

The spatial dimensions of inequality: Housing and commuting in students' higher education trajectories

Maria José Sá¹, Joyce Aguiar¹, António Magalhães^{1,2}

¹CIPES, Matosinhos, Portugal. ²FPCEUP, Porto, Portugal

Research Domains

Student Access and Experience (SAE)

Abstract

Access to higher education remains deeply shaped by social and material inequalities. This review explores how socioeconomic factors, particularly housing conditions and daily commuting experiences, influence students' experiences in higher education. Drawing on an integrative literature review of peer-reviewed articles, reports, and book chapters (N=24) published over the past decade, the paper identifies how inadequate housing and long or difficult commutes affect not only students' academic performance but also their health, well-being, and sense of belonging. These everyday material conditions are not peripheral, but central to how opportunities in HE are distributed. The review argues for policy responses beyond isolated interventions, recognising how housing and transport infrastructures reinforce broader socioeconomic divides. Integrated strategies are needed to address these overlapping challenges and to support more equitable access to tertiary education.

Full paper

Access to higher education (HE) is widely regarded as a pathway to social mobility. Yet, persistent inequalities, rooted in socioeconomic background, cultural capital, and institutional dynamics, continue to shape access to and success within HE systems (Duta et al., 2018; Müller & Klein, 2022). While extensive research has examined the influence of individual-level factors (such as family income, gender, or immigrant background), comparatively less attention has been paid to the spatial and material conditions under which students pursue HE, particularly housing and commuting arrangements (Card & Thomas, 2018; Crotti et al., 2022; Ike et al., 2020).

Students from higher socioeconomic backgrounds often benefit from early access to quality education, extracurricular resources, and informed guidance, which position them favourably in competitive HE systems (Rodríguez-Hernández et al., 2020). By contrast, students from disadvantaged backgrounds frequently confront intersecting barriers, including limited financial resources, inadequate housing, and burdensome commuting routines. These factors affect not only academic performance but also students' physical and mental well-being (Buthelezi, 2024).

In the Portuguese context, socioeconomic inequality in HE is further intensified by an unstable housing market. Cities such as Lisbon and Porto (the two major Portuguese cities) have experienced sharp increases in rental prices, placing pressure on students who relocate for their studies. Although policy responses have emerged, including the National Plan for Higher Education Accommodation (PNAES, 2024), the shortage of affordable student housing persists. As a result, intra-mobility students (those who study far away from their home region in the country) in particular are pushed to live in peripheral areas to reduce rent costs, which results in longer commutes and additional transportation expenses, frequently absorbed by their families (Cerdeira & Cabrito, 2018).

Commuting itself is a relevant structural factor. The distance between home and university, the availability and cost of public transport, and the time invested in daily travel can all influence academic persistence and students' integration into university life.

This study presents an integrative literature review that aims to broaden the discussion on inequality in HE by focusing on the interaction between inequalities, housing conditions, and commuting logistics. It contributes to a more nuanced understanding of how spatial and material dimensions shape educational pathways. The following research question guided this review: (i) *In what ways do housing and commuting conditions affect students' engagement and academic outcomes in HE?*

Method

The search was conducted in English and Portuguese across four databases: Scopus, Web of Science, Google Scholar, and the Portuguese Open Access Scientific Repository (RCAAP). Additionally, we utilised both backwards and forward citation tracking to enrich our search. The inclusion criteria encompassed both empirical and literature reviews, published by peer-reviewed journals over the past decade. The corpus (N=24) was read in full and coded independently by two researchers.

Findings

Housing and commuting conditions emerge as critical yet often overlooked factors that shape students' engagement with HE. Stable and affordable housing contributes positively to academic engagement and well-being, while inadequate housing creates significant barriers (Kinton et al., 2016, 2018; Ike et al., 2020). Students facing housing instability, such as noise and overcrowding, report poorer academic performance and higher stress levels (Peltz & Rogge, 2016; McIntyre et al., 2018). International students, in particular, are disproportionately affected by housing challenges due to limited financial support and high living costs (Ramia et al., 2022). Some reviewed studies showed that housing can also serve as a mitigating factor (Gui & Alam, 2024; Reynolds, 2020; Sotomayor et al., 2022).

Commuting conditions further influence students' engagement, particularly for those from rural and low-income backgrounds. Limited access to affordable and reliable transportation increases financial and logistical burdens on students, reducing their ability to fully engage in academic life (Guzmán et al., 2021). In rural areas, the lack of public transport options has been linked to higher dropout rates, highlighting the critical role of infrastructure in supporting educational persistence (Guzmán et al., 2021).

However, it is important to note that the extent of these influences can vary based on individual circumstances and institutional support mechanisms, which indicates that while socioeconomic factors are significant, their impact is not uniformly experienced by all students. Beyond identifying these barriers, the review underscores the nuanced and context-dependent ways socioeconomic factors impact students' academic outcomes and daily engagement. Therefore, the findings suggest that addressing educational inequality requires understanding the interplay between various socioeconomic factors and their cumulative impact on student experiences, rather than isolated interventions targeting single aspects.