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Original Research

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Evaluating Sustainability Research in Argentine Higher Education

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Abstract

This study analyzes the integration of sustainability into the research activities of Argentine higher education institutions (HEIs), both public and private. Through a quantitative approach, 132 HEIs were evaluated regarding the presence of sustainability research lines, the inclusion of this topic in strategic plans, and the existence of specialized institutes and academic publications. The results indicate that only 26% of HEIs have established research lines on sustainability, with greater participation from public universities. However, the overall commitment is uneven, with only 55% of institutions including sustainability in their strategic plans. The limited presence of observatories, specialized journals, and research centers in sustainability constrains the ability of Argentine HEIs to influence national and international agendas in this field. This study highlights the need for stronger policies and incentives to promote sustainability research. The study concludes by emphasizing that while progress has been made, it is imperative to adopt a systematic and strategic approach for Argentine HEIs to effectively contribute to sustainable development.

Keywords: *sustainable development, higher education institutions, research, institutional policies, Argentine*

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Introduction

Sustainability has emerged as one of the most pressing and complex challenges of the 21st century, with implications that span from public policies to the daily practices of individuals and institutions (Filho, Simaens, et al., 2023; Robert et al., 2005). The adoption of the 2030 Agenda and the Sustainable Development Goals (SDGs), by the United Nations (UN), has established a global framework that demands active participation from all sectors of society (Biggeri et al., 2023; Lee et al., 2016), including higher education institutions (HEIs) (Cortese, 2003; Vien & Galik, 2024).

HEIs are not only tasked with training professionals who are capable of addressing the challenges of sustainable development (Acaali, 2024; Lozano et al., 2015), they must also position themselves as leaders in research and knowledge generation that promote innovative and viable solutions to the environmental, social, and economic problems facing the world (Adnan et al., 2024; Filho, 2011). Sustainability research has been growing year by year (Yamaguchi et al., 2023; Yang & Xiu, 2023), especially since the launch of the 2030 Agenda in 2015, with an initial trend of exponential growth followed by a consolidation phase in which literature reviews have become highly relevant documents, evidencing the rapid evolution and diversification of research areas (Adnan et al., 2024; Filho, Silva, et al., 2023).

In this context of growth, evolution, and diversification, Argentine HEIs have a fundamental role to play. The integration of sustainability into the research activities of these institutions, however, remains heterogeneous (Arias-Valle et al., 2023; Pacheco & García, 2019). While some HEIs have made significant progress in incorporating sustainability into their strategic plans and developing specific research lines, others still face considerable challenges, largely due to resource limitations and differences in institutional priorities (Arias-Valle et al., 2023). These disparities are particularly evident between public and private HEIs, where variability in access to funding and institutional orientation can significantly influence the level of commitment to sustainability (Adrogué et al., 2019).

Despite growing attention to sustainability on a global scale, there is a notable lack of academic literature that specifically addresses sustainability research within Argentine HEIs, especially regarding the systematic integration of sustainability research lines across both public and private institutions. This study seeks to address this gap by examining whether sustainability research lines exist within Argentine HEIs and exploring how their implementation varies between public and private institutions.

The importance of this study lies in its potential to address a significant gap in the literature on sustainability research in Argentine HEIs. By offering empirical insights into the current landscape of sustainability research within the Argentine university system, this work contributes new empirical knowledge and proposes a conceptual framework for understanding and evaluating the incorporation of sustainability into academic research in Argentina. Furthermore, this research may serve as a guide for developing effective strategies that encourage broader and deeper adoption of sustainable practices within HEIs, fostering their role in societal transformation toward balanced and equitable development (Filho, Simaens, et al. 2023; Shawe et al., 2019). Moreover, the results of this study have significant practical implications. By identifying the strengths and weaknesses in the integration of sustainability, more effective strategies can be designed to promote a broader and deeper adoption of sustainable practices in HEIs (Filho, Simaens, et al., 2023; Shawe et al., 2019), which is especially crucial in a context where higher education must not only adapt to sustainability demands but also lead efforts to transform society toward a more balanced and equitable development (Adnan et al., 2024; Tilbury, 2011).

This study provides a detailed and comparative analysis of the state of sustainability research in Argentine HEIs, offering a solid foundation for future research and policy formulation. By focusing on the differences between public and private HEIs, the study offers a critical perspective on existing disparities, highlighting

how various governance and funding structures can influence institutional commitment to sustainability (Holst et al., 2024; Huepe, 2024). Additionally, the study highlights institutions that are already playing a leading role in this field, pointing out good practices that could be replicated by other HEIs. Ultimately, this work not only enriches academic knowledge on sustainability in higher education but also has the potential to influence the development of strategies that strengthen the capacity of Argentine HEIs to contribute effectively to sustainable development.

Literature Review

Sustainability is a concept that refers to development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland, 1987). This concept implies a balanced and comprehensive approach that encompasses the environmental, social, and economic dimensions of development (Elkington, 1998), aiming to harmonize human progress with environmental conservation and social equity (Biggeri & Mauro, 2018; Lee et al., 2016).

Education for sustainable development (ESD) aims to integrate the principles, values, and practices of sustainable development into all aspects of education and learning (Tilbury, 1995; UNESCO Center of the Basque Country, 2009). ESD not only addresses the teaching of environmental issues but also fosters competencies—such as critical thinking, problem solving, and informed decision making—which are essential for sustainable development (Gustavo, 2005; Pigozzi, 2003; UNESCO, 2017). Through ESD, educational institutions play a fundamental role in shaping globally responsible citizens committed to sustainability (UNESCO, n.d., 2020).

HEIs are key actors in promoting sustainability (Campbell, 2021; Ferguson & Roofe, 2020). These institutions not only educate future leaders and professionals but also generate knowledge through research and foster technological and social innovation (Holst et al., 2024; Sattich et al., 2024). HEIs have the capacity to influence society by integrating sustainability into their curricula, institutional practices, and research projects, acting as models of sustainable development for their communities (Ayuso et al., 2022; Biancardi, Colasante, et al., 2023).

HEIs also play a crucial role in researching and developing solutions to complex problems related to sustainability (Bednarek et al., 2023; Berrone et al., 2023). Through interdisciplinary and applied research, these institutions can address critical issues—such as climate change, poverty, and social inequality—providing the scientific foundations necessary for sustainable policies and practices (Biancardi et al., 2023).

At the international level, HEIs have adopted various approaches to integrating the SDGs into their operations and academic programs (Christou et al., 2024; Lozano et al., 2015). HEIs play a central role in generating knowledge and shaping individuals committed to sustainability (Findler et al., 2018). UNESCO emphasizes that higher education should significantly contribute to the SDGs through education, research, and innovation (UNESCO International Institute for Higher Education in Latin America and the Caribbean, 2023). Renowned institutions, such as the University of Tokyo, the Swiss Federal Institute of Technology (ETH Zurich), and Lund University, have developed robust programs and research centers dedicated to this topic, setting a global standard for integrating sustainability into academic research (Yarime et al., 2012).

HEIs in developed countries have led the way in researching and implementing sustainable practices, and setting examples of how HEIs can integrate the SDGs into all their main functions, including education, research, and community outreach (Chankseliani et al., 2021; Sudan & Zuin, 2022). According to a recent bibliometric study, the number of academic publications related to the SDGs has significantly increased since the adoption of the 2030 Agenda, reflecting a growing academic commitment to sustainability (Alfirević et al., 2023; Yamaguchi et al., 2023). Secundo et al. (2020) highlight the importance of sustainability research by

focusing their analysis on key areas, such as intellectual capital components applied to sustainable development in the private sector, intellectual capital aimed at strengthening regional development in the knowledge economy, and intellectual capital focused on promoting sustainability in the public sector.

Sustainability research is essential for addressing contemporary global challenges, as it provides the scientific foundations necessary to develop policies and practices that promote balanced and equitable development (Alfirević et al., 2023; Yamaguchi et al., 2023). The impacts of research are manifold and extend beyond the academic realm (Findler et al., 2019). First, research contributes to knowledge generation; sustainability research significantly advances knowledge across various disciplines (Alfirević et al., 2023). By addressing complex problems such as climate change, biodiversity loss, and social inequality, HEIs generate data and theories essential for understanding and mitigating these challenges (Filho, Simaens, et al., 2023). Additionally, research influences public policies. Research conducted at HEIs can directly influence public policy formulation (Janssens et al., 2022; Kumar et al., 2021). Governments and international organizations often use research findings to design and implement effective policies that promote sustainability (Sabzalieva et al., 2021). For example, the implementation of the 2030 Agenda at Paraná State University in Brazil demonstrated how universities can collaborate with local authorities to promote sustainable development at the regional level (Daú et al., 2023).

Similarly, sustainability research drives technological innovation by developing new technologies and methods that can be applied across various sectors (Yang et al., 2024). These innovations not only improve the efficiency and sustainability of industrial and agricultural processes but also create new economic opportunities (Müller et al., 2018). India's National Education Policy 2020 highlights the importance of research for innovation and development, promoting the creation of a conducive environment for research and technological development in HEIs (Kumar et al., 2021).

Through research, HEIs not only generate knowledge but also educate and raise awareness among students and the general community about the importance of sustainability (Borsatto et al., 2024), which is crucial for training future leaders and professionals committed to sustainability in their respective fields (Xing & Ironsi, 2024). Another impact is social—that sustainability research directly improves people's quality of life (Filho, Silva, et al., 2023). By addressing social issues, such as poverty and inequality, HEIs contribute to creating more just and equitable societies (Deroncele-Acosta et al., 2023).

In Latin America, HEIs have begun integrating sustainability into their curricula and research activities, albeit with unique challenges due to diverse economic and political contexts (Lima et al., 2023; Vallaeys, 2021). HEIs in Brazil, Mexico, and Chile, such as the University of São Paulo and the National Autonomous University of Mexico (UNAM), have developed institutes and research centers that address sustainability issues in a comprehensive manner (Arond et al., 2011; Scavarda et al., 2023). However, the region faces barriers, such as inadequate funding and the need for clearer and more sustained policies, in supporting these efforts (Huepe, 2024; Vallaeys, 2021). In recent years, there has been an increase in scientific production related to the SDGs in Latin America, although international and regional cooperation needs to be strengthened to improve the quality and impact of these research efforts (Scavarda et al., 2023).

In Argentina, the integration of sustainability into university research is an emerging and uneven process. Although some HEIs, such as the University of Buenos Aires (UBA), the National University of Córdoba (UNC), and the National University of La Plata (UNLP), have begun incorporating SDGs into their policies and institutional practices, there are still ample opportunities to strengthen these initiatives at the national level (Suasnábar, 2023). The country's HEIs face the need for greater governmental support and funding to achieve full integration of sustainability in the academic sphere (Adrogué et al., 2019). Despite these challenges, there are promising examples of research projects and international collaborations that

demonstrate the potential of Argentine HEIs to contribute significantly to sustainable development (Arias-Valle et al., 2023).

In order for Argentine HEIs to fully realize their potential as exemplars of sustainable development, it is imperative to advance the integration of sustainability within their research agendas (Cheng et al., 2022). This involves not only incorporating sustainability into curricula and research activities but also promoting a cultural and organizational shift within the institutions (Lunag et al., 2024). The internalization of sustainability requires long-term institutional commitment that transcends isolated initiatives and translates into an organizational culture consistent with sustainability principles (Christou et al., 2024; Holst, 2023). The opportunities for Argentine HEIs are significant.

From students and society at large, the growing demand for sustainability education and training offers HEIs the opportunity to reinforce their commitment to sustainable research, while positioning themselves as leaders in this field (Scavarda et al., 2023). Compared to other regions, Argentine HEIs show moderate progress in implementing sustainability in their research (Arias-Valle et al., 2023). In this context, Argentine HEIs need to strengthen their internal policies and practices, which includes creating more institutes that are dedicated to sustainability, including this theme in institutional strategic plans, and promoting cross-cutting research that addresses the SDGs comprehensively and systematically (Arias-Valle et al., 2023; Suasnábar, 2023).

Purpose of the Study, Research Questions, and Hypotheses

This study aimed to comprehensively evaluate the degree of integration of sustainability into the research activities of Argentine HEIs. The analysis focused on determining whether these institutions had established research lines in sustainability, whether such lines were explicitly included in their strategic plans, and how these initiatives were distributed between public and private HEIs. Additionally, it sought to analyze the academic production on sustainability to identify the institutions leading in this field and those that could benefit from greater attention to these issues. In doing so, the study not only aimed to provide an updated and detailed view of the state of sustainability research in Argentina but also to offer valuable inputs for designing policies that can strengthen the integration of sustainability in higher education.

The central question guiding this study was:

> To what extent have Argentine HEIs, both public and private, integrated sustainability into their research activities, and how is this commitment reflected in the creation of research lines, projects, and academic production on sustainability?

Methods

This study adopted a quantitative approach to analyze the commitment of Argentine HEIs to sustainability research (Stockton, 1974). The objective was to evaluate whether HEIs in Argentina have integrated sustainability into their research lines.

Participants

The participants of the study included all HEIs in Argentina (132 HEIs), both public and private. The inclusion of all HEIs ensures that the results obtained were representative of the Argentine university system, as a whole, and allowed for comparisons between different types of institutions.

Context

The research was structured as a descriptive and cross-sectional study aimed at exploring the current state of sustainability research within Argentine HEIs. A quantitative approach was used due to the nature of the analysis, which required the collection and examination of numerical data regarding institutional characteristics related to sustainability.

Instrumentation

The study focused on evaluating the existence of sustainability research lines within Argentine HEIs and analyzed the variation in their implementation between public and private institutions. Key variables analyzed included the presence of sustainability research lines. This structured data collection enabled a detailed analysis of the commitment of Argentine HEIs to sustainability research, ensuring the reliability and validity of the findings.

Data Collection

Data were collected through a comprehensive review of institutional documents, including strategic plans, annual reports, and academic publications, available on the official websites of each HEI. Data collection focused on the following key variable: Do sustainability research lines exist? For each HEI, research icons were analyzed to investigate the existence of sustainability research lines.

Data Analysis

Once the data were collected, they were organized into a structured database in Microsoft Excel, where each row represented an HEI, and each column corresponded to one of the key variables mentioned above. Qualitative data (such as the presence of a strategic plan that includes sustainability) were coded into binary values (1 if the plan was present, 0 if it was not) to facilitate quantitative analysis. The data were organized and analyzed using descriptive statistics to identify the frequency and distribution of key variables among Argentine HEIs. The proportion of HEIs that meet each of the evaluated criteria was calculated, breaking down the results by type of institution (public or private). In addition, SPSS statistical software was used to perform correlation analyses between selected variables and to evaluate the coherence and commitment of HEIs to sustainability.

Data Analysis Process

The analysis of the collected data was carried out in several stages, including (1) variable coding, (2) descriptive analysis, (3) comparative analysis, (4) correlation analysis, and (5) validation. This analysis followed a systematic and rigorous approach to ensure the accuracy and relevance of the findings.

Qualitative variables were coded into numerical values to facilitate statistical analysis using variable coding. For example, the existence of a strategic plan was coded as 1 if the HEI had one that included sustainability, and 0 otherwise.

An initial descriptive analysis was performed to identify the frequency and distribution of key variables among Argentine HEIs. Absolute and relative frequencies, as well as measures of central tendency (mean) and dispersion (standard deviation), were calculated for each variable. This analysis provided an overview of the characteristics of HEIs in relation to their commitment to sustainability.

To evaluate if there were significant differences between public and private HEIs in terms of integrating sustainability into their research activities statistical tests were used. The chi-square test was employed for categorical variables, such as the presence of a strategic plan or the existence of sustainability research lines.

For continuous variables, such as the number of sustainability publications and the number of research projects, the *t*-test was used to compare the means between public and private HEIs.

A correlation analysis was conducted to explore possible relationships between the presence of institutional policies, such as a strategic plan that includes sustainability, and academic production in sustainability. Pearson correlation coefficients were used to assess the magnitude and direction of relationships between variables.

To ensure the validity and reliability of the data, cross-reviews of the obtained information were carried out and compared with other secondary sources, such as reports from national and international organizations on higher education and sustainability in Argentina.

Results

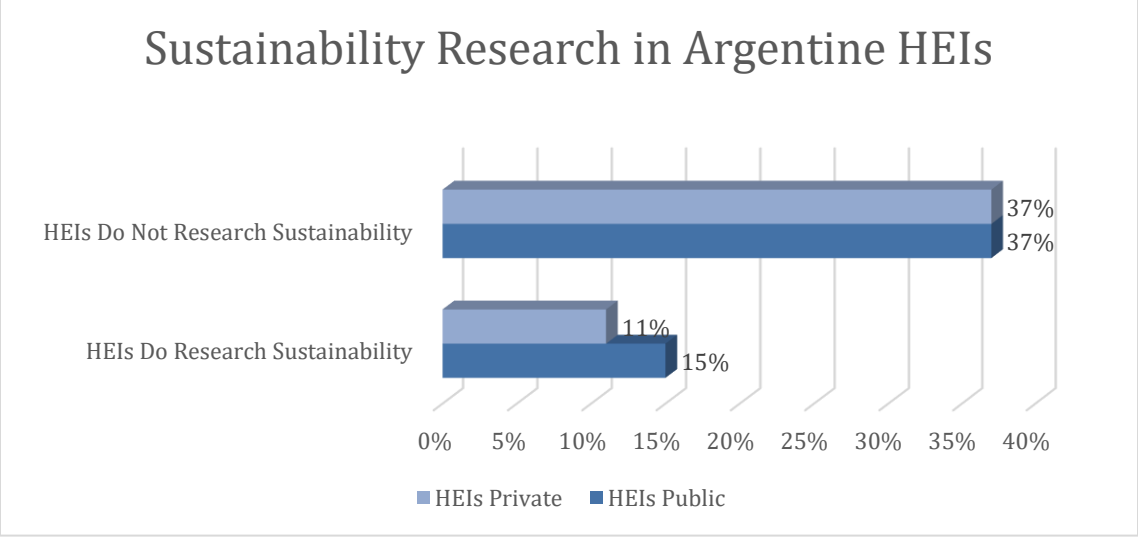
The analysis of data collected from the 132 Argentine HEIs, both public and private, revealed several significant trends regarding these institutions' commitment to sustainability research.

General Commitment of HEIs to Sustainability

Of the 132 HEIs analyzed, a total of 34 (26%) have integrated some aspect of sustainability research, indicating an initial level of commitment to this theme. (Figure 1 illustrates these findings.) The majority (74%), however, have yet to prioritize sustainability as a central focus in their research. This finding is particularly concerning given the growing importance of sustainability on the global agenda and its critical role in training professionals and generating relevant scientific knowledge to address the challenges of the 21st century (Cortese, 2003; Cortese & Hattan, 2010).

When disaggregating the data by institution type (see Figure 1), it was observed that public HEIs have a slightly higher participation in sustainability research (15%) compared to private institutions (11%). This result may be related to differences in access to funding, the nature of institutional mandates, and/or the level of priority given to research in the public versus private sectors. Nevertheless, the fact that a considerable majority of HEIs—regardless of their nature—are not involved in sustainability research underscores the need for more decisive policies and incentive strategies for these institutions to address this issue more effectively (Janssens et al., 2022).

Figure 1. *Sustainability Research in Argentine HEIs*



Note: Authors' own elaboration

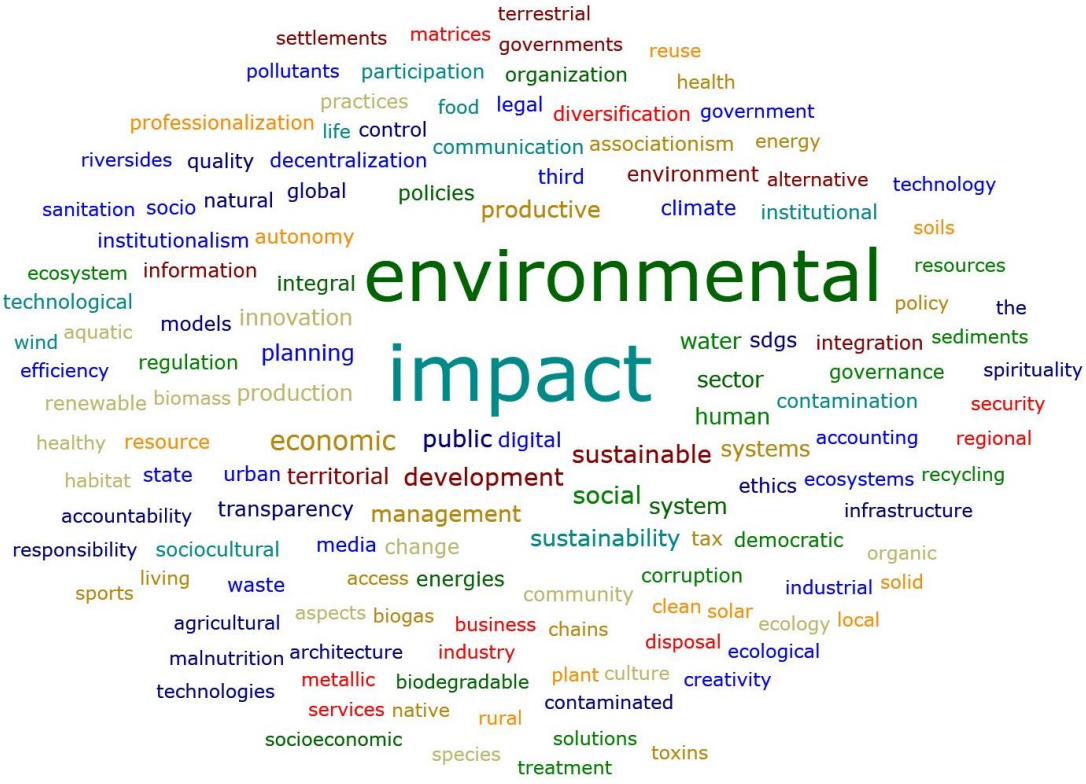
Institutional Characteristics Related to Sustainability

The analysis of the institutional characteristics of the HEIs reveals a mixed picture regarding the integration of sustainability into their structures and practices; this section only analyzed the 34 HEIs that contemplated some indicator of sustainability research. Seventy-three percent (73%) of the HEIs developed cross-cutting research lines on sustainability. Although this percentage was encouraging, the depth and impact of these research lines still needed to be evaluated, as the mere existence of lines did not guarantee the production of high-quality research or its practical application.

Research Lines in HEIs

The research lines in Argentine HEIs showed significant thematic diversity, focusing primarily on the three key dimensions of sustainability: (1) environmental impact, (2) economic impact, and (3) social impact. Topics, such as governance, democratic participation, and the professionalization of public management also were addressed (see Figure 2).

Figure 2. *Research Lines*



Note: Authors' own elaboration

Environmental Impact

The most recurrent topics in Argentine HEIs was related to environmental impact, which is the predominant focus in research lines, covering topics such as climate change, the sustainability of natural ecosystems (aquatic and terrestrial), energy efficiency, and the development of alternative energies (solar, wind, biomass, biogas). Technologies for sustainable agricultural and industrial production and the quality of water and soils, including the management of pollutants and waste, were also explored.

Economic Impact
Research lines in this area focus on social responsibility, transparency, and technological innovation, with a strong emphasis on regional economic development and territorial planning. We included studies on governance and democratic participation as well as on sustainability in the socio-productive sector and the innovation ecosystem.

Social Impact
Research related to this impact focused on socio-cultural sustainability, human ecology, and integral sustainable development.

Comparative Analysis: Public and Private HEIs

Comparisons between public and private HEIs were analyzed to evaluate if there is a significant difference in sustainability integration when using a chi-square test. These variables included the presence of a strategic sustainability plan, the existence of sustainability research lines, and the availability of institutes dedicated to sustainability. The chi-square test indicated a significant difference between public and private HEIs ($p < 0.05$), with public HEIs more likely to have sustainability research lines. This result highlighted a greater integration of sustainability in the research activities of public HEIs.

Correlation Analysis: Research Lines and Sustainability Research Projects

Correlations between different variables were analyzed to explore possible relationships between the presence of institutional policies and academic production in sustainability. A strong positive correlation ($r \approx 0.70$) was identified between the existence of sustainability research lines and the number of research projects in this area, indicating that institutions structuring their research around sustainability are more active in carrying out relevant projects.

Trend Identification

The analysis showed that Argentine HEIs are beginning to incorporate sustainability into their research areas, although unevenly. For example, public HEIs tend to be leaders in this integration, especially in terms of research lines and academic production. In contrast, many private HEIs have begun integrating sustainability into their practices to a lesser extent, which highlights the need to strengthen policies and institutional support in the private sector.

Public HEIs, such as the University of Buenos Aires, the National University of Córdoba, and the National University of La Plata, stand out as leaders in sustainability, demonstrating significant progress in this area, developing multiple research lines, generating a considerable number of projects and publications related to sustainability, and reinforcing their leadership in this field. Strengthening policies and offering institutional support will help to improve an HEI's commitment as well as contribute more significantly to its sustainable development.

Discussion

Integration Into the Current Literature

The findings of this study confirm that although Argentine HEIs have begun to integrate sustainability into their research activities, this process is uneven and varies considerably between public and private institutions. This study aligns with the literature that emphasizes the importance of institutional policies in promoting sustainability in higher education (Christou et al., 2024; Holst, 2023).

The comparative analysis between public and private HEIs reveals significant differences in the integration of sustainability. Public HEIs, such as the University of Buenos Aires (UBA), the National University of Córdoba (UNC), and the National University of La Plata (UNLP), stand out for a greater incorporation of sustainability into their research activities. This result is consistent with previous studies indicating that public institutions tend to have greater access to research resources and an institutional orientation that prioritizes public interest areas, such as sustainability (Chankseliani et al., 2021).

Although private HEIs have begun integrating sustainability, they have done so in a more limited way than their public counterparts. This slow integration could be related to a lower availability of funds and a possible prioritization of research areas that generate more immediate financial returns (Huepe, 2024), which highlights the need for stronger institutional policies in the private sector that incentivize sustainability research and the integration of sustainable practices in the academic field (Secundo et al., 2020).

The strong correlation observed between the existence of research lines and the number of sustainability projects suggests that structuring research around these topics is crucial for promoting sustained and relevant academic production (Cheng et al., 2022). These results coincide with a previous study that highlights the importance of an integrated approach to addressing sustainability challenges, in which research is not carried out in isolation but as part of a broader institutional effort (Alfirević et al., 2023).

It is crucial that sustainability be explicitly incorporated into each institution's strategic planning, making it a central axis guiding all academic and administrative areas (Christou et al., 2024). Thus, Argentine HEIs must take concrete steps to effectively integrate sustainability into their operations and research activities (Adrogué et al., 2019), which requires the development of clear strategies and measurable objectives that are aligned with sustainable development goals (SDGs) that ensure coherence and focus on actions aimed at promoting sustainability research (Galán-Muros, 2023; Tilbury, 2011).

Moreover, it is essential that public policy makers design and implement incentives to stimulate sustainability research, especially in the private sector, where the availability of funds is more limited (Huepe, 2024). These incentives could include competitive funding for research projects, specific scholarships for students and researchers, and recognition for those who demonstrate a strong commitment to sustainability (Filho, Silva, et al., 2023). Additionally, it is recommended that HEIs work toward creating centers of excellence exclusively dedicated to sustainability research. These centers would act as hubs of innovation and interdisciplinary collaboration, involving key actors from industry, civil society, and government. The creation of these centers could be supported through public–private partnerships and government funding (Filho et al., 2019).

Interinstitutional and international collaboration also play a fundamental role in improving the quality and impact of sustainability research (Kumar et al., 2021). HEIs should take advantage of these opportunities to share knowledge, resources, and best practices, which are facilitated by the creation of research networks and university consortia focused on the SDGs (Biancardi, Colasante, et al., 2023). At the same time, institutions need to establish observatories or monitoring programs to continuously evaluate progress in the integration of sustainability (Filho et al., 2019). These programs should use clear indicators that reflect the impact of sustainability research, which will not only improve current practices but also provide valuable data for strategic decision making and policy adaptation (Galán-Muros, 2023).

A significant challenge facing Argentine HEIs is the polarization of research lines and projects toward environmental impact, which neglects the integral balance that is inherent to the concept of sustainability; this also includes social and economic dimensions (Brundtland, 1987; Elkington, 1998). This challenging situation reflects an urgent need for education and awareness regarding the comprehensive concept of sustainability (Xing & Ironsi, 2024).

Sustainability cannot be reduced solely to environmental protection but must also address social equity and sustainable economic development (Findler et al., 2019). HEIs should include an integrated perspective of sustainability in their curricula and continuing education programs, thus equipping students and faculty to address global challenges holistically (Christou et al., 2024; Tilbury, 2011). Only through a deep and balanced understanding of sustainability can HEIs effectively lead the generation of innovative and sustainable solutions to the complex problems facing society (Cortese, 2003; Lunag et al., 2024).

At the public policy level, the results of this study highlight the need for governments to more firmly support sustainability research through the allocation of specific resources and the promotion of regulatory frameworks that encourage HEIs to adopt sustainable practices in all their operations (Huepe, 2024; Suasnábar, 2023). If implemented in a coordinated and strategic manner, these actions will enable Argentine HEIs to play a decisive role in building a sustainable future, both nationally and internationally (Biancardi, Colasante, et al., 2023; Secundo et al., 2020).

Limitations

This study faced certain limitations, primarily due to data collection and based on publicly available information on Argentine HEI websites. Some HEI sites may have excluded data that is not accessible to the public, generating only a partial view of sustainability activities. Future research that integrates qualitative and quantitative analyses could offer a more comprehensive understanding of the factors influencing sustainability in Argentine HEIs.

Implications for Theory and Practice

The results of this study have important implications for educational policy and institutional management in Argentine HEIs, as they underscore the need for a more systematic and strategic approach to integrating sustainability into HEIs—especially in the private sector (Christou et al., 2024). A solution could involve the creation of financial and academic incentives to promote sustainability research and the incorporation of sustainable practices in all aspects of institutional life (Huepe, 2024).

The study findings also suggest that institutional policies play a crucial role in promoting academic sustainability (Sabzalieva et al., 2021). HEIs with developed strategic plans and sustainability research lines are better positioned to contribute significantly to the SDGs and influence public policies related to sustainable development (Adrogué et al., 2019), which reinforces the need for institutional leaders to adopt a proactive approach to integrating sustainability into their academic and administrative missions (Lozano et al., 2013).

Conclusion

This study provides a comprehensive overview of the current state of sustainability research in Argentine HEIs, revealing both progress and outstanding challenges in this area. The findings indicate that while robust steps have been taken toward integrating sustainability—especially in public HEIs—there is still a significant gap compared to private HEIs, where the inclusion of sustainability in research activities is more limited.

The comparative analysis highlights that institutional policies play a crucial role in promoting sustainability research. HEIs with developed strategic plans that include sustainability tend to have a higher number of publications and projects in this area, underscoring the importance of an institutionalized approach to fostering a culture of sustainability within HEIs.

Despite these advances, the study also reveals the urgent need to strengthen policies and institutional support, especially in private HEIs, so that they can contribute more significantly to sustainable development. This includes not only the creation of appropriate financial incentives and resources but also the need for a cultural shift that promotes sustainability as a central axis in the educational and research mission of HEIs.

Although Argentine HEIs have begun to incorporate sustainability into their research, it is essential to adopt a more systematic and strategic approach to achieve full and effective integration. Only through sustained and collaborative commitment, supported by clear policies and adequate resources, will Argentine HEIs be able to play a decisive role in building a sustainable future, both nationally and internationally.

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