Exploring the Unexpected: the Relationship Between Higher Family Income and Dropout Risk

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Abstract

This study investigates the paradoxical influence of family income on school dropout risks among Brazilian public-school students. Discussing previous results that challenge traditional perspectives on school dropout by examining how students from higher family income show higher dropout risk. We hypothesize that this is due to flexible capitalism changes in our society's labor market and to the devaluation of schools as a meaningful place for student's life projects. Analyzing data from 15,924 Brazilian high school and middle school students using Multivariate Analysis of Variance (MANOVA) and univariate models, the study reveals that students from higher-income families are more likely to drop out when they perceive school as less relevant for their future careers. This unexpected finding suggests that, unlike most literature on this field, higher-income students might be at greater risk of dropping out due to the pressure to enter the workforce and the perceived lack of school alignment with their career aspirations. This study contributes to the understanding of school dropout in the global south, proposing the need for educational reforms that align with contemporary labor market realities.

Palabras clave: school dropout, family income, brazilian students, flexible capitalism, labor market.

Explorando lo Inesperado: la Relación entre Mayores Ingresos Familiares y Riesgo de Abandono Escolar

Resumen

Este estudio investiga la influencia paradójica de los ingresos familiares en los riesgos de abandono escolar entre los estudiantes de escuelas públicas brasileñas. Analizamos resultados anteriores que desafían las perspectivas tradicionales sobre el abandono escolar al examinar cómo los estudiantes de mayores ingresos familiares muestran un mayor riesgo de abandono escolar. Planteamos la hipótesis de que esto se debe a los cambios del capitalismo flexible en el mercado laboral de nuestra sociedad y a la devaluación de las escuelas como un lugar significativo para los proyectos de vida de los estudiantes. Al analizar datos de 15.924 estudiantes brasileños de secundaria y preparatoria utilizando análisis de varianza multivariante (MANOVA) y modelos univariados, el estudio revela que los estudiantes de familias de mayores ingresos tienen más probabilidades de abandonar la escuela cuando perciben que la escuela es menos relevante para sus futuras carreras. Este hallazgo inesperado sugiere que, a diferencia de la mayoría de la literatura sobre este campo, los estudiantes de mayores ingresos podrían tener un mayor riesgo de abandonar la escuela debido a la presión para ingresar a la fuerza laboral y la falta percibida de alineación de la escuela con sus aspiraciones profesionales. Este estudio contribuye a la comprensión de la deserción escolar en el sur global, proponiendo la necesidad de reformas educativas que se alineen con las realidades contemporáneas del mercado laboral.

Keywords: deserción escolar, ingreso familiar, estudiantes brasileños, capitalismo flexible, mercado laboral.

Explorando o Inesperado: a Relação entre Renda Familiar mais Alta e Risco de Evasão Escolar

Resumo

Este estudo investiga a influência paradoxal da renda familiar nos riscos de evasão escolar entre estudantes de escolas públicas brasileiras. Discutindo resultados anteriores que desafiam as perspectivas tradicionais sobre evasão escolar, examinando como estudantes de renda familiar mais alta apresentam maior risco de evasão. Nossa hipótese é que isso se deve às mudanças do capitalismo flexível no mercado de trabalho da nossa sociedade e à desvalorização das escolas como um lugar significativo para os projetos de vida dos estudantes. Analisando dados de 15.924 estudantes brasileiros do ensino médio e fundamental usando Análise de Variância Multivariada (MANOVA) e modelos univariados, o estudo revela que estudantes de famílias de renda mais alta têm maior probabilidade de evasão quando percebem a escola como menos relevante para suas futuras carreiras. Essa descoberta inesperada sugere que, ao contrário da maioria da literatura neste campo, estudantes de renda mais alta pode estar em maior risco de evasão devido à pressão para entrar no mercado de trabalho e à percepção de falta de alinhamento da escola com suas aspirações de carreira. Este estudo contribui para a compreensão da evasão escolar no sul global, propondo a necessidade de reformas educacionais que se alinhem às realidades contemporâneas do mercado de trabalho.

Palavras-chave: evasão escolar, renda familiar, estudantes brasileiros, capitalismo

flexível, mercado de trabalho.

Introduction

School dropout is a persistent problem in many countries, significantly affecting students' educational and professional success (Rumberger, 2011). School dropout is defined as a premature discontinuation (excess of absenteeism during a year or not enrollment in the school system) of studies before completing compulsory education (Lamb, 2011), and each country has its own criteria to assess and measure school dropout in their system. Several factors influence dropout, including the student's family and socioeconomic environment (Bradley & Corwyn, 2002). In addition to family income, the family environment and the student's cultural background also significantly influence school performance and dropout (Aikens & Barbarin, 2008).

Low-income families are often considered at risk for their children dropping out of school. Some reasons for this vulnerability include the need to contribute to household income at an early age and limited access to educational resources like books, computers, and internet connectivity, which can impact their children's academic performance (Duncan & Magnuson, 2012). Families with lower incomes often face more financial difficulties and obstacles in securing an adequate education for their children (Duncan & Murnane, 2011). These difficulties include a need for more financial resources to pay for school supplies, transportation, and other education-related expenses (Yoshikawa et al., 2012). In addition, lower-income families may have less time and capacity to support their children academically, leading to lower school performance and a higher risk of dropping out of school (Reardon, 2011; Gershoff et al., 2007). Family income is an essential factor that can affect a child's education.

This present study is a discussion of an unexpected finding related to Brazilian public school students' dropout risk analyzed by income rates where students with less family income seem to be at less risk than students of higher economic status, which led our research team to raise the discussion on how to explore this data having a critical eye to it. In this sense, we discuss our findings through a broader look into the theoretical models of school dropout. We propose that new configurations of school dropout might rise due to societal changes, especially in the global south.

Background context on the school dropout problem

School dropout is the premature interruption of studies before completing compulsory education. It is vital to distinguish dropout from school abandonment when students enroll but do not attend classes but come back to the system next year (Fortin et al., 2006). Dropout is a gradual process that involves a lack of interest and motivation, difficulties in learning, behavioral problems, and eventually dropping out (Freeman & Simonsen, 2015). Several factors are associated with dropping out of school, including school environment, violence at and in the family, peer relations, failure, and family income. Some studies suggest that school environment is among the most important factors influencing dropout (Thapa et al., 2013). A welcoming school environment, with motivated teachers and an excellent physical structure,

can increase student motivation and reduce the risk of dropping out.

As we will argue, an increase in a student's family income may mean a decrease in the appreciation of school as a place for future aspirations, especially because it does not enable them to enter the workforce properly (Biddle, 2011). In a certain sense, middle-class students who attend public schools in Brazil could be more vulnerable to the need to work earlier in life and prematurely end their school trajectories due to the desire to work (Ribeiro, 2006; Dantas & Valente, 2016).

Family income and dropout risk

The study of the role of the middle class in the risk factors for school dropout is extremely relevant, as this portion of the population is often not considered in research on school dropout (Rumberger & Rotermund, 2012). The middle class could have higher expectations of their children's education, which could increase the pressure on students and contribute to school-related stress and anxiety (Suldo et al., 2016). Understanding these risk factors is important for developing effective strategies to prevent dropping out of school among middle-class students.

It is also important to consider that the middle class may be affected by economic changes, such as job loss (Kalleberg, 2018) or reduced family income (Autor, 2019), which can affect the family's emotional and financial stability (Conger et al., 2010) and consequently affect their children's education. Therefore, exploring how these changes affect the relationship between the middle class and school dropouts is essential.

Flexible Capitalism and school dropout: new configuration, new risks

Flexible capitalism is characterized by flexibility in production, work, and consumption (Sennet, 1998; Doogan, 2019). However, this flexibility implies greater instability in the labor market, leading to precarious situations and worker insecurity. The lack of stability in the labor market can lead young people to abandon their studies in search of jobs that offer greater financial security (Mok & Yeung, 2019). Lower middle-class and middle-class students may be at even greater risk from the phenomenon of flexible capitalism (Kalleberg, 2018). This is because these young people are often the breadwinners in their families and need to work to help make ends meet.

Studying the role of the middle class as one of the risk factors for dropping out of school can lead to a better understanding of the problems faced by this portion of the population and help develop effective policies and strategies to prevent dropouts and promote educational success for all students (Mok & Yeung, 2019). The middle class may be even more vulnerable to discourses of devaluing school since there is a shared belief in individual merit (Kraus & Stephens, 2012). The idea that education is the key to success and that the individual is responsible for his or her own social ascension is very present in this social class (Lareau, 2011). However, this perspective often disregards structural and historical factors that limit equal access to education and, therefore, social ascension (Bourdieu & Passeron, 1990).

Description of the explanatory hypotheses raised in the literature

Attitudes and Motivation Towards School

Students' attitudes and motivation toward school are important factors in preventing dropout (Rumberger & Lim, 2008). Motivation refers to the internal drive that leads students to engage in school activities, while attitudes refer to beliefs and feelings about school and learning. Educational scientific studies show that students who exhibit positive attitudes and motivations toward school tend to have higher academic success and a lower risk of dropping out of school (Skinner et al., 2018).

One of the main theories explaining the relationship between motivation and dropout is the Self-Determination Theory (Ryan & Deci, 2000), which suggests that motivation is an internal force that can be influenced by the quality of the school environment and the satisfaction of students' psychological needs (Skinner et al., 2018). According to the theory, when students have their autonomy, competence, and relationship needs satisfied, they tend to have higher intrinsic motivation and, therefore, lower risk of dropping out of school. In addition, the Expectancy-Value Theory (Wigfield & Eccles, 2000) suggests that students' expectations of their academic performance and their value on academic success are important factors that influence student motivation (Schunk & Mullen, 2012). When students believe they are capable of academic success and value that success, they tend to have higher motivation to engage in school activities and a lower risk of dropping out of school. Empirical evidence supports these theories. A study by Rumberger and Lim (2008) showed that students' motivation to go to school and to succeed academically is an important predictor of dropout. Students who reported higher motivation to go to school and succeed academically were less likely to drop out. Furthermore, a study by Skinner et al. (2008) showed that the satisfaction of students' psychological needs, such as autonomy, competence, and relatedness, is positively related to intrinsic motivation and negatively related to dropping out of school.

Future Aspirations

In an era marked by the proliferation of precarious jobs and declining economic power in many countries, the significance of life aspirations and educational projects for youth is heightened. Barbosa-Martinez et al. (2016) underscore the vulnerability of adolescence, a period rife with challenges such as teenage pregnancy, sexual risk behaviors, and drug abuse. They emphasize the critical role of life projects as protective factors during this phase. These projects, which encompass aspirations like career goals, further education, and family plans, are vital in steering adolescents away from potential risks. This concept aligns with the findings of Zahra (2020), who, through her research in Southern Malawi, discovered that girls with aspirations to marry later are less likely to drop out of school. Zahra's study indicates that aspirations, particularly regarding education and marriage, can significantly impact educational outcomes, countering sociostructural constraints.

The dynamic interplay between students' aspirations and their educational trajectory is

further elaborated by Goux et al. (2014a) in their study. They observed that realistic aspirations, formed through a series of meetings facilitated by school principals for low-achieving students, led to a significant reduction in grade repetition and high-school dropout rates. This intervention highlights the importance of aligning students' aspirations with realistic educational pathways, thereby reducing the risk of dropout. In a similar vein, Zava et al. (2022) explored the protective factors against school dropout intentions, such as positivity, self-efficacy for self-regulated learning, and school engagement. Their study revealed that these factors positively influence academic aspirations and negatively correlate with the intention to drop out, highlighting the importance of fostering a positive and engaged learning environment.

Moreover, Goux et al. (2014b) demonstrated the transformative power of families that are engaged in the educational journey of their children, particularly those facing academic difficulties. Their intervention, involving meetings between families of struggling students and school principals, resulted in a 25% decrease in dropout rates and improved outcomes in vocational training courses. This approach not only reoriented the aspirations of these students and their families but also fostered better social interactions between low-achieving students and their higher-achieving peers. This finding is critical in the context of current economic challenges, as it highlights the need for educational systems to adapt and provide diverse pathways, including vocational training, to cater to varying student needs and aspirations.

As such, we will address the following research question: How do students' attitudes towards school and future aspirations through schooling differ between students from high-income and low-income families, and how do these factors relate to dropout risk?

Method

Description of the sample and data collection procedures

Participants included 15.924 Brazilian high school and middle school students. Specifically, this was a non-probabilistic sample, with individuals voluntarily deciding to participate (snowball sampling; Dusek et al., 2015). Regarding sample descriptions, the following characterizations were observed: Gender (boys = 8.260; girls = 7.664), Ethnicity (Black = 1639; Brown = 11.602; White = 2.233; Indigenous people = 282; Asian = 168), Geographic location (urban area = 7.954; rural area = 7.644, Indigenous community = 211; Quilombolas Communities = 116). About the other variables: school failure (Never, n = 12.785), marital status (single, n = 15.709), Mother/caregiver's education (high school degree, n = 3.656), Father/caregiver's education (middle school degree, n = 2.916). Lastly, most of the sample students were distributed among the middle school levels (n = 15.825; high school level, n = 99). All the terminology was inspired by the nationwide survey used by the government institute responsible for Brazil's population census (i.e., Instituto Brasileiro de Geografia e Estatística - IBGE).

Regarding data collection, different educational institutions were recruited through e-mail addresses provided by the local government's websites, and the individuals answered a web-based questionnaire. The objectives and all the step-by-step were described, and the survey link for their participation was provided. Firstly, students completed surveys (self-report measure

for the risk of school dropout) during school hours for approximately 10 minutes using a handheld digital device. In the following step, the school manager answered the items referring to the student (i.e., third-person measure). It is worth noting that the informed consent from each student was obtained at the beginning of each online survey. All participants were informed that the study was voluntary. The Ethics Committee from a public university in Brazil approved the study protocol (Process N° n. 5.407.594, Healthy Sciences Centre).

Description of the measurement instrument (IAFREE)

Relational Factors for the Risk of School Dropout Scale (IAFREE). This 36-item measure assesses the relational factors for the risk of school dropout in both middle and high school populations. The IAFREE consisted of five subscales that comprise the following elements: I. Student-School contains two facets: student materials (SSc1) and school materials (SSc2); II. Student-Professionals with two facets: pedagogical inflexibility (SP1) and pedagogical quality (SP2); III. Student-Family formed by two facets: family support (SF1) and pregnancy, parenting, and household care activities (SF2); IV. Student-Community with three facets: socio-educational measures and context of violence (SC1), accessibility/school attendance (SC2), and school-community distancing (SC3); V. Student-Student that consists of three facets: meaning of graduation/student engagement (SSt1), emotional and affective aspects/ socioemotional health (SSt2), and failures and age-grade distortion (SSt3).

In addition, the IAFREE is answered by both students (S items) and school professionals (PA items). For example, in dimension V. Student-Student, the student answers the item *"I've thought about dropping out of school because it doesn't prepare me for the jobs I want in the future."* (facet: Meanings of Schooling/Engagement; SSt1). On the other hand, the school manager answers the item, *"This student has a grade/age gap, not waiting in the grade expected for his age group."* (facet: Failures and age-grade interruption; SSt3). Finally, the factorial structure of the IAFREE comprises a higher-order internal structure with 12 first-order risk facets and five second-order factors. All items were rated by respondents using seven response categories ranging from 1 (completely disagree) to 7 (completely agree). A supplementary file contains all the measure details (i.e., items, instructions, scale responses, etc.).

Data analysis

The data was analyzed using JASP 0.17.1 software (JASP Team, 2023). The variables were selected based on theoretical criteria and grouped into four blocks: a) Future; b) Parental support; c) Cultural capital; and d) Motivation/self-concept, as described in Table 1. Additionally, the following independent variables were considered: i) Income, ii) Ethnicity, and iii) Gender. Fisher's exact test was used to examine the association between Income and Ethnicity since they are categorical data with cell frequencies less than 5 (Upton, 1992).

Afterwards, a Multivariate Analysis of Variance (MANOVA) was performed to observe the overall effects of the independent variables on the dependent variable blocks. Subsequently, univariate models (ANOVAs) were conducted to explore the differences between groups for each questionnaire item (Field et al., 2012). To test for significant differences in paired

comparisons, a post hoc test with Bonferroni correction was applied (Keselman et al., 1998).

Table 1. *Variables scrutinized in this study*

Blocks	Variables	Items
Attitudes and motivation towards school	This student's mother or primary caregiver did not complete basic education	PA7
Future aspirations through education	I've already thought about leaving school, as it doesn't offer me opportunities to improve my current living conditions	S5
	I've thought about dropping out of school because it doesn't prepare me for the jobs I want in the future	S10

Source: Own elaboration

Results

General description of results

Initially, the results of the multivariate model revealed statistically significant differences among groups for the variables income, sex, and their interaction. These results are presented in Table 2. However, the model also indicated a linear combination of the variables "income" and "ethnicity," which rendered the comparative analysis impossible. In this way, the association between the variables income and race was evaluated. The results showed significant associations between these variables [Fisher's =444,014, Crammer's V = .080, $p < .001$]. Furthermore, the Standardized Residuals indicated that students with no family income are predominantly Indigenous and black. In addition, students with a family income of up to 1 minimum wage are predominantly Indigenous, as well as students from 1 to 3 minimum wages. On the other hand, students with a family income of 6 to 9 minimum wages and more than 9 minimum wages were predominantly Asian.

Table 2. *Results of the multivariate model*

	Wilk's λ	F	df	p
Income	0,961	19,772	5;35	< 0,001
Gender	0,994	14,303	1;7	< 0,001
Income*Gender	0,997	1,503	5;35	0,028

Source: Own elaboration

Subsequently, an analysis of univariate models was conducted (Table 3). The findings from these models indicated variations among income groups investigated in the study for all dependent variables. Similarly, the dependent variables scrutinized in this study exhibited statistical distinctions across gender groups. Nevertheless, no discernible differences in the interaction between income and gender were observed in the sample employed for this study. After this, the outcomes of paired comparisons are presented, considering each dependent variable.

Table 3. *Results of the univariate models*

Groups	Dependent Variables	F	df	p
Income	QE7	94,301	5	< 0,001
	QA5	2,663	5	0,021
	QA10	7,861	5	< 0,001
Gender	QE7	14,582	1	< 0,001
	QA5	53,230	1	< 0,001
	QA10	32,808	1	< 0,001
Income*Gender	QE7	0,052	5	0,998
	QA5	0,807	5	0,544
	QA10	1,815	5	0,106

Source: Own elaboration

Analysis of specific results for the middle-class

- Attitudes and motivation towards school:

The "attitudes and motivation" component is composed only of item PA7 ("This student's mother or primary caregiver did not complete basic education"). The results of the paired comparisons showed that students with a family income of up to 1 minimum wage had higher scores when compared to students with a family income of 1 to 3 minimum wages (I-J= .570, t= 15,672, $p < .001$) and students with a family income of 3 to 6 minimum wages (I-J= .970, t= 12,624, $p < .001$). On the other hand, students with a family income of up to 1 minimum wage had lower scores when compared to students without family income (I-J= -.271, t= -5,424, $p < .001$).

Students with a family income of 1 to 3 minimum wages had higher scores when compared to students with a family income of 3 to 6 minimum wages (I-J= .401, t= 5,078, $p < .001$). Furthermore, students without family income had higher scores when compared to students with family income of 1 to 3 minimum wages (I-J= .840, t= 15,837, $p < .001$), 3 to 6 minimum wages (I-J=1.241, t= 14,424, $p < .001$) and 6 to 9 minimum wages (I-J= .781, t= 4,117, $p < .001$).

- Future aspirations through education:

For the S5 ("I've already thought about leaving school, as it doesn't offer me opportunities to improve my current living conditions") variable, the results indicated that there were no real differences between the groups of students with different family incomes. However, female students had lower scores when compared to males (I-J= -.232, t= -3,307, $p < .001$).

As for the S10 ("I've thought about dropping out of school because it doesn't prepare me for the jobs I want in the future.") variable, the results of paired comparisons indicated that students with a family income of up to 1 minimum wage showed significant differences when compared to students with a family income of 3 to 6 minimum wages (I-J = -.294, t= -5,116, $p < .001$), indicating that the highest income in this case presented a higher risk. Similarly, students with a family income of 1 to 3 minimum wages had lower scores when compared to

students with a family income of 3 to 6 minimum wages (I-J= -.227, t= -2,398, *p* = .002). On the other hand, students with an income of 3 to 6 minimum wages had higher scores when compared to students without income (I-J= .248, t= 3,860, *p* = .002). The results indicate that students with higher family income also had higher risk scores for dropping out of school for the investigated item. Furthermore, in general, male students had higher scores when compared to female students (I-J= -.232, t = -2,777, *p* = .005).

Discussion of the results considering our explanatory hypotheses

- a) Attitudes and motivation towards school

When examining the attitudes and motivation towards school, we found that there are differences, but it does not seem that higher income equates to a greater risk for Question 2 (I am unable to complete my studies). However, for S20 (I have considered dropping out of school because classes are repetitive and tiresome), the association between higher income and a higher risk of dropout is significant. These findings suggest that factors such as the perceived repetitiveness and tediousness of classes may have a stronger influence on the dropout risk among wealthier students.

The finding that higher income is associated with a higher risk of dropout when considering the perception of repetitive and tiresome classes (S20) but not for the inability to complete studies (S2) has important implications for school dropout theories. The perception of repetitive and tiresome classes could be an indication of disengagement or a lack of motivation, which may be more prevalent among students from higher-income backgrounds. We can speculate that richer students can feel more entitled to leave school if it is uninteresting, maybe due to access to other forms of education. Despite this speculation, improving pedagogical practices would be protective for these strata of the population.

Gershoff et al. (2007) highlight that income alone is not enough to fully understand educational outcomes, emphasizing the role of perceived material hardship or perceived usefulness of education. This perception could be an indication of disengagement or a lack of motivation, which may be more prevalent among students from higher-income backgrounds due to their greater access to other forms of education and opportunities. Additionally, Goux et al. (2014a) suggest that school and peer environments significantly impact dropout behavior. We can speculate that wealthier students feel more entitled to leave school if it is uninteresting, possibly due to their access to alternative educational opportunities or early job prospects. It is important to highlight that improving pedagogical practices and innovating teaching methods could be effective protective strategies for this specific population.

These findings highlight the importance of considering individual experiences and attitudes towards school when studying dropout phenomena. They suggest that factors such as classroom dynamics, teaching methods, and student engagement should be considered to understand the dropout patterns among students from different socioeconomic backgrounds. They also emphasize the need for tailored interventions and support systems that address students' specific concerns and motivations to prevent dropout and promote educational success.

- b) Future aspirations through education

When examining future aspirations through education, we found differences between income groups. This hypothesis can be accepted as an explanation for why higher-income students are at greater risk when the school fails to provide them with a better vision of the future, especially for boys. Specifically, in relation to S5 (I have considered dropping out of school because it does not offer me opportunities to improve my current living conditions), the results were lower compared to the results of S10 (I have considered dropping out of school because it does not prepare me for the jobs I desire in the future).

This finding suggests that students from higher-income backgrounds may perceive that the school does not offer them possibilities for upward mobility or improvement in their current living conditions. Additionally, they may feel that the school does not adequately prepare them for the specific careers they aspire to pursue in the future. One way to understand this is to speculate if this population is more vulnerable to flexible capitalism promises of money-making in the present instead of life projection for the future based on education, which sounds more and more disconnected from students' realities worldwide, but especially in the global south (Drumond et al., 2019).

Higher-income backgrounds may perceive that school does not offer clear possibilities for upward mobility or improvement in their current living conditions. Furthermore, they may feel that the school does not adequately prepare them for the specific careers they aspire to pursue in the future. Barbosa-Martinez et al. (2016) discuss the concept of life projects for adolescents, emphasizing the importance of aligning educational pathways with future aspirations. Furthermore, Doogan (2019) explores the promises of flexible capitalism, which values immediate income-generating opportunities over future life projections based on education. This perception may be influenced by such promises, leading to a disconnection between education and students' realities, especially in the global south. Goux et al. (2014b) further illustrate how involving parents in educational aspirations can affect dropout rates. Specifically, the reference to boys suggests that there may be specific challenges or factors influencing dropout rates for male students from higher-income families, which should be further explored and addressed to ensure their educational success and retention.

The implications for school dropout theories are significant, as they emphasize the role of the school in shaping students' future aspirations and perceptions of their educational value. It suggests that when students from higher-income backgrounds do not see a clear connection between their education and improved living conditions or desired career paths, they are at a greater risk of dropping out. Furthermore, the finding highlights the need for personalized and tailored approaches, considering the unique aspirations and needs of different student groups, particularly in terms of gender. The reference to boys specifically suggests that there may be specific challenges or factors influencing dropout rates for male students from higher-income families, which should be further explored and addressed to ensure their educational success and retention.

Conclusion

In the conclusion of our study on school dropout risks among students from diverse income backgrounds, we explored several hypotheses to understand the factors influencing this phenomenon. Our research revealed a nuanced relationship between income levels and attitudes towards schooling. Interestingly, while students from higher income backgrounds did not inherently face a greater risk of being unable to complete their studies, their risk of dropping out increased when they found classes repetitive and tiresome. This suggests that the perception of the school environment and its ability to engage students plays a crucial role in their decision to continue their education.

Further, our findings shed light on the impact of future aspirations on the educational journey of higher-income students. We found that these students were more prone to drop out when they perceived a lack of opportunities for upward mobility or adequate preparation for their desired future careers in their current educational setting. This underscores the importance of aligning educational programs with the evolving career aspirations and expectations of students. Educational institutions must consider incorporating diverse career-oriented courses and guidance that cater to the varied aspirations of students, ensuring that their education is perceived as a valuable tool for future success. This approach is not only beneficial for student retention but also essential for equipping them with the skills and knowledge required in an ever-changing job market.

Theoretical implication

Theoretical implications of this study highlight a significant departure from the prevailing assumption that higher income universally protects against dropout among students. Our findings reveal a more nuanced understanding of dropout risks among higher-income students, demonstrating that high income (among the middle class, this must be highlighted) can, in certain cases, present a higher risk of dropout. This counterintuitive result challenges the conventional belief that socioeconomic advantage automatically safeguards students from educational disengagement and calls for a reevaluation of existing dropout theories (Santos & Courseuil, 2019).

In order to think about these findings theoretically, we must understand the necessity to reassess the role of parental involvement in higher-income families whose children are enrolled in public schools and also have a look into how current socioeconomic pressure might affect these students to pursue a future that schools no longer can provide to them. While it is commonly assumed that students from wealthier backgrounds benefit from increased parental support, our findings suggest that higher-income students may face a higher risk of dropout associated with parental disinterest, limited participation in their school lives, difficulties in valuing the school, and lack of hope in schools as an institution for social mobility. We argue that our work provides a new look for a phenomenon that needs urgent understanding.

Limitations of the study and suggestions for future research

This study has certain limitations that should be acknowledged. Firstly, the data used for

analysis might have inherent biases or limitations in capturing the full complexity of students' experiences and motivations. Future research could consider utilizing more advanced statistical techniques and other sampling methods, but mainly, further research should better grasp the theoretical implications of the income variable in the school dropout phenomenon.

Additionally, this study focused on a specific context and sample. Replicating the study in different educational settings and regions would help validate the findings and examine the generalizability of the observed patterns. The next step would be exploring the intersectionality of gender, socioeconomic status, and other social factors, which could provide a more nuanced understanding of dropout risks that may later be used for targeted interventions. By addressing these limitations and conducting further research, we can continue to enhance our understanding of the complex dynamics of school dropout and develop evidence-based interventions to support all students in their educational journeys.

Final Statements

Author contributions. All authors contributed equally to this work.

Conflicts of interest. The authors declare that there is no conflict of interest regarding the publication of this paper.

Ethical implications. This research was approved by the Ethics Committee in Research (CEP-UFAL) under the approval number 5.407.594.

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