

**PUBLIC POLICIES AND EXTRACURRICULAR ACTIVITIES: IMPLICATIONS
ON SCHOOL PERFORMANCE**

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NO DESEMPENHO ESCOLAR***

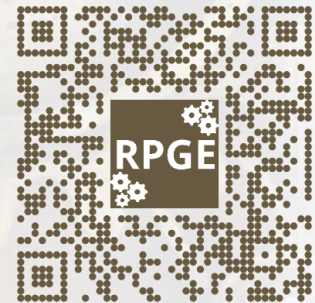
***POLÍTICAS PÚBLICAS Y ACTIVIDADES EXTRACURRICULARES:
IMPLICACIONES EN EL DESEMPEÑO ESCOLAR***



Neyfsom Carlos Fernandes MATIAS¹
e-mail: neyfsom@ufsj.edu.br

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¹ Federal University of São João del-Rei (UFSJ), São João del-Rei – MG – Brazil. Professor of the Graduate Program in Psychology and the Department of Psychology at the Federal University of São João del-Rei.

ABSTRACT: The contexts that children attend, in addition to family and school, play an important role in schooling, and it is essential to carry out research on these implications. This study investigated the differences in academic performance between participants and non-participants in structured extracurricular activities, developed by a school and a Non-Governmental Organization. Seventy-eight students from a public school, 53 of whom were female, with an average age of 10.57 years (SD=0.57), participated in the research. Students who stayed at home demonstrated higher academic performance compared to those participating in activities offered by a municipal program. This indicates that government public policies have been constituted more as contexts of social protection than of learning. It is concluded that public programs for children must be developed through State policies to actually collaborate in the schooling process.

KEYWORDS: Extracurricular activities. School performance. Social protection. Full-time school. Non-governmental organization.

RESUMO: Os contextos que as crianças frequentam, além da família e da escola, têm papel importante na escolarização e é pertinente a realização de pesquisas sobre essas implicações. Este estudo investigou as diferenças no desempenho escolar entre participantes e não participantes de atividades extracurriculares estruturadas, desenvolvidas por uma escola e por uma Organização Não Governamental. Setenta e oito estudantes de uma escola pública, sendo 53 do sexo feminino, com idade média de 10,57 anos (DP=0,57), participaram da pesquisa. Os alunos que ficavam em casa demonstraram desempenho escolar superior em relação aos participantes das atividades oferecidas por um programa municipal. Isso indica que as políticas públicas de governos têm se constituído mais como contextos de proteção social, do que de aprendizagem. Conclui-se que, programas públicos para as crianças devem ser desenvolvidos por meio de políticas de Estado com o intuito de colaborar de fato no processo de escolarização.

PALAVRAS-CHAVE: Atividades extracurriculares. Desempenho escolar. Proteção social. Educação em tempo integral. Organização não governamental.

RESUMEN: Los contextos a los que asisten los niños, además de la familia y la escuela, juegan un papel importante en la escolarización y es importante realizar investigaciones sobre estas implicaciones. Este estudio investigó las diferencias en el rendimiento académico entre participantes y no participantes en actividades extracurriculares estructuradas, desarrolladas por una escuela y una Organización No Gubernamental. Participaron de la investigación setenta y ocho estudiantes de una escuela pública, 53 de los cuales eran mujeres, con una edad promedio de 10,57 años (DE=0,57). Los estudiantes que permanecieron en casa demostraron un mayor rendimiento académico en comparación con los que participaron en actividades ofrecidas por un programa municipal. Esto indica que las políticas públicas gubernamentales se han constituido más como contextos de protección social que de aprendizaje. Se concluye que los programas públicos para la niñez deben desarrollarse a través de políticas de Estado con el objetivo de colaborar efectivamente en el proceso de escolarización.

PALABRAS CLAVE: Actividades extracurriculares. El rendimiento escolar. Protección social. Educación a tiempo completo. Organización no gubernamental.

Introduction

Extracurricular activities are actions carried out outside of school hours and can be categorized into two forms. The first is characterized as unstructured and usually takes place in the student's family context or other locations such as parks, squares, and even on the streets, with or without adult supervision. Students spend their free time watching television, playing games, and engaging in various activities, among other tasks (Ribeiro; Ciasca; Capelatto, 2016). In cases where students are under the care of an adult, the mother is often the primary caregiver (Shcimonek, 2015). What defines these activities as unstructured is the lack of objectives and the absence of guidance for learning specific skills under the supervision of an educator. It is important to note that this characteristic, particularly regarding play, does not mean that these activities do not have an impact on child development.

On the contrary, they play a significant role in cognitive and socio-emotional development (Ranyere; Matias, 2023). The second form refers to participation in structured extracurricular activities provided by Non-Governmental Organizations (NGOs), projects developed by education and social assistance departments, private schools, and specialized courses such as music, sports, and languages (Fonseca; Matias, 2023). Unlike the first approach, this one involves the offering of activities focused on specific skills, whether they are athletic, artistic, or academic, under the supervision of an educator. These activities are organized progressively, starting from simple tasks and advancing to more complex ones (Carvalho; Senkevics; Loges, 2014; Osti, 2016; Silva; Ehrenberg, 2017).

The main difference between the two modalities lies in the fact that the second is offered by institutions during regular hours, through planned activities with specific objectives (Marques; Dell'Aglío; Sarriera, 2009). In Brazil, various NGOs provide such activities in partnership with public programs in the areas of Education and Social Assistance. Between 2010 and 2018, there was a considerable increase in the number of children and adolescents from public schools participating in structured extracurricular activities, both academic (such as school support with tutoring and homework assistance) and recreational (such as art classes, cultural activities, and leisure). These activities were offered through initiatives like the *Novo Mais Educação* program and the *Serviço de Convivência e Fortalecimento de Vínculos* (Brasil, 2016; Castro; Lopes, 2011; Farias, 2011; Sestren; Bueno, 2024; Souza, 2017). However, as part of the strategies to dismantle public policies from 2016

onward, public investment in these types of activities has decreased significantly (Jales; Teixeira, 2021).

This study aimed to identify differences in academic performance among students from the same public school, categorized according to the types of extracurricular activities: structured and unstructured. The structured activities were provided by an NGO and the participants' school, while the unstructured activities referred to actions conducted outside these institutions. Specifically, the investigation explored the association between students' academic performance and the contexts of extracurricular activities (microsystems including family, activities provided by the NGO, and by the school). It is based on the principle that structured and unstructured extracurricular activities contain proximal processes that influence personal characteristics, such as academic performance (Bronfenbrenner; Evans, 2000; Bronfenbrenner; Morris, 2006; Fonseca; Matias, 2023).

The article is divided into five sections, including this introduction. The following sections address the relationship between extracurricular activities and the development of public educational policies focused on extending school hours. The third section presents the methodology, detailing the procedures carried out in the field research. The results found and the discussion about them, based on the literature addressing the topic, constitute the penultimate part of this work. Finally, the fifth section presents the concluding remarks, followed by the references.

Full-Time Education and Extracurricular Activities

Initiatives focusing on full-time public education in Brazil have utilized extracurricular activities as strategies for providing support, both inside and outside schools, through partnerships with social institutions. This was achieved through the implementation of the *Mais Educação* Program during the Dilma and Lula administrations (Silva; Silva, 2014). In 2016, the federal government launched the *Novo Mais Educação* program (Brasil, 2016), and on July 31, 2023, during President Luiz Inácio Lula da Silva's third term, Law No. 14,640 was enacted, establishing the *Programa Escola em Tempo Integral* with the primary objective of increasing enrollment in full-time education in Brazilian schools (Brasil, 2023). Various initiatives of this nature gained momentum and were implemented with the Law of Guidelines and Bases of Education in 1996 (Vilas Boas; Abbiati, 2020). This program is now justified by the need to meet goal six of the National Education Plan, described in Law No. 13,005 of

June 25, 2014, which sets objectives to improve Brazilian education to be pursued by municipalities, states, and the federal government (Brasil, 2014).

There are few Brazilian studies investigating the influence of extracurricular activities on their participants, based on data collected directly from students (Castanho; Mancini, 2016; Matias, 2020) and existing research presents divergent results. Some studies indicate better academic performance among students who do not participate in these activities compared to those who do (Castro; Lopes, 2011; Matias; Teodoro, 2019; Pereira *et al.*, 2015; Silva *et al.*, 2022), while others do not identify significant impacts of extracurricular activities (Faria, 2011). Conversely, there are also studies that point to the positive effects of these activities on academic performance (Osti, 2016; Silva, Ehrenberg, 2017; Soares *et al.*, 2014).

Additionally, from the students' perspective, the time dedicated to these activities, when offered at school, can enhance contact with teachers and increase learning opportunities, although it may also lead to fatigue (Souza, 2017; Vilas Boas; Abbiati, 2020). This issue is also highlighted by students' parents and the professionals responsible for developing the activities in schools (Soares; Brandolin; Amaral, 2017).

Given the complexity of the topic, there is a need for further research addressing two main aspects. The first concerns the political and structural dimensions associated with programs such as *Novo Mais Educação*, the *Programa Escola em Tempo Integral* (Brasil, 2023) and public policies for full-time education, as explored in other studies (Glória, 2016; Schimonek, 2015; Soares; Brandolin; Amaral, 2017). The second aspect focuses on the impacts of participation in structured extracurricular activities on students. This article examines these influences while acknowledging the importance of the first aspect, particularly regarding its effect on the development of programs aimed at supporting children.

Several studies demonstrate that participation in structured extracurricular activities brings significant benefits to students. Positive impacts are observed in areas such as strengthening the bond with the school, changes in antisocial behavior, improvements in positive interactions among children and between children and adults, and, above all, enhancements in academic performance (Ciocanel *et al.*, 2017; Hughes; Cao; Kwok, 2016; Soares *et al.*, 2014). The idea that daily activities, in addition to the time spent on classroom subjects, contribute to students' academic success is widely discussed in programs with extracurricular activities (Soares; Brandolin; Amaral, 2017).

The effectiveness of structured activities is closely related to the process used to ensure continuity and active engagement of participants, as well as to the definition of clear

focus and objectives (Durlak; Weissberg; Pachan, 2010). Extracurricular activities that exhibit these characteristics significantly contribute to child development. In this context, the proximal processes involved in these actions serve as promoters of human development (Bronfenbrenner; Evans, 2000; Fonseca, Matias, 2023). Additionally, the interaction between participants, as well as between them and the adults responsible for conducting the activities, along with the establishment of rules to be followed, are aspects associated with the positive effects of these actions (Bronfenbrenner; Morris, 2006; Hughes; Cao; Kwok, 2016).

The analysis of the influences of structured extracurricular activities remains an area of research to be explored. Research on the impacts of these activities is marked by methodological challenges, among which are the diversity of activities attended by students and the need to investigate organizational and developmental aspects of the activities concerning their influence on participants (Vandell *et al.*, 2015). Studies involving groups of students from the same educational institution, who have the opportunity to participate in different structured extracurricular activities, are suggested as solutions to methodological implications. This approach allows for the consideration of student participation in more than one type of activity outside of school. The discussion presented here contributes to the search for indicators of how these actions support child development, particularly in academic performance.

Throughout the second decade of the 2000s, there has been a significant increase in programs developed through extracurricular activities in Brazil, with prospects for further growth with the implementation of the *Escola em Tempo Integral* program (Brasil, 2023). Despite numerous experiences related to the development of Integral Education (Vilas Boas; Abbiati, 2020), there is a lack of studies investigating the impacts of these actions, particularly concerning academic performance (Matias, 2020). In this context, there is a pertinent need for further research into the influences of such participation.

Based on this need and the importance of exploring different aspects to understand the implications of extracurricular activities, especially those developed in public programs, this study aimed to examine some of these influences. The rationale for conducting this research lies in the importance of developing investigations into the implications of actions implemented by the state on the development of the individuals served, providing information that could support the planning and execution of public policies.

Specifically, concerning the increase in students' time spent both in schools and in associated activities, it is essential to produce information that indicates effects beyond social

protection, so that this does not become the primary justification (Vilas Boas; Abbiati, 2020) for implementing projects with such objectives. In an era where opinions often overshadow facts, it is crucial to present data that demonstrates the need for public investment in social policies aimed at childhood and adolescence.

Methodology

The choice of research designs and procedures adopted in this study considered the scarcity of work on the implications of extracurricular activities on academic performance (Castanho; Mancini, 2016; Matias, 2020) and the methodological challenges present in research on the topic. In this regard, two types of designs were utilized: exploratory and descriptive (Gil, 2010). The exploratory design was selected due to the need to gain familiarity with the problem, which allowed for the development of hypotheses based on the collected data. Conversely, the descriptive design was adopted to ascertain the characteristics of the investigated population, identify the activities they engaged in, and the contexts in which these activities occurred.

Data collection was carried out through quantitative procedures, including the use of standardized instruments, and qualitative procedures, involving observations of the actions provided by the institutions, consultations with the coordinators of these actions, and interviews with the participants.

The study was conducted at a public school in the city of Belo Horizonte, MG, located in a region of social vulnerability, which offered Elementary School I. The socioeconomic level of the institution was among the lowest in the municipality (< 2.00), according to information provided by the Municipal Secretariat of Education (SMED). This indicator, which ranged from 0 to 10, was based on the socioeconomic characteristics of the students' families, allowing the conclusion that the school served children from families with a low socioeconomic status.

The school offered activities associated with the municipal extended school day program, known as the *Programa Escola Integrada* (PEI). Nearby, there was an NGO that provided activities outside regular school hours. Thus, it was possible to identify the participation of students in two microsystems offering structured activities: those provided by the school and those provided by the NGO. All these factors were considered in the selection

of the research site. These two actions, described below, were organized as recreational and academic, respectively.

In the *Programa Escola Integrada* (PEI), activities were conducted by two distinct teams: one composed of workshop instructors, who were outsourced professionals hired by a social organization, and the other by professionals affiliated with a partner institution in the execution of the program. This partnership included the offering of workshops conducted outside the school building. Activities were distributed across three locations: at the school itself, where photography, computer, and film screening workshops took place; at a rented space near the school, used for jiu-jitsu and percussion classes; and at the headquarters of the social organization partnering with the PEI, where music, dance, theater, arts, collage, and painting classes were held.

The responsibility for hiring the workshop instructors, who worked at the school and in the rented space, fell to the program coordinator. There were no specific criteria regarding the minimum qualifications of candidates, although preference was given to those with experience working with students who resided near the school. There was no connection between the curricular content and the workshops offered by the program, nor were there collaborations with teachers for joint work. The organization of activities was defined by the coordination, without municipal guidelines for the execution and content to be covered. The PEI implemented at each school had its own identity, to the extent that the activities described here differ from those presented in other studies (Leite; Carvalho, 2016). Thus, the format of the actions was established by the coordination and depended on the availability of financial resources.

The students' routine consisted of staying at the school from 7:00 AM to 11:20 AM for 4 hours and 20 minutes of regular classes, followed by an additional five hours of extracurricular activities in the afternoon. When the activities took place at the partner institution, the students left the school in a group, accompanied by three educators responsible for their safety, and traveled to the location where dance, music, and art activities were offered. The journey was approximately 2 kilometers in length. Upon arrival, the students were divided into three groups of 20, participating in one-hour classes. In the late afternoon, around 4:00 PM, the educators returned to pick up the students and take them back to the school, where they had a snack before finishing the day.

The group attending the rented space was smaller, with approximately 20 children and one educator. Activities took place until 3:00 PM, after which the students returned to the

educational institution for two additional workshops. All students participated in these classes throughout the week, and a snack was provided at the end of each day. The activities conducted at this space were distinct from those offered by the partner social organization.

At the NGO, activities were conducted by a team of educators hired by the institution. The entity had its infrastructure, including classrooms, a cafeteria, a library, a garden, a multipurpose space, and a sports court, resembling a school. The activities offered by the NGO focused on academic support and assistance with homework, with a priority audience of children from families in situations of social vulnerability. This focus aligns with studies indicating a correlation between low socioeconomic status and involvement in activities promoted by such institutions (Matias, 2018). Educational activities were conducted by the educators during two of the three 50-minute periods allocated for classes. The third period, typically after a break similar to a school recess, featured diverse activities such as soccer, dance, gardening, computer science, and music.

The NGO was part of the municipality's social assistance network and received funding from the city hall to carry out some of the city's full-time education initiatives. This demonstrates how social institutions were integrated into programs such as *Novo Mais Educação*, contributing to the development of full-time education in Brazil. However, there was no coordination between the NGO and the school in the planning and execution of these activities. The NGO's activities were offered without connection to the school's curricular content, and the public funds received by the institution were insufficient for the full development of its activities, a common reality for many similar organizations in the country (Benelli, 2021).

The daily routine of students attending the NGO was the same as that of other students participating in activities offered by the PEI, with an additional 4 hours of supplementary activities at the social institution. However, the students went home for lunch before traveling to the activities. The focus of this institution was on academic tasks. Most activities occurred in classrooms with rows of desks, blackboards, chalk, and school supplies, including notebooks, pencils, erasers, and textbooks. The activities were structured similarly to those in a regular school.

The study included students who were regularly enrolled in the school years corresponding to their ages and grouped them according to the activities they engaged in outside of school. Only students who were actively attending at the time of data collection and had been involved with the programs for over 12 months were selected to be part of the

groups for structured extracurricular activities. Initially, data were collected from 90 students. Of these, one had changed schools, three participated in activities offered by different institutions, and eight were not regularly enrolled in the school years corresponding to their ages.

After applying the participant exclusion criteria, 78 students were included in the study sample. Twenty-nine (37.00%) were 4th-grade students, and 49 (63.00%) were 5th-grade students. Their ages ranged from 9 to 11 years ($M=10.57$; $SD=0.57$), with 25 students (32.00%) being male and 53 (68.00%) being female. The students lived near the school, and 38.00% of the sample spent time at home after school playing or watching television with an adult, most often their mother. Among the others, 47.00% indicated participation in the extracurricular activities offered by PEI, and 15.00% were associated with the NGO.

Based on this information, the analyses were conducted with participants divided into three groups, hereafter referred to as: the PEI participant group (PEI); the NGO activity participant group (NGO); and the unstructured extracurricular activity participant group (UEA). The latter consisted of students not listed in the PEI and NGO records and reported staying home after school. Table 1 shows the distribution of students into the groups, separated by gender and the average duration of participation, in years, in structured activities.

Table 1 – Distribution of the sample into groups by gender and average duration of participation in activities

Groups	Female	Male	Total	Time (Years)
AED	19	10	29	---
PEI	27	10	37	3,91
NGO	07	05	12	3,33
Total	43	25	78	---

Note: UEA = Unstructured Extracurricular Activity Group. PEI = Integrated School Program Group. NGO = Non-Governmental Organization Group.

Source: Compiled from research data.

Four distinct instruments were used in data collection. The first was the School Performance Test (TDE), developed by Stein (1994), which aims to assess academic skills in three subtests: Writing, Arithmetic, and Reading.

To control for possible effects of intellectual level on school performance, a non-verbal intelligence test standardized in Brazil by Angelini *et al.* (1999), was administered,

known as Raven's Colored Progressive Matrices: Special Scale. This instrument allows data collection with minimal interference from cultural issues and the participants' knowledge.

The third instrument was a semi-structured interview guide designed to identify what the students did and where they stayed when not in school. This tool asked the child questions such as: *Where do you stay when you are not in school? What do you do when you are not in school? Who do you stay with when you are not in school?* Additionally, a field diary was used to record the characteristics of the activities attended by the students. This diary also included notes obtained from the coordinators of the PEI and NGO.

The results of the assessments were initially analyzed using descriptive statistics to determine the medians, means, and standard deviations for each group. Next, the normality of the data was examined using the Kolmogorov-Smirnov test. For data with a normal distribution ($p > 0.50$), parametric statistical analyses were conducted, including the t-test, Analysis of Variance (ANOVA), and the Bonferroni test for post-hoc mean comparisons.

The scores from the reading subtest of the TDE did not exhibit a normal distribution. For these results, non-parametric tests, specifically the Kruskal-Wallis and Mann-Whitney U tests, were employed to identify differences between the groups. The significance level adopted for all evaluations was $p < 0.050$.

The information collected from the children regarding activities conducted outside the school environment was entered into a Microsoft Word file. After an initial reading of the material, the data were analyzed and grouped according to where the students spent their time and the activities they engaged in. In cases where students reported participation in one of the two extracurricular activities offered near the school, and the activity coordinators confirmed this information, the students were allocated to the PEI or NGO groups. Those who indicated that they stayed at home or in other locations, such as their grandmother's house, under someone's supervision, and mentioned engaging in unstructured extracurricular activities, such as playing, watching television, or playing video games, were classified into the UEA (Unstructured Extracurricular Activities) group.

The data collected during the observations of extracurricular activities and from the coordinators were entered into a Microsoft Word file. Based on this information, the activities offered by the PEI and the NGO were categorized as recreational when they included games, sports, and leisure, and as academic when they were focused on schooling, such as homework assistance, academic reinforcement, and classes in school subjects.

Fieldwork commenced after the research project received approval from a Human Research Ethics Committee. The children's guardians authorized them to participate in the study, and they signed the Informed Consent Form along with them. The students were informed about the research objectives and the confidentiality of the data collected.

Data collection took place at the school during class hours and was conducted by the author of this study, with the assistance of two psychology students. The instruments were administered collectively in groups of 7 to 10 students in a room provided by the school. The reading assessment was conducted individually, and during this assessment, students were interviewed about the activities they engaged in outside of school.

Consultations were conducted with the responsible educational coordinators to confirm the information collected from students who reported participating in a structured extracurricular activity. The purpose was to verify the student's enrollment in the activities and determine the length of their participation. The groups were defined based on the confirmation of students' participation in structured extracurricular activities and their responses about what they did outside of school. Information about the organization of activities, including operating hours, duration, and types of activities offered, was requested from the PEI and NGO coordinators. Additionally, three on-site observations of these activities were conducted.

Results and Discussion

The results of this study revealed a significant difference among participants divided by type of extracurricular activity, with the group of students involved in unstructured extracurricular activities (AED) showing superior academic performance compared to the group in the Integrated School Program (PEI). In other words, there was an association between the results obtained in the School Performance Test (TDE) and the microsystems frequented by the students. These data suggest that differences in academic performance may be related to the contexts in which students spend their time outside of school, including family microsystems and the activities offered by the NGO and the school.

In addition to social and institutional variables, it is necessary to consider the influence of students' personal factors (Bronfenbrenner; Morris, 2006) on academic performance. In this regard, data on children's intelligence, a cognitive ability essential for learning, were collected. Analyses conducted using the Raven's Colored Progressive Matrices Test did not

reveal significant differences among participants based on gender ($t(76) = 1.356$; $p = 0.179$); grade level ($t(76) = 1.168$; $p = 0.247$); or in the comparisons between the AED, PEI, and NGO groups ($F(2,75) = 1.340$, $p = 0.268$). This measure is relevant due to the possibility that results could be influenced by intervening variables. Therefore, it is possible to conclude that the observed difference between the AED and PEI groups may be related to the characteristics of the activities developed within the microsystems frequented by the students during their time outside of school. Table 2 presents the medians, means, and standard deviations of Raven and TDE scores, as well as the p-values from the statistical tests.

Table 2 – Medians, Means, and Standard Deviations of Assessments and p-value from Analysis of Variance and Kruskal-Wallis Test

Assessments	Groups									F/X ²	p
	AED (n = 29)			PEI (n = 37)			NGO (n = 12)				
	Md	M	DP	Md	M	DP	Md	M	DP		
Raven's Glue	28,00	26,89	4,87	26,00	25,62	5,51	28,50	28,25	4,20	1,340 ^a	0,26
TDE – Writing	27,00	26,27	5,66	22,00	21,27	7,43	25,00	23,75	6,03	4,653 ^a	0,01*
TDE – Arithmetic	16,00	16,51	4,13	15,00	14,70	3,51	15,50	15,75	2,09	2,087 ^a	0,13
TDE – Reading	68,00	66,41	4,12	64,00	62,05	9,72	66,00	65,50	3,87	6,357 ^a	0,04*
TDE - Total	110,00	99,20	11,80	100,00	98,02	16,76	107,50	105,00	10,33	5,120 ^a	<0,01*

Note: AED = Unstructured Extracurricular Activity. PEI = Integrated School Program. NGO = Non-Governmental Organization. Md = median; M = mean; SD = standard deviation; n = number of participants in the group. TDE = School Performance Test. Raven Col. Matrices = Raven's Colored Progressive Matrices.

a = Analysis of Variance.

b = *Kruskal-Wallis* Test.

p < 0,05

Source: Prepared based on data collected through the instruments (2019).

The AED group achieved higher medians and means, followed by the NGO and PEI groups in the evaluations related to school performance. The ANOVA results showed a significant difference in the writing subtest and the overall TDE score. According to the Bonferroni post-hoc test, the AED group outperformed the PEI group. Students in the group that did not participate in any extracurricular activities excelled compared to the other groups in the TDE reading subtest, and the Kruskal-Wallis test indicated statistical significance. According to the Mann-Whitney test, the AED group achieved a significantly higher score ($U=349,000$; $p=0.015$) than the PEI group.

The combination of exploratory and descriptive research designs significantly contributed to achieving the study's objectives and led to the formulation of an assumption

related to participation in extracurricular activities. The results suggest that the implications of interactions within the family context may outweigh the effects of extracurricular activities, especially when these activities are predominantly recreational. On the other hand, in programs focused on academic activities, these actions indirectly contribute to school learning. According to the objectives of exploratory research (Gil, 2010), the results led to the formulation of two hypotheses that support the established assumption, which will be discussed next.

The first hypothesis is that family environment resources may have a more significant impact than structured activities. In all school performance evaluations, the group involved in unstructured extracurricular activities (AED) scored higher than the groups in the Integrated School Program (PEI) and the NGO. Statistically significant differences were observed in the writing and reading subtests, as well as in the total test score, in comparisons between the AED and PEI groups. This result contradicts the expectation that activities offered in full-time programs promote improvements in academic performance, as initially predicted by the Municipal Department of Education (SMED) during the implementation of extended school day activities in Belo Horizonte (Resende, 2013). These data support previous studies (Faria, 2011; Pereira *et al.*, 2015), and indicate that investigating the impacts of extracurricular activities must consider the specific characteristics of the actions attended by students, as in other studies where participants in structured activities showed better academic performance (Matias; Teodoro, 2019; Osti, 2016; Silva; Ehrenberg, 2017; Soares *et al.*, 2014).

It is essential to consider that the families of the involved students might have had better socioeconomic conditions. This assumption is supported by the fact that, in most cases, the students were under the care of their mothers. This suggests that, in these families, the income from a father or another member might have been sufficient to maintain the household, eliminating the need for the child to be elsewhere, unlike the participants in extracurricular programs offered by the social institution attended by students in the NGO group (Matias, 2018).

Moreover, the fact that students in the AED group remained at home under the supervision of an adult may indicate the positive influence of daily oversight by a mother or another guardian, as well as family interactions, on the results obtained. The family can be a microsystem that fosters the development of essential skills, such as reading (Pereira *et al.*, 2015). For example, an adult's presence may enforce the completion of homework with focus and at set times, and interactions with parents have been identified as a factor in promoting

academic performance (Benetti, Vieira, Faracco, 2016; Carvalho; Senkevics; Loges, 2014; Osti, 2016; Silva *et al.*, 2022).

Simultaneously, with the supervision of a guardian, students who remain at home have the opportunity to use their free time for rest. Based on visits conducted to evaluate the organization of activities, it was observed that the journey to the NGO partnered with PEI was tiring due to a walk of approximately 2 km. It is plausible that participation in activities offered by the PEI could result in a high level of fatigue, which may be reflected in the student's academic performance. This issue has been highlighted in other studies on students' participation in activities similar to those offered by the PEI (Glória, 2016; Soares; Brandolin; Amaral, 2017; Souza, 2017) and in experiences with full-time schools (Vilas Boas; Abbiati, 2020).

The survey of extracurricular aspects based on the information provided by the students proved to be important, as it allowed for active participation in the research. However, this approach presented some limitations, such as the restriction of data sources to the students' perceptions and the lack of details about the family context. Due to these circumstances, it is not possible to assert definitively but only hypothesize that the proximal processes (Bronfenbrenner; Morris, 2006; Fonseca; Matias, 2023) present in the homes of the AED group students had a more significant influence on the school learning measured by the Test of School Performance (TDE). Thus, it is evident that the family microsystem requires further interventions and studies to better understand these processes and promote actions that enhance students' development.

It is also important to consider that public policies aimed at families play a crucial role in this process, making it pertinent for the State to make significant investments in this area (Jales; Teixeira, 2021). With the advancement of social policies directed toward families, especially those that secure income through participation in the labor market, it is possible for families to have more resources to promote child development.

The second hypothesis suggests that predominantly academic activities may positively affect school performance. This is evidenced by the TDE results obtained by the NGO students, which were superior to those of the PEI group. The lack of statistical significance between the AED and NGO groups allows for the inference that the actions of the social organization indirectly contributed to the student's academic performance, going beyond merely providing a place for children to stay while their parents worked, as described in another study (Matias, 2018). Therefore, this demonstrates that implementing actions such as

Full-Time Schooling (Brasil, 2023) should consider activities that effectively contribute to students' cognitive development. The information on the organization of activities offered by PEI and the NGO provides possible explanations for students' performance in these actions.

The activities promoted by the social institution were focused on schooling, and it is known that programs structured in this way can positively impact academic performance (Springer; Diffily, 2012). However, the lack of alignment between curricular classes and the activities offered by both proposals, even with the NGO's emphasis on academic content, reveals a gap in the organization of these actions. Therefore, it is pertinent that the organization of these programs considers the integration between curricular content and the extracurricular activities developed.

This brings to light the implications of the macrosystem, as evidenced by the development of government policies such as the *Programa Escola em Tempo Integral* (Brasil, 2023), which aims to extend the school day in public schools. It is of utmost urgency that these actions be incorporated into State policies and not merely tied to specific governments. The way these actions are managed, planned, and developed is linked to governmental bodies. Although not the focus of this study, it is possible to observe the influence of political dimensions on structural issues (Glória, 2016; Schimonek, 2016; Soares; Brandolin; Amaral, 2017), reflecting on the results found in the present analysis.

It is relevant to consider that the findings of this study may be corroborated by other research, as the way schools develop their full-time activities can present unique characteristics. One strategy to promote activities with greater potential to influence school performance is to invest in the training of the professionals involved. This training should take into account local specificities, demonstrating how the activities that comprise full-time schooling can contribute to child development (Fonseca; Matias, 2023) and, consequently, to school performance.

The investigation into the organization of activities indicated the absence of lesson plans, minimal planning, and interactions between educators and children that foster developmental processes impacting school performance (Bronfenbrenner; Evans, 2000). The lack of consistent pedagogical projects in these actions has been observed by other researchers, and this is a characteristic present in these projects (Benelli, 2021; Matias, 2018). The data from this study corroborate the information regarding the need for an organization based on specific objectives of extracurricular programs to promote positive impacts on participants (Durlak; Weissberg; Pachan, 2010). The development of extracurricular activities

should include actions related to the knowledge transmitted by the school, as well as linked to culture, sports, and other areas of knowledge, within a broad perspective of education.

Despite the exploratory nature of this study, it is possible to infer some explanations for the lack of influence of the PEI on school performance outcomes. In this program, the activities provided to the children were structured but lacked organization to achieve specific goals. Observations indicated the absence of a sequence, focus, and clear objectives, which are essential for practical activities (Fonseca; Matias, 2023). The set of activities offered by the PEI functioned more as recreation, a necessary aspect of child development (Ranyere; Matias, 2023). However, the program should have sought activities that offered proximal processes (Bronfenbrenner; Evans, 2000), such as educational games that could either maintain students' performance on par with their peers from other groups or improve it. Merely participating in the activities is insufficient to provide positive impacts on school performance, although it does play a role in social protection.

Although there is an indication that these actions should be improved to promote greater impacts on educational processes, two issues should be considered. Firstly, both the activities developed by the PEI and the NGO provided spaces for social interaction. Thus, it is possible to hypothesize that the participants in these activities might have developed skills not assessed in this analysis, such as cooperation, stance on social injustices, and group interaction. These competencies should be considered in future research.

Secondly, it is relevant to observe that both the PEI and the NGO's activities constituted contexts of social protection, which are fundamental to the communities in which they were situated. The NGO, like many other similar institutions in Brazil, faced significant challenges related to funding its activities (Benelli, 2021).

Final considerations

This study highlighted that family interactions may have a more significant impact on academic performance than recreational extracurricular activities. However, academically oriented actions can contribute indirectly to school performance. Furthermore, the organization of the structured extracurricular activities investigated revealed the presence of few resources necessary to generate significant positive impacts on the participants' academic performance.

This type of investigation has not yet received significant attention in the Brazilian context. The data obtained from this study will stimulate further research, particularly with longitudinal designs, allowing data collection at various stages of students' participation in structured activities. Studies of this nature can substantially contribute to understanding the factors affecting child development and the planning and development of programs targeting this population. Given the lack of standardization in extracurricular activities, it is likely that other experiences with different characteristics from those investigated in this study may lead to improvements in academic performance. The new federal government proposal through the *Escola em Tempo Integral* program offers a promising context for generating new insights into the implications of extracurricular activities on academic performance.

This investigation has some limitations, including: the small sample size of NGO participants; the absence of measures to assess other intervening variables, such as student motivation; the lack of analysis of family issues, such as how parents or guardians monitored students' academic performance; the lack of details about the activities of students who remained at home; and the absence of observation of the organization of structured activities, including aspects that may influence participants, such as the relationship between educators and students. Future studies addressing these issues and conducted in different schools across various Brazilian cities will contribute to a more comprehensive understanding of the variables related to the impacts of extracurricular activities, both structured and unstructured. It is anticipated that the information highlighted in this study will assist researchers and public managers in the formulation of extracurricular and full-time programs aimed at child development.

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