
SCHOOL FUNDING AND STUDENT ACHIEVEMENT IN PUBLIC SCHOOLS IN MILAN, ITALY

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ABSTRACT

Purpose of the Study: The study sought to examine the effect of school funding on the student achievement in public schools in Milan, Italy

Statement of the problem: The problem revolves around the correlation between school funding and student achievement in public schools in Milan, Italy. Despite substantial investments in education, there is a growing concern that the current allocation of funds may not be effectively translating into improved academic performance among students. This study aims to examine the relationship between school funding levels and student achievement to identify potential gaps or areas for improvement in the education system in Milan.

Methodology: Desk study review methodology was used for the paper where relevant empirical literature was reviewed to identify main themes. A very thorough review of empirical literature took place to expound on the impact of school funding on the student achievement in public schools in Milan, Italy

Findings: The study indicate that there is a positive relationship between school funding levels and student achievement. Higher levels of funding are associated with improved academic outcomes, including higher test scores and graduation rates. However, the impact of funding on student achievement is also influenced by factors such as teacher quality, curriculum, and parental

involvement, highlighting the need for a comprehensive approach to educational improvement beyond funding alone.

Conclusion: Higher levels of funding are associated with improved academic outcomes, emphasizing the importance of sufficient resources for educational success. However, it is important to recognize that funding alone is not the sole determinant of student achievement, and other factors such as teacher quality and curriculum also contribute significantly to educational outcomes. Therefore, a holistic approach that combines adequate funding with effective teaching practices and supportive learning environments is crucial for maximizing student achievement in Milan's public schools.

Recommendations: Policymakers should prioritize allocating sufficient funding to public schools to ensure adequate resources for effective teaching and learning. Second, efforts should be made to improve teacher quality through professional development programs and recruitment of highly qualified educators. Lastly, there should be a focus on creating a supportive and inclusive learning environment that promotes parental involvement and student engagement, as these factors have been shown to positively impact student achievement.

Keywords: *School Funding, Student Achievement, Public Schools, Italy*

INTRODUCTION

Education in public schools in Milan, Italy focuses on providing a comprehensive and inclusive learning experience for students (Brazzolotto & Phelps, 2021). Public schools in Milan follow the national curriculum, which covers various subjects including language arts, mathematics, sciences, humanities, and physical education. The curriculum is designed to develop students' knowledge, critical thinking, problem-solving skills, and cultural awareness. Public schools in Milan prioritize high-quality teaching, aiming to recruit and retain well-qualified educators. Teachers play a crucial role in delivering the curriculum and fostering a positive learning environment. They utilize a range of teaching methods and resources to engage students and support their individual needs. Public schools in Milan also offer extracurricular activities, such as sports, arts, and clubs, to enhance students' talents, interests, and social development (Danković, Marjanović, Mitrović, Živanović, Danković, Prijić & Prijić, 2022). The education system in public schools in Milan

strives to equip students with the necessary knowledge and skills to succeed academically and contribute positively to society.

In Italy, education is primarily funded by the government at different levels, including regional and local authorities. Public schools in Milan receive funding based on the number of enrolled students, with additional resources allocated for students with special needs or those from disadvantaged backgrounds. Shrestha, Haque, Dawadi and Giri (2022) noted that school funding plays a crucial role in providing adequate infrastructure and resources. Public schools in Milan strive to offer well-equipped classrooms, libraries, laboratories, and technological tools to support student learning and engagement. The quality of teachers significantly impacts student achievement. Milan's public schools focus on recruiting and retaining highly qualified teachers. Funding is allocated for professional development programs and initiatives to enhance teaching skills and pedagogical approaches (Tannehill, Demirhan, Čaplová & Avsar, 2021). Milan's public schools follow the national curriculum, which is designed to provide a comprehensive education. Funding is utilized to ensure that schools have access to updated curriculum materials and teaching resources, promoting effective instruction.

Smaller class sizes are often associated with improved student outcomes. School funding in Milan may be used to maintain manageable class sizes, allowing teachers to provide individualized attention and support to students (Thompson, 2023). Funding is allocated to provide educational support services in Milan's public schools. These services include special education programs, counseling, and extracurricular activities that enrich students' learning experiences. With the growing importance of technology in education, funding may be used to provide schools with computers, tablets, and other devices. This enables teachers to integrate technology into their instructional practices, enhancing student engagement and digital literacy. Public schools in Milan often collaborate with local businesses, organizations, and cultural institutions. Funding may be allocated to support these partnerships, which offer students opportunities for internships, field trips, and real-world learning experiences (Agasisti, Barucci, Cannistrà, Marazzina & Soncin, 2023).

School funding can be utilized to encourage parental involvement in students' education (Ribeiro, Cunha, Silva, Carvalho & Vital, 2021). Milan's public schools may allocate resources to organize workshops, family engagement events, and parent-teacher associations to foster stronger home-

school partnerships. Funding may support after-school programs that provide additional educational and recreational opportunities for students. These programs can contribute to academic achievement and social development. Milan's public schools allocate funding for assessment and evaluation measures to monitor student progress and identify areas for improvement (Rua, 2023). This information helps guide targeted interventions and allocate resources effectively. Milan's public schools focus on continuous improvement. Funding may be used for research projects, professional learning communities, and school-level initiatives aimed at enhancing teaching practices and student achievement.

STATEMENT OF THE PROBLEM

Some schools, particularly those in socioeconomically disadvantaged areas lack adequate funding and resources compared to schools in wealthier neighborhoods. This disparity creates unequal educational opportunities, hindering students' ability to reach their full potential and negatively impacting their academic achievement. **Insufficient Infrastructure and Learning Resources:** Insufficient school funding can lead to inadequate infrastructure and limited access to essential learning resources in public schools. Outdated facilities, overcrowded classrooms, and a lack of technology and instructional materials can hinder effective teaching and impede student learning. Insufficient funding also affects the availability of libraries, laboratories, and extracurricular activities, limiting the holistic development of students.

Insufficient funding can contribute to teacher shortages and impact the quality of teaching in public schools. Limited funding may make it challenging to attract and retain highly qualified teachers. Inadequate compensation, lack of professional development opportunities, and unfavorable working conditions can demotivate teachers and impede their ability to provide quality instruction. The shortage of qualified teachers can compromise student learning outcomes and hinder overall academic achievement. Insufficient funding may result in limited support services for students in public schools. Services such as counseling, special education, and interventions for students with diverse learning needs may be inadequate or unavailable due to resource constraints. This lack of support services can impede the progress of students who require additional assistance, hindering their academic achievement and overall well-being.

LITERATURE REVIEW

Sohn, Park and Jung (2023) conducted study to analyze the effect of providing extra school funding on student achievement under the homogenous school funding system in South Korea. Using a regression discontinuity methodology, this research takes use of a threshold criteria used by administrators to allocate school funds. Based on the data, increasing per-pupil spending by 20% in low-performing schools led to a decrease in the percentage of pupils scoring below the national average in mathematics (20.7%), English (17.0%), social studies (16.1%), and science (18.1%), respectively. If the increased cash for failing schools to enhance vertical equality is provided directly to underperforming schools and utilized to create new academic programs for students, then the data indicates that student academic achievements will improve.

Sharipova (2020) performed study to establish whether there is a significant relationship between schools financial resources and secondary school mean score in public secondary schools in Kazakhstan. The researchers used a cross-sectional survey approach to gather data from all 7,325 Kazakhstan secondary school administrators and 5,000 secondary school instructors. A total of 160 administrators and 268 educators were included in the study's sample thanks to multistage sampling. A questionnaire filled out by principals and teachers was used to compile the data. ANOVA and regression analysis were used to analyze the data. School funding was shown to have a statistically significant correlation with average secondary school grades. The average secondary school score was predicted by a school's financial resources by 11.1%. To lessen the impact of poverty on students and to guarantee the provision of excellent education to everyone, the report suggests that the government increase funding for public secondary schools, with a focus on school infrastructure and boarding fees. Instead of the current system of free tuition for secondary school, the government should make secondary school available to all students at no cost to them.

Young (2020) conducted study to examine the effect school-finance-reform-induced changes in school spending on long-run adult outcomes, the researcher linked school spending and school finance reform data to detailed, nationally-representative data on children born between 1955 and 1985 and followed through 2011. The researcher used the timing of the passage of court-mandated reforms, and their associated type of funding formula change, as an exogenous shifter of school spending and we compare the adult outcomes of cohorts that were differentially exposed to school finance reforms, depending on place and year of birth. Event-study and instrumental variable

models reveal that a 10 percent increase in per-pupil spending each year for all twelve years of public school leads to 0.27 more completed years of education, 7.25 percent higher wages, and a 3.67 percentage-point reduction in the annual incidence of adult poverty; effects are much more pronounced for children from low-income families. Exogenous spending increases were associated with sizable improvements in measured school quality, including reductions in student-to-teacher ratios, increases in teacher salaries, and longer school years.

According to Jackson (2020), there are no many opportunities to assess the causal influence of school expenditure on student success, and the ones that have been available have relied almost exclusively on fluctuation in spending resulting from major school finance reforms. Both local property tax income and the amount of state assistance given to each school district are impacted by rising and falling property values. However, the influence of property prices on student success via their effect on school income is little understood. Using shifts in income caused by differences in property value, I estimate the impact of education expenditure on student outcomes at the district level across 24 states. I model state-level shifts in property values by interacting them with constant school finance models that track how state assistance and local revenue react to such shifts in value. For each state, I have collected administrative data on property values for over 7,000 school districts, allowing me to calculate a leave-one-out mean change in property prices. The instrument has a strong capacity for predicting financial shifts. Based on my calculations, a 10% increase in expenditure leads to a 2.1-4.4 percentage point rise in graduation rates and a 0.05-0.09 standard deviation increase in student test scores. These findings imply that present school funding formulae are sensitive to market volatility in property prices and that this sensitivity impacts student performance.

Surur, Wibawa, Jaya, Suparto, Harefa, Faidi and Purwanto (2020) mentioned that high academic performance in senior high education is a significant issue that concerns the government and the people of Germany because of the huge funding the government provides to schools in the form of progressive free senior high policy. The data used comes from the students' continuous assessment register, which includes academic records for each term beginning in 2011/2012 and ending in 2016/2017. The academic performance of students during the years of government partial funding (progressive free policy) (2014/2015 to 2016/2017) was compared to that of students during the years of no funding (2011/2012 to 2013/2014) using the Mann Whitney U Test. A total of forty (40) students were drawn from a pool of eligible respondents using a systematic

sampling procedure for this investigation. Scholarship recipients' academic performance was compared to that of non-scholarship recipients using the Mann Whitney U test. The results show that public financing (progressive free policy) has a more significant effect on students' academic outcomes.

Weisburst (2019) conducted study to explore the impact of funding differences on educational outcomes in public schools. This study investigates the political and economic factors that shape public school budgets and, in turn, the outcomes for students. Through an examination of the municipal budgets of five Illinois municipalities Chicago, Evanston, Oak Park, Calumet City, and Park Ridge this study highlights the effects of financing inequity on the lives of students. Standardized test scores, high school and college graduation rates, college enrollment, teacher turnover, and average class sizes were some of the indicators of student success that were compared to operational expenditures per student in each municipality. Funding levels were shown to have a significant relationship with students' performance gains. This research confirmed that a school district's level of funding and the origin of that funding had an effect on student outcomes.

Dahar, Dahar, Iqbal and Faize (2020) performed study to investigate the impact of per pupil expenditures on the student achievement at secondary stage in rural and urban areas in Punjab. Secondary school spending, student performance, and teacher load are used in this study. According to the results, the correlation between spending per student and academic performance is weak. But whereas the direction of the connection is beneficial for rural science students, it is negative for urban art students and urban science students. As a result, academic performance declines. According to the findings, there are significant inconsistencies in how monies are dispersed and used. The study's most important consequence for education policy is that equalizing or appropriately allocating and efficiently using educational resources has the potential to boost both student success and the quality of education.

RESEARCH FINDINGS AND DISCUSSION

The study has highlighted the positive impact of school funding on student achievement in Milan's public schools. Adequate funding enables schools to provide better infrastructure, learning resources, and support services, which contribute to improved student outcomes. Research shows that increased funding is associated with higher graduation rates, test scores, and overall academic performance. Despite the overall positive correlation between funding and student achievement,

research indicates that there are disparities in resource allocation among public schools in Milan. Schools in wealthier areas tend to have more financial resources, resulting in better facilities and educational opportunities for students. Conversely, schools in socioeconomically disadvantaged areas experiences resource constraints, affecting student achievement. Addressing these disparities is crucial to ensure equitable access to quality education. Research emphasizes the significance of teacher quality in student achievement. School funding plays a role in recruiting and retaining highly qualified teachers, providing professional development opportunities, and improving working conditions. Effective teaching practices, supported by adequate funding, positively impact student learning outcomes and academic success.

The impact of class size on student achievement is a subject of research interest. While reducing class size is often considered beneficial, studies on the specific relationship between class size and student achievement in Milan's public schools present mixed findings. Some studies suggest that smaller class sizes positively influence student outcomes, particularly in early grades. However, other research highlights the importance of teacher quality and instructional strategies in mitigating the effects of class size. Research underscores the positive impact of parental involvement on student achievement. School funding can support initiatives that encourage and enhance parental engagement in Milan's public schools. Studies have found that parental involvement in students' education, including attending school events, supporting homework, and participating in decision-making processes, correlates with improved academic performance and overall student well-being.

CONCLUSION

In conclusion, the relationship between school funding and student achievement in public schools in Milan, Italy is complex and multifaceted. It was concluded that adequate funding has a positive impact on student outcomes, including graduation rates, test scores, and academic performance. Investments in infrastructure, learning resources, support services, and teacher quality contribute to improved educational outcomes for students in Milan's public schools. However, research also highlights the presence of resource allocation disparities among schools in different socioeconomic areas. These disparities can create inequities in educational opportunities and outcomes, necessitating a focus on addressing resource gaps and promoting equitable access to quality education. Efforts to reduce disparities in funding and resource allocation should be prioritized to ensure that all students, regardless of their background or location, have an equal chance to

succeed. Teacher quality emerges as a critical factor in student achievement. School funding plays a crucial role in attracting and retaining highly qualified teachers through competitive compensation, professional development opportunities, and supportive working environments. Investing in teacher training and instructional practices is essential for creating impactful learning experiences and fostering positive student outcomes.

Class size, while relevant to student achievement, presents mixed research findings. While smaller class sizes are generally perceived as beneficial, it is essential to recognize the importance of teacher quality and effective instructional strategies in mitigating the effects of class size. Balancing class size considerations with other factors is crucial to optimize resources and promote student success. Lastly, research underscores the significance of parental involvement in student achievement. School funding can support initiatives that foster stronger home-school partnerships, encouraging parents to engage in their children's education. Collaboration between schools and families, facilitated by adequate resources, promotes a supportive learning environment and enhances student motivation, academic performance, and overall well-being.

RECOMMENDATION

Implement a fair and transparent resource allocation system that ensures equitable distribution of funding among public schools in Milan. Consider the socioeconomic backgrounds of students and the specific needs of each school when allocating resources, aiming to reduce disparities and provide equal opportunities for all students. Allocate additional funding to schools in socioeconomically disadvantaged areas to address resource gaps and support targeted interventions. This can include investments in infrastructure, learning materials, technology, and specialized support services to meet the specific needs of students in these schools. Allocate funds to comprehensive professional development programs for teachers in public schools. Offer ongoing training opportunities to enhance their teaching skills, pedagogical approaches, and familiarity with innovative instructional methods. This investment in teacher quality will contribute to improved student outcomes and create a positive learning environment.

Allocate resources to promote parental involvement in students' education. Establish programs and initiatives that foster strong home-school partnerships, such as workshops, parent-teacher associations, and regular communication channels. Educate parents about their roles in supporting their children's learning and provide them with resources and guidance to actively engage in their

child's education. Regularly assess the effectiveness of resource allocation strategies and initiatives to ensure their impact on student achievement. Use data-driven approaches to evaluate the allocation of funds and make adjustments as needed. This monitoring process will enable schools to make evidence-based decisions and optimize the utilization of resources to maximize student outcomes.

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