the educational environment can be attributed to the intervention of funding programs.

The analysis continued by measuring the existence of significant differences between the evaluations provided by teachers from schools in which EU-funded projects were implemented and those from schools where such projects were not implemented, concerning the mean scores obtained for the elements of each main component, namely:

C1—improvements at the student level (increase in learning performance (V13); improvements in school enrollment (V7); reducing absenteeism (V12); reducing early school leaving (V10), increase in student satisfaction (V8); increase in student engagement (V9); better results in national assessments and exams) (V11), and

C2—improvements at the school level (infrastructure improvement—construction, renovation (V5); facilities improvement—equipment, work tools (V3); educational offer improvement—study programs, curriculum, etc. (V6); improvements of procedures and working methods (V4), improvements in teaching staff skills (V2), and improvements in school management performance (V1)).

The observed differences highlight that direct experience in project implementation contributes to a more favorable perception of their impact on student-related dimensions (C1), such as an increase in learning performance (V13), an increase in student engagement (V9), and an increase in student satisfaction (V8) (Figure 1). This result supports the subjective relevance of these interventions and validates the perceived potential of European funding to improve the student-centered educational process.

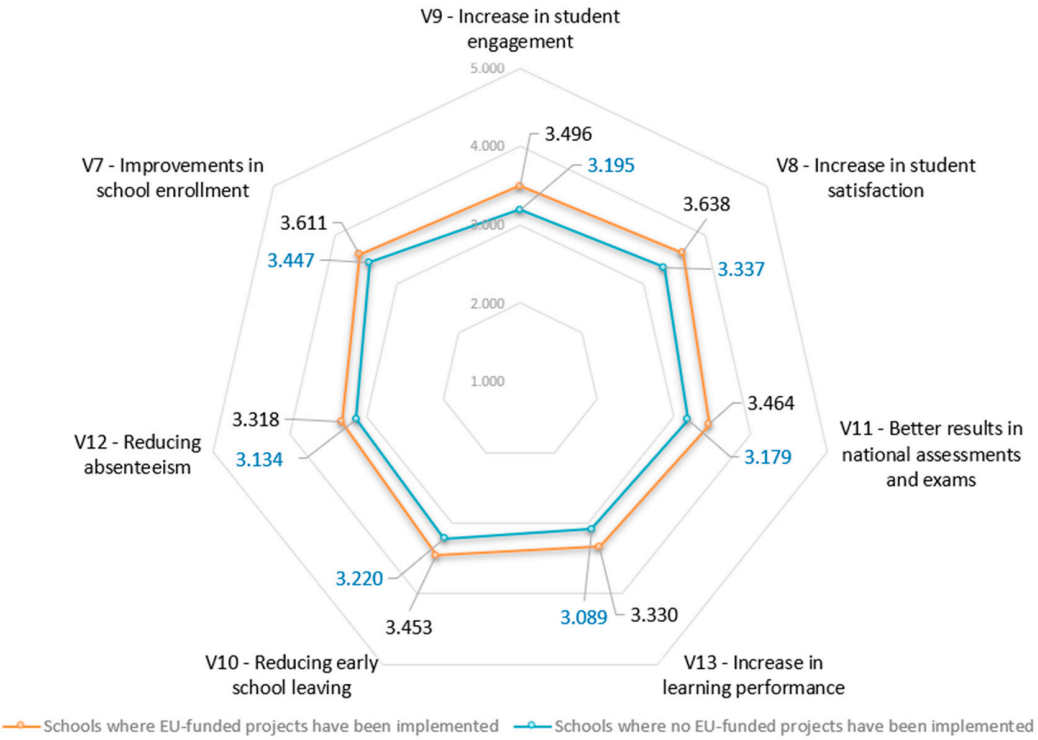

Figure 1. Mean scores for the elements of C1 in schools where EU-funded projects were implemented and in schools where no such projects were implemented.

The results were tested using the independent sample Student's *t*-test for each main component. The sample included 804 schools in which projects were implemented and 246 schools in which no such projects were implemented. Table 4 presents the mean scores for each variable considered, for schools where EU-funded projects were implemented and for schools where no such projects were implemented, along with the corresponding test results.

The mean score across all indicators in C1—improvements at the student level was 3.470 points in project schools, compared to 3.230 points in non-project schools, resulting in a mean difference of 0.240 points. The largest difference was recorded for the increase in student satisfaction (V8). The mean score in project schools was 3.638, versus 3.337 in non-project schools, with a mean difference of 0.301 points (t = 4.548, $p = 0.000$). An equally large difference was observed in the increase in student engagement (V9), where the mean score was 3.496 in project schools and 3.195 in non-project schools, also resulting in a mean difference of 0.301 points, but with a lower t-value (t = 3.970, $p = 0.000$).

The smallest difference was found for improvements in school enrollment (V7). The mean score in project schools was 3.611, versus 3.447 in non-project schools, with a mean difference of 0.164 points (t = 2.538, $p = 0.011$).

Table 4. Differences between schools regarding the improvements at the student level.

Changes in the Educational Process	Mean		Mean Difference	t	Sig.
	Schools Where EU-Funded Projects Have Been Implemented	Schools Where no EU-Funded Projects Have Been Implemented			
V13—Increase in learning performance	3.330	3.089	0.240	3.466	0.001
V7—Improvements in school enrollment	3.611	3.447	0.164	2.538	0.011
V12—Reducing absenteeism	3.318	3.134	0.184	2.555	0.011
V10—Reducing early school leaving	3.453	3.220	0.233	3.318	0.001
V8—Increase in student satisfaction	3.638	3.337	0.301	4.548	0.000
V9—Increase in student engagement	3.496	3.195	0.301	3.970	0.000
V11—Better results in national assessments and exams	3.464	3.179	0.285	4.319	0.000

Source: SPSS database.

Figure 2 presents the mean score for each variable considered, for schools where EU-funded projects were implemented and for schools where no such projects were implemented, along with the corresponding test results. For all variables analyzed, the recorded values indicate improvements in the C2 component—improvements at the school level. These improvements were also greater in schools where EU-funded projects were implemented compared to those without such projects, particularly concerning infrastructure improvement (construction, renovation) (V5), facilities improvement (equipment, work tools) (V3), and educational offer improvement (study programs, curriculum, etc.) (V6).

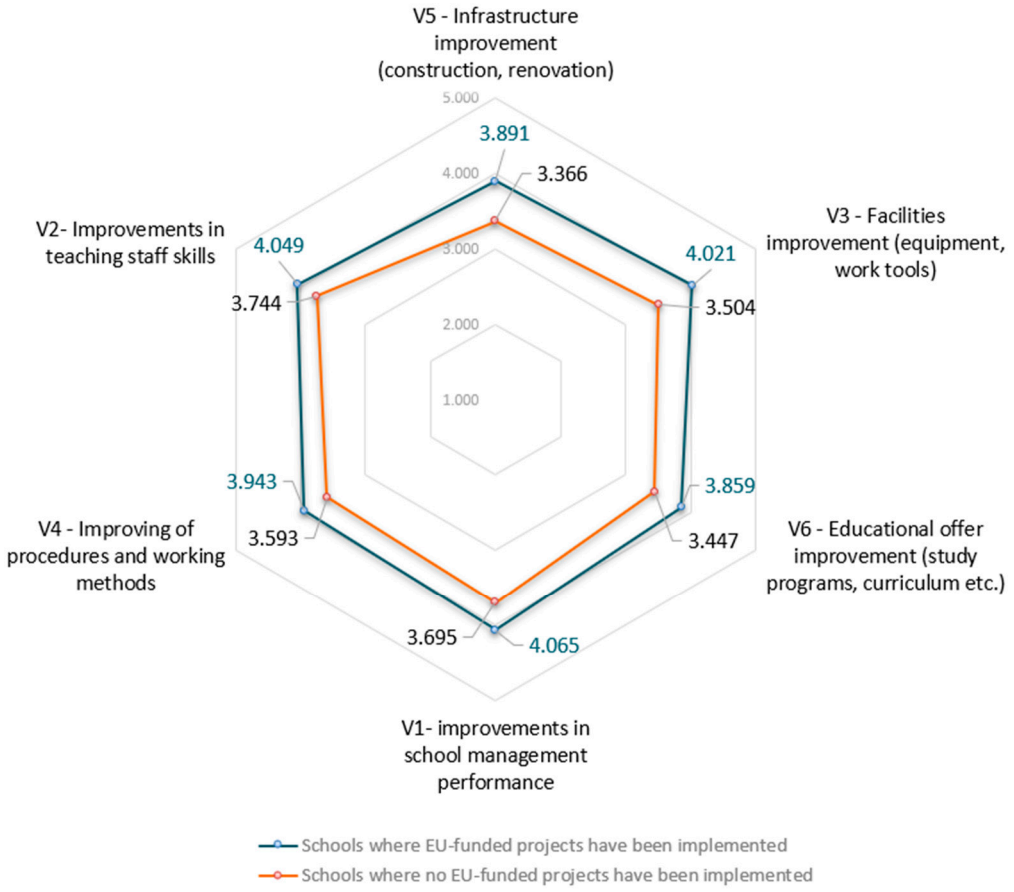

Figure 2. Mean scores for the elements of the main component C2 in schools where EU-funded projects were implemented and in schools where no EU-funded projects were implemented.

The results were tested using the independent sample Student's *t*-test for each main component. Table 5 presents the mean scores for each variable considered, for schools where EU-funded projects were implemented and for schools where no such projects were implemented, along with the corresponding test results. The mean score across all indicators in C2—improvements at the school level was 3.971 points in project schools, compared to 3.558 points in non-project schools, resulting in a mean difference of 0.413 points.

Table 5. Differences between schools regarding the improvements at the school level.

Changes in the School Represented	Mean		Mean Difference	t	Sig.
	Schools Where EU-Funded Projects Have Been Implemented	Schools Where no EU-Funded Projects Have Been Implemented			
V5—Infrastructure improvement (construction, renovation)	3.891	3.366	0.525	7.647	0.000
V3—Facilities improvement (equipment, work tools)	4.021	3.504	0.517	8.246	0.000
V6—Educational offer improvement (study programs, curriculum, etc.)	3.859	3.447	0.412	7.454	0.000
V4—Improving of procedures and working methods	3.943	3.593	0.349	6.259	0.000
V2—Improvements in teaching staff skills	4.049	3.744	0.305	5.498	0.000
V1—Improvements in school management performance	4.065	3.695	0.370	5.985	0.000

Source: SPSS database.

The largest difference was recorded for infrastructure improvement (construction, renovation) (V5). The mean score in project schools was 3.891 points, versus 3.366 points in non-project schools, with a mean difference of 0.525 points (t = 7.647, p = 0.000).

A similarly high difference was observed for facilities improvement (equipment, work tools) (V3). The mean score in project schools was 4.021 points and 3.504 points in non-project schools, resulting in a mean difference of 0.517 points, but with a higher t-value (t = 8.246, p =0.000).

The smallest difference was found for the competences of teaching staff. The mean score in project schools was 4.049 points, compared to 3.744 points in non-project schools, with a mean difference of 0.305 points (t = 5.498, p = 0.000).

Our findings reinforce the hypothesis (H2) that European funding is perceived as having a genuine potential to generate positive transformations in the quality of the institutional educational environment, particularly regarding dimensions such as physical infrastructure, material equipment, and teaching resources, which constitute the main component C2—improvements at the school level.

O3. Determining the extent to which teachers' perceptions towards improving the quality of the educational environment vary in relation to the dominant socio-economic status of children studying in different schools.

The analysis sought to identify any significant differences in the assessment of these improvements between schools serving students from economically disadvantaged, average, and favorable backgrounds, for the two main components. Schools were grouped into three categories based on the socio-economic status of students' families: good or very good, average, and poor.

These results (Figure 3) revealed statistically significant differences between the three types of schools for all elements related to improvements at the student level.

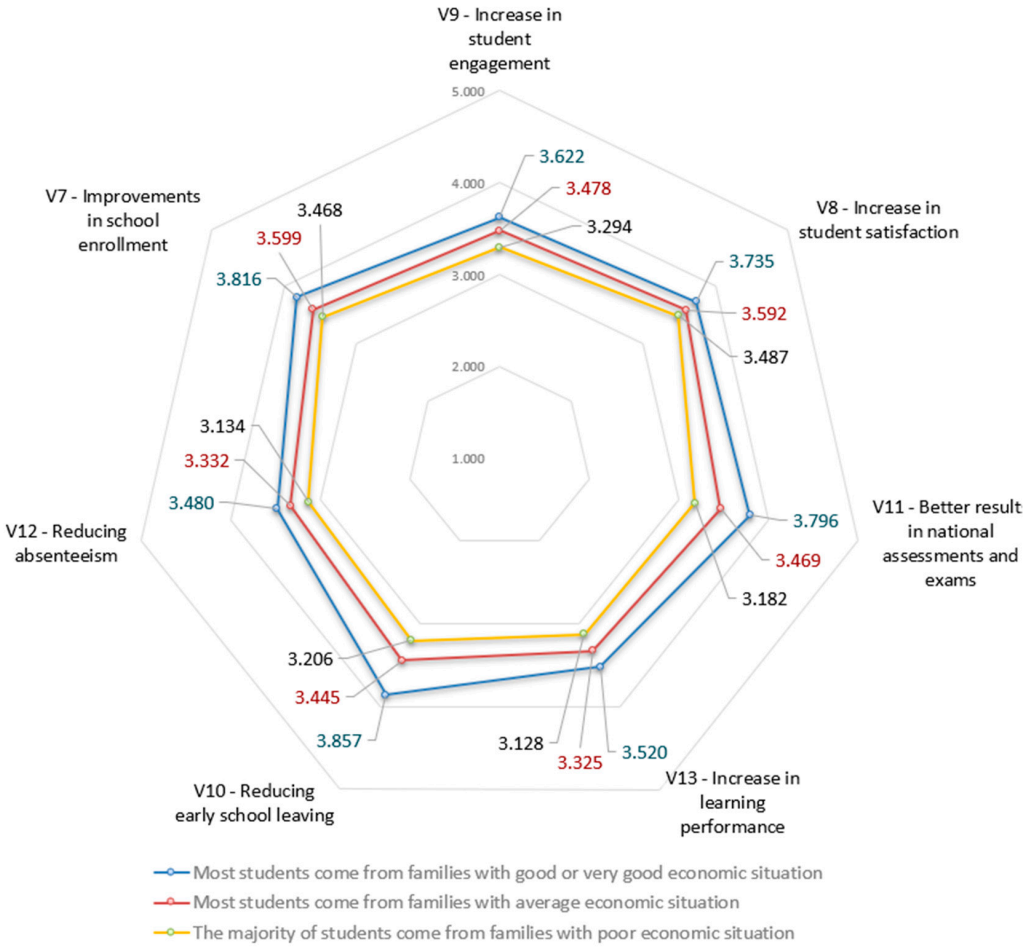

Figure 3. Mean scores for the elements of C1 across the three types of schools.

The observed differences suggest that perceptions of improvements at the student level are influenced by the predominant socio-economic profile of the students within the school. Interestingly, schools with students from more disadvantaged socio-economic backgrounds often reported more substantial improvements.

The results of the ANOVA test (F-statistic values and *p*-values) for each item within component C1 (improvements at the student level) according to school type are presented in Table 6.

The results were tested using one-way ANOVA for each indicator in C1—improvements at the student level (increase in learning performance (V13); improvements in school enrollment (V7); reducing absenteeism (V12); reducing early school leaving (V10); increase in student satisfaction (V8); increase in student engagement (V9); better results in national assessments and exams (V11)). The economic background of students' families was grouped into three categories: good or very good, average, and poor.

The mean score across all indicators was highest in schools where most students came from families with a good or very good economic situation (mean score was 3.689 points), and lowest in schools where the majority of students came from families with a poor economic situation (mean score was 3.271 points).

The largest difference was recorded for better results in national assessments and exams (V11). The mean score was 3.796 points for schools with students from good or very good economic backgrounds, 3.469 points for those from average backgrounds, and

3.182 points for students from poor backgrounds, with a maximum difference of 0.614 points (F = 22.385, $p = 0.000$).

Table 6. ANOVA results in the case of the socio-economic context of the educational institutions—C1. (*Key results:* V13: F = 8.55, $p < 0.001$; V7: F = 6.626, $p = 0.001$; V12: F = 6.908, $p = 0.001$; V10: F = 19.687, $p < 0.001$; V8: F = 3.308, $p = 0.037$; V9: F = 5.424, $p = 0.005$; V11: F = 22.385, $p < 0.001$).

		N	Mean	Std. Deviation
V13—Increase in learning performance	Most students come from families with good or very good economic situation	98	3.520	0.99721
	Most students come from families with average economic situation	578	3.325	0.93909
	The majority of students come from families with poor economic situation	374	3.128	0.9517
V7—Improvements in school enrollment	Most students come from families with good or very good economic situation	98	3.816	0.8537
	Most students come from families with average economic situation	578	3.599	0.87214
	The majority of students come from families with poor economic situation	374	3.468	0.90443
V12—Reducing absenteeism	Most students come from families with good or very good economic situation	98	3.480	1.01767
	Most students come from families with average economic situation	578	3.332	0.94952
	The majority of students come from families with poor economic situation	374	3.134	1.03467
V10—Reducing early school leaving	Most students come from families with good or very good economic situation	98	3.857	0.88516
	Most students come from families with average economic situation	578	3.445	0.92784
	The majority of students come from families with poor economic situation	374	3.206	1.00554
V8—Increase in student satisfaction	Most students come from families with good or very good economic situation	98	3.735	0.94761
	Most students come from families with average economic situation	578	3.592	0.90983
	The majority of students come from families with poor economic situation	374	3.487	0.91081
V9—Increase in student engagement	Most students come from families with good or very good economic situation	98	3.622	1.06988
	Most students come from families with average economic situation	578	3.478	1.00967
	The majority of students come from families with poor economic situation	374	3.294	1.08814
V11—Better results in national assessments and exams	Most students come from families with good or very good economic situation	98	3.796	0.82436
	Most students come from families with average economic situation	578	3.469	0.89282
	The majority of students come from families with poor economic situation	374	3.182	0.91698

Source: SPSS database. *Note.* Values indicate significant differences across socio-economic contexts for all variables ($p < 0.05$).

Another high difference, 0.651 points, was observed for reducing early school leaving (V10). The mean score was 3.857 points for students from good or very good economic

situations, compared to 3.445 points for average and 3.206 points for poor backgrounds (F = 19.687, p = 0.000).

The smallest difference was found for the increase in student satisfaction (V8). The mean score was 3.735 points for students from good or very good families, 3.592 points for average, and 3.487 points for poor economic situation, with a maximum difference of 0.248 points (F = 3.308, p = 0.037).

The analysis of the results for component C2—Improvements at the school level—highlights the fact that teachers' perceptions differ depending on the socio-economic context of the students in the educational institution, as illustrated in Figure 4.

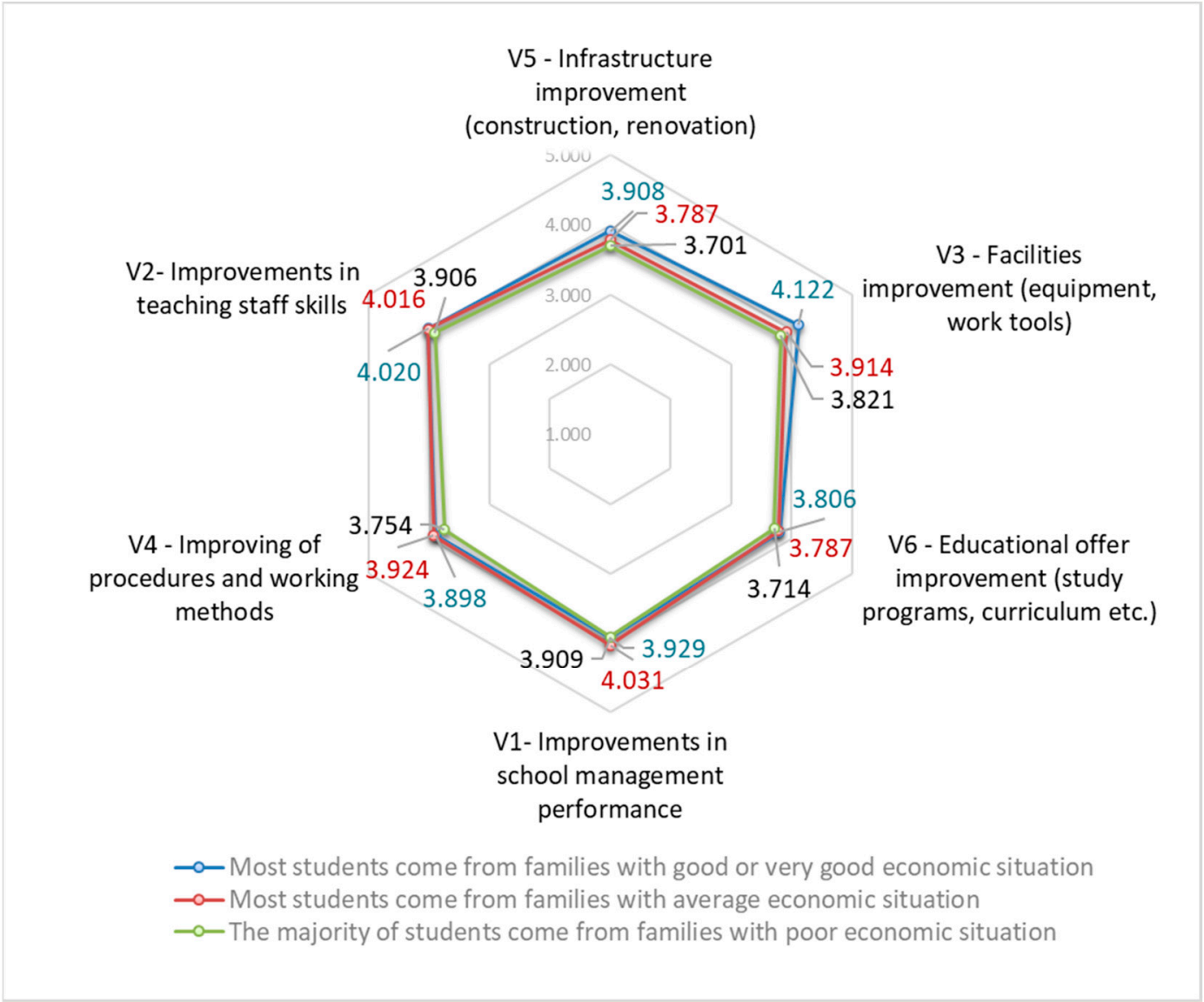

Figure 4. Mean scores for the elements of C2 across the three types of schools.

The analysis of the results with the ANOVA test for this component highlights the fact that teachers' perceptions differ significantly depending on the socio-economic context of the students in the educational institution, only on two dimensions: equipment and procedures, and working methods (Table 7).

Table 7. ANOVA results in the case of the socio-economic context of educational institutions—C2. (*Key results:* V5: F = 2.057, $p = 0.128$; V3: F = 4.663, $p = 0.010$; V6: F = 1.173, $p = 0.310$; V4: F = 5.559, $p = 0.004$; V2: F = 2.453, $p = 0.087$; V1: F = 2.464, $p = 0.086$).

		N	Mean	Std. Deviation
V5—Infrastructure improvement (construction, renovation)	Most students come from families with good or very good economic situation	98	3.908	0.90914
	Most students come from families with average economic situation	578	3.787	0.94825
	The majority of students come from families with poor economic situation	374	3.701	1.00729
V3—Facilities improvement (equipment, work tools)	Most students come from families with good or very good economic situation	98	4.122	0.76341
	Most students come from families with average economic situation	578	3.914	0.87886
	The majority of students come from families with poor economic situation	374	3.821	0.92188
V6—Educational offer improvement (study programs, curriculum, etc.)	Most students come from families with good or very good economic situation	98	3.806	0.79506
	Most students come from families with average economic situation	578	3.787	0.78197
	The majority of students come from families with poor economic situation	374	3.714	0.76867
V4—Improving of procedures and working methods	Most students come from families with good or very good economic situation	98	3.898	0.77977
	Most students come from families with average economic situation	578	3.924	0.75010
	The majority of students come from families with poor economic situation	374	3.754	0.81436
V2—Improvements in teaching staff skills	Most students come from families with good or very good economic situation	98	4.020	0.74584
	Most students come from families with average economic situation	578	4.016	0.76634
	The majority of students come from families with poor economic situation	374	3.906	0.78136
V1—Improvements in school management performance	Most students come from families with good or very good economic situation	98	3.929	0.88807
	Most students come from families with average economic situation	578	4.031	0.8526
	The majority of students come from families with poor economic situation	374	3.909	0.86472

Source: SPSS database. *Note.* Significant differences across socio-economic contexts were found for V3 and V4 ($p < 0.05$). For all other variables, differences were not statistically significant ($p > 0.05$).

Regarding endowments (equipment, working materials, etc.), the ANOVA test indicated a statistically significant difference among the three types of schools (F = 4.663, $p = 0.010$). The highest mean scores were recorded in schools with students from families with a favorable economic situation, averaging 4.122 points, followed by schools with an average economic situation 3.914 points and those with a disadvantaged economic situation 3.821 points. The difference between the most and least advantaged means is 0.301 points, suggesting that the economic resources of the school community influence perceptions of the level of equipment.

For work procedures and methods, the differences were also significant (F = 5.559, $p = 0.004$). The highest mean score was found in schools with an average economic situation

at 3.924 points, followed by schools with a favorable economic situation (3.898 points) and disadvantaged schools (3.754 points). The maximum difference of 0.170 points is smaller compared to that observed for equipment. For the other dimensions, the identified differences were not statistically significant.

Considering the obtained results, for the majority of the items related to the main component C2, the formulated hypothesis (H3) is rejected; thus, there are no statistically significant differences between the mean scores based on the type of school, determined by the predominant economic situation of the students (favorable, average, or disadvantaged), according to teachers' evaluations. The exceptions are the institution's equipment and the work procedures and methods.

6. Discussion

The research findings highlight a predominantly favorable perception among teachers in Romania regarding the impact of EU-funded educational projects during the period 2014–2022. The average score obtained (0.8829 points on a scale from −2 points to +2 points) indicates a predominantly positive perceived value of the EU-funded projects.

This perception is supported by the specialized literature, which emphasizes that European educational policies and the associated funding mechanisms have played a crucial role in modernizing educational systems in Central and Eastern Europe. For example, Tusa (2023) [10] highlights that the EU accession process prompted significant structural adaptations in Romanian education to align with the European model. According to the European Commission (2021), these convergence processes have been supported by European funding instruments aimed at reducing disparities and promoting inclusion and quality in education. Overall, there is a clear convergence between the empirical results of this research and the conclusions found in the literature, both suggesting that European educational projects are perceived as having a perceptible and appreciated influence among educational stakeholders in Romania.

Meta-analyses conducted at the EU level indicate that European funding, particularly the European Social Fund (ESF), has improved educational outcomes, with greater effectiveness in interventions directly targeting students (for indicators such as grades and promotion to the next year) [153]. Funding has also been correlated with an increase in the proportion of young people completing lower secondary and tertiary education, as well as with better employment prospects for youth across all educational levels [154]. The impact is amplified when funding is accompanied by institutional factors such as heterogeneous classes, high expectations, critical pedagogies and culturally relevant curricula, positive school relationships, personalized support, and family/community involvement through integrated approaches and specific support that reduce early school leaving and enhance academic performance [155]. A study conducted in Portugal shows that the adoption of policies and measures related to education is influenced by the interpretations of actors situated at these levels [156]. On the other hand, research at the European level does not find a clear correlation between EU funds and test scores [157], although in some countries, such as the Czech Republic, effects have been observed on certain dimensions of the school climate [158].

Thus, the empirical data obtained support both the positive impact of European funds on the educational environment and the importance of including teachers' perspectives in evaluating educational interventions, as also underlined by Molinari and Grazia, (2023) [37].

The findings of our research confirm the hypothesis that the perceived value of these projects is influenced by multiple functional dimensions of the institutional educational environment. This result reinforces the idea supported by other researchers. Wang and Degol [22] show that the institutional educational environment has a multidimensional

structure, composed of interdependent components that influence the perceptions, attitudes, and engagement of teachers.

By identifying two principal components that positively influence the perceived value of EU-funded educational projects, one related to improvements at the student level (performance, involvement, absenteeism, etc.) and the other to improvements at the school level (infrastructure, procedures, management), the research validates the model proposed by recent literature regarding the multidimensional structure of the educational environment. The importance of the interdependent components of the school climate in shaping attitudes and engagement of educational actors is also emphasized in studies by [11,20,21,23–33].

Within the overall model proposed by us, the influence of improvements at the school level on perceived value was stronger than that of improvements at the student level. At the same time, positive perceptions of the impact of educational projects are correlated with moderate but visible progress recorded across multiple dimensions of the educational environment: from infrastructure improvement and equipment to an increase in student engagement and satisfaction. Such findings support the conclusions of the OECD report from 2025 [19], which shows that school infrastructure, access to digital resources, quality of relationships, and curricular adaptability are key factors determining institutional educational functionality. On the other hand, the moderate results obtained for dimensions such as an increase in learning performance or national exam results reveal the existence of less pronounced impact areas that require careful attention.

Moreover, the comparative results between schools where projects funded by European funds were implemented and those where no such interventions took place highlight a stronger perceived impact on the institutional components of the educational environment (C2) than on those directly targeting students (C1). The average difference between scores was +0.413 points in favor of C2, compared to +0.244 points for C1. The largest differences were recorded in terms of infrastructure and equipment, indicating a high sensitivity of teachers' perceptions to tangible and visible improvements brought about by funding. These findings align with the specialized literature, which emphasizes that financial support directed toward infrastructure and educational resources generates immediate and easily observable effects [12].

At the same time, the lower—but still significant—influence on the dimensions concerning students validates the observations made by Jackson, (2014) [53] and Schwerter et al. (2024) [63], according to whom the effects on student performance, reducing absenteeism, or involvement emerge over a longer time horizon and are conditioned by the complexity of contextual factors. Additionally, according to Wang and Degol (2016) [22], teachers' perceptions are strongly influenced by the structural components of the school environment—such as organizational culture, facilities, and teaching conditions—which explains why interventions targeting infrastructure and institutional practices are evaluated more favorably than those targeting student outcomes.

The analysis revealed statistically significant differences between the three types of schools regarding perceptions of improvements at both the student level and the school level. Teachers in schools serving students from economically disadvantaged backgrounds reported more consistent improvements in all elements of the main component C1 and in two of the elements of the main component C2. The largest difference was recorded for reducing early school leaving, which showed the greatest difference between means, namely 0.651 points. These perceptions can be explained by the more visible effect of external interventions in schools with greater needs, where changes are felt more intensely. Such findings are supported by other research showing that financial support directed towards disadvantaged areas contributes to reducing educational gaps [33,50,52–56,58,59,102].

Our results, which indicate clear improvements, especially in disadvantaged environments as funding increases, differ from the conclusions of Atolagbe (2024) [57], whose research found that increased secondary education budgets in Nigeria did not generate progress.

Overall, there is a clear convergence between the empirical results of our research and conclusions drawn in the specialized literature, suggesting that European educational projects are perceived by teachers as having positive and visible effects on the quality of the educational environment in Romania. More visible short-term results are observed, particularly in the component related to the institutional educational environment at the school level, and in both components—schools and students—in disadvantaged environments.

Therefore, our research complements the specialized literature by providing empirical evidence on how teachers' perceptions can serve as an informative indicator for evaluating the perceived effectiveness of educational interventions funded by European funds.

7. Conclusions

The results of this study highlight the significant impact of European funding on teachers' perceptions regarding the improvement of the educational environment in Romanian schools. Statistical analyses confirm the existence of two main factors, namely school-level improvements and student-level improvements, which have a positive influence on the value of EU-funded educational projects perceived by teachers in different types of schools. The investigation also demonstrated that the influence of school-level improvements is slightly higher than the influence of student-level improvements.

The study also reveals that the differences between schools where EU-funded projects were implemented and those without such projects are consistent, especially regarding infrastructure, equipment, and procedures/methods of work.

The analysis of variability in perceptions depending on the dominant socio-economic status of children studying in different schools reveals that schools serving students from economically disadvantaged backgrounds report more consistent improvements, confirming that external investments produce a more visible impact where needs are more acute. This result aligns with international literature highlighting the positive effects of funding targeted at vulnerable communities.

From a managerial perspective, the results emphasize the need for management teams to use resources obtained through European funding not only to support infrastructure modernization but also to promote methodological innovation and teacher competency development. Interventions must be integrated into a long-term strategy that includes both material and pedagogical dimensions to maximize effects on student performance.

Furthermore, our findings support the orientation of educational policies toward the prioritized allocation of resources to schools in disadvantaged areas, where the social return on investment is higher. At the same time, monitoring and evaluation mechanisms should go beyond quantitative indicators, including qualitative dimensions such as school climate, student motivation, and organizational culture.

Developing strategies to strengthen the public image of EU-funded projects is essential for ensuring recognition of their benefits, addressing misconceptions, and promoting transparency. A favorable perception enhances support, engagement, and collaboration, which in turn increases the long-term effectiveness and integration of these initiatives within local communities.

This research is also useful for formulating more contextualized educational policies oriented toward the involved stakeholders. Moreover, the study contributes to developing a conceptual framework in which subjective perceived value is treated as a relevant indicator of educational impact, complementing formal measures of project effectiveness

and providing a useful diagnostic tool in post-implementation evaluation processes of educational projects.

Our results may also contribute to developing evaluation mechanisms for projects that consider not only what has been achieved in terms of the quality of the institutional educational environment but also how those achievements are perceived by the main actors in the system.

Future research directions: Future studies should include objective performance indicators (standardized test results, dropout rates, socio-professional insertion) to corroborate teachers' perceptions with measurable data. Expanding research to an international comparative level could highlight cultural and structural particularities that influence the impact of European funding. Additionally, longitudinal post-implementation analysis would allow for the assessment of the sustainability of observed effects and identification of factors facilitating or limiting the maintenance of improvements.

Additionally, future research could include in-depth qualitative analyses through interviews, focus groups, and narrative studies of schools' experiences, combined with investigating the perceptions of multiple stakeholders (teachers, students, parents, inspectorates), in order to capture the nuances of how changes are experienced and to build a more holistic framework of project impact.

Overall, the study demonstrates that European funding, when strategically directed and integrated within a systemic institutional development framework, can generate profound transformations in the educational environment, reducing inequalities and strengthening the quality of education. These results provide valuable benchmarks for policymakers, school managers, and practitioners in planning and implementing future educational interventions.

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Appendix A

Table A1. Rotated Component Matrix [a].

	Component	
	1	**2**
V13—Increase in learning performance	0.820	0.221
V7—Improvements in school enrollment	0.734	0.281
V12—Reducing absenteeism	0.837	0.203
V10—Reducing early school leaving	0.814	0.223
V8—Increase in student satisfaction	0.785	0.343
V9—Increase in student engagement	0.818	0.307
V11—Better results in national assessments and exams	0.781	0.252
V5—Infrastructure improvement (construction, renovation)	0.161	0.744
V3—Facilities improvement (equipment, work tools)	0.175	0.799
V6—Educational offer improvement (study programs, curriculum, etc.)	0.298	0.803
V4—Improving of procedures and working methods	0.290	0.812
V2—Improvements in teaching staff skills	0.322	0.709
V1—Improvements in school management performance	0.301	0.757
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

Source: SPSS database.

References

1. Cohesion Open Data Platform. Available online: https://cohesiondata.ec.europa.eu/themes/10/14-20 (accessed on 19 June 2025).
2. European Commission. Erasmus+. Program Guide, 2022. Available online: https://erasmus-plus.ec.europa.eu/sites/default/files/2021-11/2022-erasmusplus-programme-guide_ro.pdf (accessed on 19 June 2025).
3. Regional Development, Regional Operational Program. Available online: https://www.fonduri-ue.ro/por-2014 (accessed on 19 June 2025).
4. Ministry of Investments and European Projects, Operational Programme Human Capital. Available online: https://www.fonduri-ue.ro/pocu-2014 (accessed on 19 June 2025).
5. The European Economic Area (EEA) and Norway Grants. Available online: https://data.eeagrants.org/2014-2021/projects/?beneficiary=RO#projects (accessed on 19 June 2025).
6. European Commission. Horizon 2020. Available online: https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-2020_en (accessed on 19 June 2025).
7. Archidata SRL; Civitta Strategy & Consulting SA; NTSN Conect SRL; Grupul de Consultanță Pentru Dezvoltare (DCG) SRL. Evaluation Report for the Year 2023 of the POCU 2014–2020 Interventions in the Field of Education, 2023. Available online: https://www.evaluare-structurale.ro (accessed on 1 December 2024).
8. Halász, G. Education and Social Transformation in Central and Eastern Europe. *Eur. J. Educ.* **2015**, *50*, 350–371. [CrossRef]
9. Lawn, M.; Grek, S. *Europeanizing Education: Governing a New Policy Space*; Symposium Books: Oxford, UK, 2012; pp. 1–250.
10. Tusa, E. The Influence of Educational Management in the Modernization of Romanian Education. In Proceedings of the RAIS Conference Proceedings 2022–2024 0329, Research Association for Interdisciplinary Studies, Princeton, NJ, USA, 3–4 August 2023. Available online: https://ideas.repec.org/p/smo/raiswp/0329.html (accessed on 25 June 2025).
11. Norouzi Larsari, V. Trends of Innovation of Primary Education in Europe: Goals, Curriculum, Teaching Methods, Assessment, Organization, Structure in the Educational System, Cooperation with Municipality, with Parents. *Int. J. Res. Stud. Educ.* **2022**, *11*, 1–12. [CrossRef]
12. Ion, E.C.; Barbatosu, L. The Impact of Implementing European-Funded Projects on the Quality of Services Provided by School Organizations. *Theor. Appl. Econ.* **2024**, *XXXI*, 113–118. Available online: https://store.ectap.ro/suplimente/Theoretical_and_Applied_Economics_2024_Special_Issue_Summer.pdf#page=113 (accessed on 25 June 2025).
13. Popescu, M.-F.; Chiripuci, B.-C.; Orîndaru, A.; Constantin, M.; Scrieciu, A. Fostering Sustainable Development through Shifting Toward Rural Areas and Digitalization—The Case of Romanian Universities. *Sustainability* **2020**, *12*, 4020. [CrossRef]

14. Hopbach, A. *UNESCO-OECD Guidelines for Quality Provision in Cross-Border Higher Education: Analysis and Recommendations to Move Forward*; UNESCO: Paris, France, 2022. Available online: https://unesdoc.unesco.org/ark:/48223/pf0000389910 (accessed on 5 June 2025).
15. Vincent-Lancrin, S.; Fisher, D.; Pfotenhauer, S. *Ensuring Quality in Cross-Border Higher Education: Implementing the UNESCO/OECD Guidelines*; OECD: Paris, France, 2015. Available online: https://unesdoc.unesco.org/ark:/48223/pf0000243559 (accessed on 5 June 2025).
16. Aldridge, J.M.; Blackstock, M.J.; McLure, F.I. School Climate: Using a Person–Environment Fit Perspective to Inform School Improvement. *Learn. Environ. Res.* **2024**, *27*, 411–430. [CrossRef]
17. Elken, M.; Frølich, N.; Maassen, P.; Stensaker, B. Quality Systems in Higher Education Institutions: Enabling and Constraining Quality Work. In *Quality Work in Higher Education*; Elken, M., Maassen, P., Nerland, M., Prøitz, T., Stensaker, B., Vabø, A., Eds.; Higher Education Dynamics, Volume 54; Springer: Cham, Switzerland, 2020; pp. 15–37. [CrossRef]
18. Kayyali, M. Quality Enhancement Frameworks in Higher Education. In *Quality Assurance and Accreditation in Higher Education*; Palgrave Macmillan: Cham, Switzerland, 2024; pp. 25–48. [CrossRef]
19. OECD. *Education and Skills in Romania, Reviews of National Policies for Education*; OECD: Paris, France, 2025. [CrossRef]
20. Lewno-Dumdie, B.M.; Mason, B.A.; Hajovsky, D.B.; Villeneuve, E.F. Student-Report Measures of School Climate: A Dimensional Review. *Sch. Ment. Health* **2020**, *12*, 1–21. [CrossRef]
21. Terrell, J.H.; Henrich, C.C.; Miskell, R.; Nabors, A.; Grogan, K.; McCrary, J. Measuring School Climate as a Component of School Capacity. *Contemp. Sch. Psychol.* **2025**, *29*, 70–82. [CrossRef]
22. Wang, M.T.; Degol, J. School Climate: A Review of the Construct, Measurement, and Impact on Student Outcomes. *Educ. Psychol. Rev.* **2016**, *28*, 315–352. [CrossRef]
23. Edgerton, A.K.; Desimone, L.M. Teacher Implementation of College- and Career-Readiness Standards: Links among Policy, Instruction, Challenges, and Resources. *AERA Open* **2018**, *4*, 1–25. [CrossRef]
24. Thant Sin, K.K. Curriculum Development as a Tool for Professional Development: Teacher Learning through Collaboration and Communication. *GILE J. Skills Dev.* **2021**, *1*, 29–43. [CrossRef]
25. Thapa, A.; Cohen, J.; Guffey, S.; Higgins-D'Alessandro, A. A Review of School Climate Research. *Rev. Educ. Res.* **2013**, *83*, 357–385. [CrossRef]
26. Rucinski, C.L.; Brown, J.L.; Downer, J.T. Teacher–Child Relationships, Classroom Climate, and Children's Social-Emotional and Academic Development. *J. Educ. Psychol.* **2018**, *110*, 992–1004. [CrossRef]
27. Robinson, L.R.; Leeb, R.T.; Merrick, M.T.; Forbes, L.W. Conceptualizing and Measuring Safe, Stable, Nurturing Relationships and Environments in Educational Settings. *J. Child Fam. Stud.* **2016**, *25*, 1488–1504. [CrossRef]
28. Hansen, K.G.; Barene, S. Exploring the Associations between School Climate and Mental Wellbeing: Insights from the MOVE12 Pilot Study in Norwegian Secondary Schools. *Eur. J. Investig. Health Psychol. Educ.* **2025**, *15*, 46. [CrossRef]
29. Tomaszewski, W.; Xiang, N.; Huang, Y. School Climate, Student Engagement and Academic Achievement across School Sectors in Australia. *Aust. Educ. Res.* **2024**, *51*, 667–695. [CrossRef]
30. Sebastian, J.; Park, S. School Leadership and Organizational Factors: Evaluating Pathways to Student Learning. In *International Encyclopedia of Education*, 4th ed.; Elsevier: Amsterdam, The Netherlands, 2023; pp. 243–254. ISBN 9780128186299. [CrossRef]
31. Veletić, J.; Price, H.E.; Olsen, R.V. Teachers' and Principals' Perceptions of School Climate: The Role of Principals' Leadership Style in Organizational Quality. *Educ. Assess. Eval. Account.* **2023**, *35*, 525–555. [CrossRef]
32. Ozdogru, M.; Sarier, Y.; Korucuoglu, T. How Leadership and School Climate Influence Student Achievement: Evidence from a Comparative Meta-Analysis. *Educ. Process Int. J.* **2025**, *15*, e2025156. [CrossRef]
33. Javornik, Š.; Klemenčič Mirazchiyski, E. Factors Contributing to School Effectiveness: A Systematic Literature Review. *Eur. J. Investig. Health Psychol. Educ.* **2023**, *13*, 2095–2111. [CrossRef]
34. Delgado-Galindo, P.; García-Jiménez, J.; Torres-Gordillo, J.-J.; Rodríguez-Santero, J. School Climate and Academic Performance: Key Factors for Sustainable Education in High-Efficacy Schools and Low-Efficacy Schools. *Sustainability* **2025**, *17*, 6497. [CrossRef]
35. Ainscow, M.; Messiou, K. Engaging with the Views of Students to Promote Inclusion in Education. *J. Educ. Change* **2018**, *19*, 1–17. [CrossRef]
36. OECD. *TALIS 2018 Results (Volume II): Teachers and School Leaders as Valued Professionals*; OECD: Paris, France, 2020. [CrossRef]
37. Molinari, L.; Grazia, V. A Multi-Informant Study of School Climate: Student, Parent, and Teacher Perceptions. *Eur. J. Psychol. Educ.* **2023**, *38*, 1403–1423. [CrossRef]
38. Thompson, C.; Waldeck, D.; Holliman, A. Exploring Teachers' Experience of Occupational Value and Global Accountability Reforms: A Qualitative Inquiry. *Educ. Sci.* **2025**, *15*, 254. [CrossRef]
39. Thi To Khuyen, N.; Van Bien, N.; Lin, P.-L.; Lin, J.; Chang, C.-Y. Measuring Teachers' Perceptions to Sustain STEM Education Development. *Sustainability* **2020**, *12*, 1531. [CrossRef]
40. Jud, J.J.; Hirt, C.N.; Rosenthal, A.; Karlen, Y. Teachers' Motivation: Exploring the Success Expectancies, Values and Costs of the Promotion of Self-Regulated Learning. *Teach. Teach. Educ.* **2023**, *127*, 104093. [CrossRef]

41. Lazarides, R.; Schiefele, U.; Daumiller, M.; Dresel, M. From Teacher Motivation to Teaching Behaviour: A Systematic Review and Theoretical Framework of the Mediating Processes. *Educ. Res. Rev.* **2025**, *48*, 100703. [CrossRef]
42. European Commission. *Education and Training Monitor 2023: Comparative Report*; Publications Office of the European Union: Luxembourg, 2023. Available online: https://data.europa.eu/doi/10.2766/810689 (accessed on 29 July 2025).
43. European Parliamentary Research Service. *Teachers: Key to Achieving the European Education Area (Briefing No. 762.284)*; European Parliament: Brussels, Belgium, 2024. Available online: https://www.europarl.europa.eu/RegData/etudes/BRIE/2024/762284/EPRS_BRI%282024%29762284_EN.pdf (accessed on 29 July 2025).
44. Organisation for Economic Co-Operation and Development. *Education at a Glance 2023: Country Note–Romania*; OECD Education Policy Perspectives, No. 123; OECD: Paris, France, 2023. Available online: https://gpseducation.oecd.org/Content/EAGCountryNotes/EAG2023_CN_ROU_pdf.pdf (accessed on 29 July 2025).
45. Magdaș, I. Curriculum Management Qualification in Education and the Situation in Romania. *PedActa* **2020**, *10*, 63–75. [CrossRef]
46. Christensen, A.A.; Jerrim, J. Professional Learning Communities and Teacher Outcomes: A Cross-National Analysis. *Teach. Teach. Educ.* **2025**, *156*, 104920. [CrossRef]
47. OECD. *Teacher Support for Student Learning: Insights from PISA*; OECD Education Policy Perspectives, No. 124; OECD: Paris, France, 2025. [CrossRef]
48. Brandmiller, C.; Schnitzler, K.; Dumont, H. Teacher Perceptions of Student Motivation and Engagement: Longitudinal Associations with Student Outcomes. *Eur. J. Psychol. Educ.* **2024**, *39*, 1397–1420. [CrossRef]
49. Robinson, M. Teacher Perceptions of Tier 2 Reading Interventions. Ph.D. Thesis, Texas Southern University, Houston, TX, USA, 2022. Available online: https://digitalscholarship.tsu.edu/dissertations/54 (accessed on 19 July 2025).
50. Beeson, M.; Wildman, J.M.; Wildman, J. Does Tackling Poverty Related Barriers to Education Improve School Outcomes? Evidence from the North East of England. *Econ. Lett.* **2024**, *236*, 111614. [CrossRef]
51. Roy, J. Impact of School Finance Reform on Resource Equalization and Academic Performance: Evidence from Michigan. *Educ. Finance Policy* **2011**, *6*, 137–167. [CrossRef]
52. Hyman, J. Does Money Matter in the Long Run? Effects of School Spending on Educational Attainment. *Am. Econ. J. Econ. Policy* **2017**, *9*, 256–280. [CrossRef]
53. Jackson, C.K.; Johnson, R.; Persico, C. *The Effect of School Finance Reforms on the Distribution of Spending, Academic Achievement, and Adult Outcomes*; No. w20118; National Bureau of Economic Research: Cambridge, MA, USA, 2014. [CrossRef]
54. Riinawati, R.; Noor, F. Implication of Education Financing on Student Academic Achievement. *Nidhomul Haq J. Manaj. Pendidik. Islam* **2023**, *8*, 338–350.
55. Hosung, S.; Park, H.; Jung, H. The Effect of Extra School Funding on Students' Academic Achievements under a Centralized School Financing System. *Educ. Finance Policy* **2023**, *18*, 1–24. [CrossRef]
56. Khaemba, B.W.; Sakwa, M.; Wachilonga, L.W. Relationship between Education Financing and Human Capital Investment: A Survey of Public Secondary Schools in Kimilili-Bungoma Sub-County. *Int. J. Acad. Res. Bus. Soc. Sci.* **2014**, *4*, 148. [CrossRef]
57. Atolagbe, A.A. Public Education Financing, Efficiency and Academic Performance of Students in Kwara State Basic Secondary Schools, Nigeria. *J. Elem. Educ.* **2024**, *33*, 1–20. Available online: http://111.68.103.26//journals/index.php/jee/article/view/5141 (accessed on 9 July 2025).
58. Lafortune, J.; Rothstein, J.; Schanzenbach, D.W. School Finance Reform and the Distribution of Student Achievement. *Am. Econ. J. Appl. Econ.* **2018**, *10*, 1–26. [CrossRef]
59. Jackson, C.K.; Wigger, C.; Xiong, H. Do School Spending Cuts Matter? Evidence from the Great Recession. *Am. Econ. J. Econ. Policy* **2021**, *13*, 304–335. [CrossRef]
60. International Commission on the Futures of Education. *Reimagining Our Futures Together: A New Social Contract for Education*; UNESCO: Paris, France, 2021. [CrossRef]
61. UNESCO. *Transforming Education Towards SDG 4: Report of a Global Survey on Country Actions to Transform Education*; UNESCO: Paris, France, 2024. Available online: https://media.unesco.org/sites/default/files/webform/ed3002/390204eng.pdf (accessed on 29 July 2025).
62. UNESCO. *Unpacking Sustainable Development Goal 4: Education 2030 Guide*; UNESCO: Paris, France, 2016. Available online: https://www.unesco.ch/wp-content/uploads/2017/01/Unpacking-sdg4.pdf (accessed on 29 July 2025).
63. Schwerter, J.; Netz, N.; Hübner, N. Does Instructional Time at School Influence Study Time at University? Evidence from an Instructional Time Reform. *Econ. Educ. Rev.* **2024**, *100*, 102526. [CrossRef]
64. Chen, A.; Li, Y. Long-Term Effects of Early-Life Education Intervention on Children's Outcomes: Evidence from School Consolidation in Rural China. *J. Asian Econ.* **2024**, *93*, 101751. [CrossRef]
65. Samuelsson, I.P.; Park, E. How to Educate Children for Sustainable Learning and for a Sustainable World. *Int. J. Early Child.* **2017**, *49*, 273–285. [CrossRef]
66. Siraj-Blatchford, J.; Mogharreban, C.; Park, E. *International Research on Education for Sustainable Development in Early Childhood*; Springer: Dordrecht, The Netherlands, 2016; pp. 1–250.

67. Heckman, J.J. Skill Formation and the Economics of Investing in Disadvantaged Children. *Science* **2006**, *312*, 1900–1902. [CrossRef]
68. Dräger, J.; Klein, M.; Sosu, E. The Long-Term Consequences of Early School Absences for Educational Attainment and Labour Market Outcomes. *Br. Educ. Res. J.* **2024**, *50*, 1636–1654. [CrossRef]
69. Goldman, B.; Gracie, J. *Every Day Counts: Absenteeism and the Returns to Education in High-Poverty Schools*. Working Paper, 2024. Available online: https://jgracie.s3.us-east-2.amazonaws.com/files/jgracie_jmp.pdf (accessed on 1 July 2025).
70. Akkus, M.; Çinkır, Ş. The Problem of Student Absenteeism, Its Impact on Educational Environments, and the Evaluation of Current Policies. *Int. J. Psychol. Educ. Stud.* **2022**, *9*, 978–997. [CrossRef]
71. Attwood, G.; Croll, P. Truancy in Secondary School Pupils: Prevalence, Trajectories and Pupil Perspectives. *Res. Pap. Educ.* **2006**, *21*, 467–484. [CrossRef]
72. Klein, M.; Sosu, E.M.; Dare, S. Mapping Inequalities in School Attendance: The Relationship between Dimensions of Socioeconomic Status and Forms of School Absence. *Child. Youth Serv. Rev.* **2020**, *118*, 105432. [CrossRef]
73. Gershenson, S.; Jacknowitz, A.; Brannegan, A. Are Student Absences Worth the Worry in U.S. Primary Schools? *Educ. Finance Policy* **2017**, *12*, 137–165. [CrossRef]
74. Morrissey, T.W.; Hutchison, L.; Winsler, A. Family Income, School Attendance, and Academic Achievement in Elementary School. *Dev. Psychol.* **2014**, *50*, 741–753. [CrossRef] [PubMed]
75. Gottfredson, D.; Cross, A.B.; Wilson, D.; Rorie, M.; Connell, N. Effects of Participation in After-School Programs for Middle School Students: A Randomized Trial. *J. Res. Educ. Eff.* **2010**, *3*, 282–313. [CrossRef]
76. Durlak, J.A.; Weissberg, R.P.; Pachan, M. A Meta-Analysis of After-School Programs That Seek to Promote Personal and Social Skills in Children and Adolescents. *Am. J. Community Psychol.* **2010**, *45*, 294–309. [CrossRef]
77. Kumar, D.; Choudhury, P.K. Do Private Schools Really Produce More Learning than Public Schools in India? Accounting for Student's School Absenteeism and the Time Spent on Homework. *Int. J. Educ. Dev.* **2021**, *83*, 102395. [CrossRef]
78. Kremer, K.P.; Maynard, B.R.; Polanin, J.R.; Vaughn, M.G.; Sarteschi, C.M. Effects of After-School Programs with At-Risk Youth on Attendance and Externalizing Behaviors: A Systematic Review and Meta-Analysis. *J. Youth Adolesc.* **2015**, *44*, 616–636. [CrossRef]
79. Leos-Urbel, J. What Works after School? The Relationship between After-School Program Quality, Program Attendance, and Academic Outcomes. *Youth Soc.* **2015**, *47*, 684–706. [CrossRef]
80. Contreras, D.; González, L.; Láscar, S.; López, V. Negative Teacher–Student and Student–Student Relationships Are Associated with School Dropout: Evidence from a Large-Scale Longitudinal Study in Chile. *Int. J. Educ. Dev.* **2022**, *91*, 102576. [CrossRef]
81. Murphy-Graham, E.; Montoya, D.P.; Cohen, A.K.; Lopez, E.V. Examining School Dropout among Rural Youth in Honduras: Evidence from a Mixed-Methods Longitudinal Study. *Int. J. Educ. Dev.* **2021**, *82*, 102329. [CrossRef]
82. Ali, K.; Yaseen, M.R.; Makhdum, M.S.A.; Quddoos, A.; Sardar, A. Socioeconomic Determinants of Primary School Children Dropout: A Case Study of Pakistan. *Int. J. Educ. Manag.* **2021**, *35*, 1221–1230. [CrossRef]
83. Singh, H.P.; Alhulail, H.N. Predicting Student-Teachers Dropout Risk and Early Identification: A Four-Step Logistic Regression Approach. *IEEE Access* **2022**, *10*, 6470–6482. [CrossRef]
84. Sabates, R.; Rose, P.; Alcott, B.; Delprato, M. Assessing Cost-Effectiveness with Equity of a Programme Targeting Marginalised Girls in Secondary Schools in Tanzania. *J. Dev. Eff.* **2020**, *13*, 28–46. [CrossRef]
85. Fatimah, S.; Suryandari, K.C.; Mahmudah, U. The Role of Parents, Schools, and Communities for Preventing Dropout in Indonesia. *Int. J. Soc. Sci. Educ. Stud.* **2021**, *8*, 14–29. [CrossRef]
86. Marlow, S.A.; Rehman, N. The Relationship between Family Processes and School Absenteeism and Dropout: A Meta-Analysis. *Educ. Dev. Psychol.* **2021**, *38*, 3–23. [CrossRef]
87. Napitupulu, D.; Rahim, R.; Abdullah, D.; Setiawan, M.I.; Abdillah, L.A.; Ahmar, A.S.; Simarmata, J.; Hidayat, R.; Nurdiyanto, H.; Pranolo, A. Analysis of Student Satisfaction toward Quality of Service Facility. *J. Phys. Conf. Ser.* **2018**, *954*, 012019. [CrossRef]
88. Gray, J.A.; DiLoreto, M. The Effects of Student Engagement, Student Satisfaction, and Perceived Learning in Online Learning Environments. *Int. J. Educ. Leadersh. Prep.* **2016**, *11*, n1. Available online: https://files.eric.ed.gov/fulltext/EJ1103654.pdf (accessed on 9 July 2025).
89. Verkuyten, M.; Thijs, J. School Satisfaction of Elementary School Children: The Role of Performance, Peer Relations, Ethnicity and Gender. *Soc. Indic. Res.* **2002**, *59*, 203–228. Available online: https://pure.rug.nl/ws/files/3034982/VerkuytenM-School.pdf (accessed on 29 July 2025). [CrossRef]
90. Mathur, G.; Nathani, N.; Chauhan, A.S.; Kushwah, S.V.; Quttainah, M.A. Students' Satisfaction and Learning: Assessment of Teaching-Learning Process in Knowledge Organization. *Indian J. Inf. Sources Serv.* **2024**, *14*, 1–8. [CrossRef]
91. De Lam, S.-F.; Jimerson, S.; Wong, B.P.H.; Kikas, E.; Shin, H.; Veiga, F.H.; Hatzichristou, C.; Polychroni, F.; Cefai, C.; Negovan, V.; et al. Understanding and Measuring Student Engagement in School: The Results of an International Study from 12 Countries. *Sch. Psychol. Q.* **2014**, *29*, 213. Available online: https://core.ac.uk/download/pdf/38052999.pdf (accessed on 29 July 2025). [CrossRef] [PubMed]

92. Fredricks, J.; Mccolskey, W.; Manweiler, J.; Mordica, J.; Montrosse-Moorhead, B.; Mooney, K. *Measuring Student Engagement in Upper Elementary Through High School: A Description of 21 Instruments*; Issues & Answers; REL 2011-No. 098; Regional Educational Laboratory Southeast: Washington, DC, USA, 2011.
93. Zumbrunn, S.; McKim, C.; Buhs, E.; Hawley, L.R. Support, Belonging, Motivation, and Engagement in the College Classroom: A Mixed Method Study. *Instr. Sci.* **2014**, *42*, 661–684. [CrossRef]
94. Korpershoek, H.; Canrinus, E.T.; Fokkens-Bruinsma, M.; De Boer, H. The Relationships between School Belonging and Students' Motivational, Social-Emotional, Behavioural, and Academic Outcomes in Secondary Education: A Meta-Analytic Review. *Res. Pap. Educ.* **2020**, *35*, 641–680. [CrossRef]
95. Kassab, S.E.; Rathan, R.; Taylor, D.C.M.; Hamdy, H. The Impact of the Educational Environment on Student Engagement and Academic Performance in Health Professions Education. *BMC Med. Educ.* **2024**, *24*, 1278. [CrossRef]
96. Pedler, M.; Hudson, S.; Yeigh, T. The Teachers' Role in Student Engagement: A Review. *Aust. J. Teach. Educ.* **2020**, *45*, 48–62. Available online: https://search.informit.org/doi/10.3316/ielapa.270830255864389 (accessed on 2 June 2025). [CrossRef]
97. Gruppen, L.D.; Irby, D.M.; Durning, S.J.; Maggio, L.A. Conceptualizing Learning Environments in the Health Professions. *Acad. Med.* **2019**, *94*, 969–974. [CrossRef]
98. Poling, D.V.; Van Loan, C.L.; Garwood, J.D.; Zhang, S.; Riddle, D. Enhancing Teacher–Student Relationship Quality: A Narrative Review of School-Based Interventions. *Educ. Res. Rev.* **2022**, *37*, 100459. [CrossRef]
99. Tahir, I.; Fatima, N. The Impact of Student Engagement, Quality of Student–Faculty Relationship and Student Loyalty on Quality of Higher Education: A Systematic Literature Review. *World J. Adv. Res. Rev.* **2023**, *20*, 741–755. [CrossRef]
100. Virtanen, T.E.; Lerkkanen, M.K.; Poikkeus, A.M.; Kuorelahti, M. The Relationship between Classroom Quality and Students' Engagement in Secondary School. *Educ. Psychol.* **2013**, *35*, 963–983. [CrossRef]
101. Zhou, A.; Guan, X.; Ahmed, M.Z.; Ahmed, O.; Jobe, M.C.; Hiramoni, F.A. An Analysis of the Influencing Factors of Study Engagement and Its Enlightenment to Education: Role of Perceptions of School Climate and Self-Perception. *Sustainability* **2021**, *13*, 5475. [CrossRef]
102. Ömeroğulları, M.; Gläser-Zikuda, M. Relationships between School Enjoyment, Social Integration, and Achievement at the Beginning of Primary School: Does Family Background Matter? *Eur. J. Psychol. Educ. Res.* **2022**, *5*, 127–143. [CrossRef]
103. Anderson, D.L.; Graham, A.P.; Simmons, C.; Thomas, N.P. Positive Links between Student Participation, Recognition and Wellbeing at School. *Int. J. Educ. Res.* **2022**, *111*, 101896. [CrossRef]
104. Rautanen, P.; Soini, T.; Pietarinen, J.; Pyhältö, K. Primary School Students' Perceived Social Support in Relation to Study Engagement. *Eur. J. Psychol. Educ.* **2021**, *36*, 653–672. [CrossRef]
105. Hatfield, J.L.; Soløst, T.E.T. Assessing the Assessment: Exploring Norwegian Primary Education Teachers' Perceptions of National Accountability Testing. *Scand. J. Educ. Res.* **2024**, *69*, 391–408. [CrossRef]
106. Camphuijsen, M.K.; Parcerisa, L. Teachers' Beliefs about Standardised Testing and Test-Based Accountability: Comparing the Perceptions and Experiences of Teachers in Chile and Norway. *Eur. J. Educ.* **2023**, *58*, 67–82. [CrossRef]
107. Barragán, S.; Marcelo, E. Results of Standardized Government Tests: An Educational Quality Indicator. *Front. Educ.* **2023**, *8*, 1288640. [CrossRef]
108. Sammons, P.; Bakkum, L. Effective Schools, Equity and Teacher Efficacy: A Review of the Literature. *Profr. Rev. Currículum Form. Profr.* **2011**, *15*, 9–26.
109. Engida, M.A.; Iyasu, A.S.; Fentie, Y.M. Impact of Teaching Quality on Student Achievement: Student Evidence. *Front. Educ.* **2024**, *9*, 1367317. [CrossRef]
110. Susilowati, N.; Sukidjo, S. The Factors Affecting National Examination Achievement in High Schools. *Harmoni Sos. J. Pendidik. IPS* **2020**, *7*, 22–33. [CrossRef]
111. Hamidy, A.; Jailani, J.; Rahman, F. The Effect of National Examination and Curriculum on Students' Performance in Solving TIMSS Model Mathematics Problems. *Prisma Sains J. Pengkaj. Ilmu Pembelajaran Mat. IPA IKIP Mataram* **2020**, *8*, 1–11. [CrossRef]
112. Durán-Narucki, V. School Building Condition, School Attendance, and Academic Achievement in New York City Public Schools: A Mediation Model. *J. Environ. Psychol.* **2008**, *28*, 278–286. [CrossRef]
113. Manca, S.; Cerina, V.; Tobia, V.; Sacchi, S.; Fornara, F. The Effect of School Design on Users' Responses: A Systematic Review (2008–2017). *Sustainability* **2020**, *12*, 3453. [CrossRef]
114. Andrade, A.E.; Padilla, L.; Carrington, S.J. Educational Spaces: The Relation between School Infrastructure and Learning Outcomes. *Heliyon* **2024**, *10*, e38361. [CrossRef]
115. John, M.O.; Aliyu, U.M.A.R. Educational Infrastructure and Its Impact on Academic Performance in Nigerian Schools. *Iconic Res. Eng. J.* **2024**, *8*, 497–502. Available online: https://www.researchgate.net/profile/Moses-Obinna-John/publication/391395605_Educational_Infrastructure_and_Its_Impact_on_Academic_Performance_in_Nigerian_Schools/links/6814e7c160241d514021a5dd/Educational-Infrastructure-and-Its-Impact-on-Academic-Performance-in-Nigerian-Schools.pdf (accessed on 2 June 2025).
116. Simons, E.; Hwang, S.A.; Fitzgerald, E.F.; Kielb, C.; Lin, S. The Impact of School Building Conditions on Student Absenteeism in Upstate New York. *Am. J. Public Health* **2010**, *100*, 1679–1686. [CrossRef] [PubMed]

117. Hu, M. Optimal Renovation Strategies for Education Buildings—A Novel BIM–BPM–BEM Framework. *Sustainability* **2018**, *10*, 3287. [CrossRef]
118. Vestfal, P.; Seduikyte, L. Systematic Review of Factors Influencing Students' Performance in Educational Buildings: Focus on LCA, IoT, and BIM. *Buildings* **2024**, *14*, 2007. [CrossRef]
119. Catalina, T.; Ghita, S.A.; Popescu, L.L.; Popescu, R. Survey and Measurements of Indoor Environmental Quality in Urban/Rural Schools Located in Romania. *Int. J. Environ. Res. Public Health* **2022**, *19*, 10219. [CrossRef]
120. Nepal, B. Relationship among School's Infrastructure Facilities, Learning Environment and Student's Outcome. *Int. J. Res. Soc. Sci. Humanit. Res.* **2016**, *2*, 44–57. Available online: https://www.researchgate.net/publication/326539338_RELATIONSHIP_AMONG_SCHOOLâĂŹS_INFRASTRUCTURE_FACILITIES_LEARNING_ENVIRONMENT_AND_STUDENTâĂŹS_OUTCOME (accessed on 2 June 2025).
121. Wanke, P.; Lauro, A.; dos Santos Figueiredo, O.H.; Faria, J.R.; Mixon, F.G. The Impact of School Infrastructure and Teachers' Human Capital on Academic Performance in Brazil. *Eval. Rev.* **2023**, *48*, 636–662. [CrossRef]
122. European Commission Staff. *Capacity for Digital Education and Training in European Countries (SWD(2023)205)*. Available online: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A52023SC0205 (accessed on 2 June 2025).
123. Ahmed, S.; Baloch, M.A.; Karim, H. Investigating the Impact of Teaching–Learning Materials on Students' Academic Performance in Government Primary Schools in the Naseerabad Division, Balochistan, Pakistan. *J. Dev. Soc. Sci.* **2024**, *5*, 538–545. [CrossRef]
124. Ion, C.E.; Hamburda, R.O. The Impact of School Infrastructure on the Performance of Pupils. *Lumen Proc.* **2020**, *10*, 362–367. [CrossRef]
125. Barrett, P.; Treves, A.; Shmis, T.; Ambasz, D. *The Impact of School Infrastructure on Learning: A Synthesis of the Evidence*; World Bank Group: Washington, DC, USA, 2019. Available online: https://books.google.ro/books?hl=en&lr=&id=Tf6jDwAAQBAJ&oi=fnd&pg=PP1&dq=The+Impact+of+School+Infrastructure+on+Learning+&ots=WzXP4ZmQAQ&sig=gGUhQiqwQFeHY2UJVUccHGyNKSY&redir_esc=y#v=onepage&q=The%20Impact%20of%20School%20Infrastructure%20on%20Learning&f=false (accessed on 2 June 2025).
126. Mogaka, M.M. The Relationship between Classroom Equipment and Students' Academic Achievement in Public Day Secondary Schools in Kisii County, Kenya. *Int. J. Res. Innov. Soc. Sci.* **2019**, *3*, 53–57. Available online: https://rsisinternational.org/journals/ijriss/Digital-Library/volume-3-issue-8/53-57.pdf (accessed on 2 June 2025).
127. Savasci, H.S.; Tomul, E. The Relationship between Educational Resources of School and Academic Achievement. *Int. Educ. Stud.* **2013**, *6*, 114–123. [CrossRef]
128. Karataş, T.; Malo, S.; Hernandez-Martinez, P. Reshaping Curriculum Adaptation in the Age of Artificial Intelligence: Mapping Teachers' AI-Driven Curriculum Adaptation Patterns. *Br. Educ. Res. J.* **2024**, *51*, 154–180. [CrossRef]
129. Hargreaves, A.; Fullan, M. *Professional Capital: Transforming Teaching in Every School*; Teachers College Press: New York, NY, USA, 2012. Available online: https://books.google.ro/books?id=2sRWQxBBsj4C&printsec=frontcover (accessed on 2 June 2025).
130. Andrietti, V.; Su, X. Education Curriculum and Student Achievement: Theory and Evidence. *Educ. Econ.* **2019**, *27*, 4–19. [CrossRef]
131. Mejía-Rodríguez, A.M.; Kyriakides, L. What Matters for Student Learning Outcomes? A Systematic Review of Studies Exploring System-Level Factors of Educational Effectiveness. *Rev. Educ.* **2022**, *10*, e3374. [CrossRef]
132. Ainscow, M. *Struggles for Equity in Education: The Selected Works of Mel Ainscow*; Routledge: London, UK, 2015. [CrossRef]
133. Sulastri, A.; Adri, H.T.; Syamsudin, D. The Role of Teachers in Improving Quality of Education and Developing Competencies of Primary School Students at Muslim Suksa School Thailand. *Contin. Educ. J. Sci. Res.* **2024**, *5*, 1–8. [CrossRef]
134. Schuster, D.; Cobern, W.W.; Adams, B.A.; Undreiu, A.; Pleasants, B. Learning of Core Disciplinary Ideas: Efficacy Comparison of Two Contrasting Modes of Science Instruction. *Res. Sci. Educ.* **2018**, *48*, 389–435. [CrossRef]
135. Carter, E.; Molina, E.; Pushparatnam, A.; Rimm-Kaufman, S.; Tsapali, M.; Wong, K.K.-Y. Evidence-Based Teaching: Effective Teaching Practices in Primary School Classrooms. *Lond. Rev. Educ.* **2024**, *22*, 8. [CrossRef]
136. Tomaszewski, W.; Xiang, N.; Huang, Y.; Western, M.; McCourt, B.; McCarthy, I. The Impact of Effective Teaching Practices on Academic Achievement When Mediated by Student Engagement: Evidence from Australian High Schools. *Educ. Sci.* **2022**, *12*, 358. [CrossRef]
137. Röhl, S.; Bijlsma, H.; Schwichow, M. Can Feedback from Students to Teachers Improve Different Dimensions of Teaching Quality in Primary and Secondary Education? A Hierarchical Meta-Analysis. *Educ. Assess. Eval. Account.* **2025**, *37*, 35–71. [CrossRef]
138. Fauth, B.; Decristan, J.; Decker, A.T.; Büttner, G.; Hardy, I.; Klieme, E.; Kunter, M. The Effects of Teacher Competence on Student Outcomes in Elementary Science Education: The Mediating Role of Teaching Quality. *Teach. Teach. Educ.* **2019**, *86*, 102882. [CrossRef]
139. Schleicher, A. Building on COVID-19's Innovation Momentum for Digital, Inclusive Education. In *International Summit on the Teaching Profession*; OECD: Paris, France, 2022. [CrossRef]
140. Embacher, E.-M.; Smidt, W. Associations between Teachers' Professional Competencies and the Quality of Interactions and Relationships in Preschool: Findings from Austria. *Front. Psychol.* **2023**, *14*, 1222369. [CrossRef]

141. Widodo, W.; Gustari, I.; Chandrawaty, C. Adversity Quotient Promotes Teachers' Professional Competence More Strongly Than Emotional Intelligence: Evidence from Indonesia. *J. Intell.* **2022**, *10*, 44. [CrossRef] [PubMed]
142. Leithwood, K.; Sun, J. The Nature and Effects of Transformational School Leadership: A Meta-Analytic Review of Unpublished Research. *Educ. Adm. Q.* **2012**, *48*, 387–423. [CrossRef]
143. Gningue, S.M.; Peach, R.; Jarrah, A.M.; Wardat, Y. The Relationship between Teacher Leadership and School Climate: Findings from a Teacher-Leadership Project. *Educ. Sci.* **2022**, *12*, 749. [CrossRef]
144. Garza, E.; Drysdale, L.; Gurr, D.; Jacobson, S.; Merchant, B. Leadership for School Success: Lessons from Effective Principals. *Int. J. Educ. Manag.* **2014**, *28*, 770–791. [CrossRef]
145. Leithwood, K.; Louis, K.S.; Anderson, S.; Wahlstrom, K. *How Leadership Influences Student Learning*; Review of Research; Wallace Foundation: New York, NY, USA, 2004. Available online: https://eric.ed.gov/?id=ED485932 (accessed on 9 July 2025).
146. Day, C.; Sammons, P.; Gorgen, K. *Successful School Leadership*; Education Development Trust: Reading, UK; University of Nottingham: Nottingham, UK; University of Oxford, Department of Education: Oxford, UK, 2020; p. 59.
147. Ismail, M.; Khatibi, A.A.; Azam, S.M.F. Impact of School Culture on School Effectiveness in Government Schools in Maldives. *Particip. Educ. Res.* **2022**, *9*, 261–279. [CrossRef]
148. Cochran, W.G. *Sampling Techniques*, 3rd ed.; John Wiley & Sons: New York, NY, USA, 1977.
149. Ahmad, H.; Halim, H. Determining Sample Size for Research Activities. *Selangor Bus. Rev.* **2017**, *2*, 20–34. Available online: https://sbr.journals.unisel.edu.my/index.php/sbr/article/view/12 (accessed on 1 June 2025).
150. Adam, A.M. Sample Size Determination in Survey Research. *J. Sci. Res. Rep.* **2020**, *26*, 90–97. [CrossRef]
151. Malhotra, N.K. *Marketing Research. An Applied Orientation*; Georgia Institute of Technology: New York, NY, USA, 2019.
152. Kolb, B. *Absolute Essentials of Marketing Research*, 1st ed.; Routledge: London, UK, 2021. [CrossRef]
153. Haepp, T. *Meta-Analysis of the European Social Fund Counterfactual Impact Evaluations: First Quantitative Results on Education Outcomes*; JRC Policy Brief, JRC143146; European Commission, Joint Research Centre: Ispra, Italy, 2025. Available online: https://publications.jrc.ec.europa.eu/repository/handle/JRC143146 (accessed on 1 June 2025).
154. Fusaro, S.; Scandurra, R. The impact of the European Social Fund on youth education and employment. *Socio-Econ. Plann. Sci.* **2023**, *88*, 101650. [CrossRef]
155. García-Cid, A.; Khalfaoui, A.; Fernández-Villardón, A.; Fresno Anabo, I.; Gutiérrez-Fernández, N.; Santiago-Garabieta, M.; Sharipova, D.; Villardón-Gallego, L.; García-Carrión, R. Addressing underachievement and early school leaving in Europe: The role of institutional factors. *Educ. Rev.* **2025**, *77*, 1–21. [CrossRef]
156. Magalhães, A.M.; Araújo, H.C.; Macedo, E.; Rocha, C. Early school leaving in Portugal: Policies and actors' interpretations. *Educ. Soc. Cult.* **2015**, *45*, 97–119. Available online: https://repositorio-aberto.up.pt/bitstream/10216/82682/2/117582.pdf (accessed on 10 September 2025).
157. Sokoláková, M. The Impact of European Funding on Learning Outcomes of Pupils in Slovakia. Bachelor's Thesis, Charles University, Faculty of Social Sciences, Institute of Economic Studies, Prague, Czech Republic, 2023. Available online: https://top-az.eu/wp-content/uploads/2024/02/130356650_merged.pdf?utm_source=chatgpt.com (accessed on 10 September 2025).
158. Agosti, F.; Dusatko, J.; Meroni, E.C.; Vrobel, J. *Evaluation of the Support to Schools Project in Czech Republic*; Publications Office of the European Union: Luxembourg, 2021; EUR 30860 EN. Available online: https://publications.jrc.ec.europa.eu/repository/handle/JRC125324 (accessed on 10 September 2025).