

## SUSTAINABLE DEVELOPMENT GOALS (SDGs) FROM THE VIEW OF UNICENTRO'S MANAGEMENT STUDENTS

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### ABSTRACT

**Objective:** This study aims to explore the awareness and willingness of Management students at Unicentro to engage in the implementation of the Sustainable Development Goals (SDGs) during their higher education.

**Method:** The methodology involves assessing the awareness and perceptions of Management students regarding the SDGs through surveys or interviews. This approach aims to understand their perspective on the role of government, states, and educational institutions in promoting sustainability. It also seeks to evaluate the existing communication and educational strategies within the university concerning the SDGs.

**Results:** The findings reveal a significant gap in communication and guidance related to the SDGs within the institution and among students. While most students possess a basic understanding of the SDGs, they acknowledge a need for enhanced efforts from governments and educational institutions in sustainability strategies. Furthermore, students advocate for the university to assume a leadership role in integrating sustainability into its methodology, practical exercises, and research activities.

**Conclusions:** The study concludes that there is an urgent need for improved communication and educational initiatives regarding the SDGs at Unicentro. By fostering a collaborative environment that encourages sustainability practices, higher education institutions can play a pivotal role in achieving the SDGs. This involves developing innovative educational tools and methodologies that not only enhance student awareness and engagement but also contribute to societal well-being and environmental sustainability.

**KEYWORDS:** SDG; University; Management; Sustainable Development.

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## 1. Introduction

The Sustainable Development Goals (SDGs) of the 2030 Agenda were approved by 193 countries in 2015 at the UN and have been gaining increasing prominence in discussions and initiatives around the importance of developing a more just, equitable, and sustainably efficient society. The proposal to eradicate hunger and reduce poverty worldwide has prompted the governments of signatory countries to develop strategies around 17 global objectives and 169 targets, prioritizing human rights, with the aim of ending poverty, reducing inequality and injustice, promoting gender equality and empowering women and girls, as well as addressing other contemporary challenges (UN, 2016).

In this perspective, governments, organizations, and various sectors of society play a crucial role in participating and taking action to achieve these goals. Universities, as agents of education and transformation, can and should play a role in the knowledge production process and in meeting the goals. According to Farias, Coelho, and Coelho (2019), education plays a significant role in building a sustainable society and raising awareness of the importance of today's actions for the future, thus enabling the operationalization of the transition from discourse to practice through Education for Sustainability.

As the SDGs are a global demand requiring joint practices and actions, studies such as those by Bizerril, Rosa, and Carvalho (2018), advocating for a culture of sustainability through daily practice on university campuses, research, education, and their relationship with society, shaping environmentally responsible citizens, have highlighted the need to assess the level of knowledge of students in Higher Education Institutions (HEIs) and the institutions' strategies regarding actions towards SDGs practices.

With the above justification, this study aimed to answer the research question: what is the vision, knowledge, and interest in participating in the implementation of sustainable development goals during undergraduate studies among students in the Management course at the State University of Midwestern - Unicentro? To answer the raised question, the general objective was established to identify the knowledge of Management course students about the SDGs. The theoretical framework of the study is presented below.

## 2. Theoretical Framework

It is widely acknowledged that the Sustainable Development Goals (SDGs) have become a trend in academic circles and scientific research, with a noticeable increase in works dedicated to sustainability since 2015 with the adoption of the UN Agenda (Lima; Ribeiro, 2023). Higher Education Institutions (HEIs) in this context should play a significant role in shaping the formation of students, researchers, and the community towards solutions that guide goal achievement. Therefore, academic training should empower individuals to live in a sustainable and responsible society, always seeking solutions to social problems (Mainginski et al., 2017).

The Sustainable Development Goals outlined by the UN (2015) are divided into 17 objectives, as depicted in Figure 1. Integrated with this, the SDGs align towards the global call for actions aimed at ending poverty, protecting the environment and climate, and ensuring peace and prosperity for all people. They also recognize current challenges that are complex and interconnected, such as poverty, inequality, climate change, and environmental degradation (Horst et al., 2023).

Figure 1 - 17 Sustainable Development Goals



UN (2015).

Sustainable objectives are joint goals with common interests among agents and social actors towards sustainable development and mutual and coordinated work. Thus, it is generally of interest that the driving forces for the 2030 agenda goals focus together, understanding that each objective impacts the outcome of the other (UN, 2015).

Interdisciplinarity work is essential for achieving the SDGs, requiring concerted efforts across all academic areas and society to pursue common goals. Therefore, a systemic approach can address social, economic, and ecological issues on a global scale and in an integrated manner (Lima; Ribeiro, 2023). This perception reinforces that one sector influences the fulfillment of another, necessitating cooperation, as this synergy influences one another.

Discussions on the SDGs in the field of applied social sciences have already shown results capable of diagnosing sustainability knowledge, even if partially, and how these objectives have been developed in higher education institutions (Faria et al., 2018). In the social context, the Administration course has the commitment to develop management strategies that value the economic and financial potential of institutions, creating managerial methods that encompass business sustainability and all resources of the administrative process, including natural, raw material, and human resources (Pacheco et al., 2023).

Various research efforts dedicated to analyzing the perception of students from specific courses have shown results where students claim to be more knowledgeable about those core objectives addressed in the curriculum (Lemke; Barroso, 2021). As Mainginski (2017) discusses in the study on the perception of SDG knowledge in engineering areas, the result demonstrated that interest in knowledge is closely related to the curricular studies applied to the course. The author also emphasizes the need to address other areas, such as humanities, as a way to expand knowledge and the need to understand, think, and plan the SDGs in an interdisciplinary manner.

Therefore, faced with the demand for interest in the SDGs and the commitment to the goals and objectives to be met, the theme of sustainable development and sustainability is gradually gaining prominence in the academic environment at the Higher Education level, aiming to empower and train future professionals from various fields to deal with new demands and challenges (Faria et al., 2018). The adoption of research practices, student promotion, extension programs, and disciplines focused on the SDGs should align around the construction of actions and, above all, attitudes that generate interest among HEIs and the community.

In the study conducted by Faria et al. (2018), which involved students from a Private

University in São Paulo, it was observed that administration students still know little about sustainability, a problem that must be overcome through incentives, teaching programs, research, etc., given that HEIs can be used beyond awareness, with local and regional strategies around the SDGs. Moreover, what is expected is achieving social responsibility, directing methodologies aligned with social actions that promote awareness and sustainable attitudes for the entire community.

Aligned with the objective of SDG 4, education plays an important role in SDG implementation and in shaping citizens aware of social needs and committed to a sustainable future (Horst et al., 2023). Developing capacities, updating, and interest in current demands are essential commitments towards sustainability. Furthermore, the role of HEIs for quality education should focus on adapting to the current scenario, focusing on social gaps, inequality among people, and irrational consumption.

The State of Paraná of Brazil stands out as an important of strategies in development around the SDGs. The State, in partnership with the Organization for Economic Cooperation and Development (OECD), has been fostering studies and research with the aim of enhancing strategies towards the global pact goals by 2030 (Horst et al., 2023).

Areas that have been highlighted include renewable energy, air quality, water preservation, and coastal protection. However, there are still many challenges ahead, especially in the fields of health, education, and security, areas where Paraná is below the OECD average in terms of education but above the Brazilian average. Faced with this, there is a great challenge and need to raise the development index of quality education and thus adjust and position strategies through the formation of knowledge and sustainable awareness. Education is essential for the construction and expansion of the SDGs. There is a real need to empower HEIs with projects in this direction (Horst et al., 2023).

In this perspective, Horst et al. (2023) demonstrate how partnerships with institutions engaged in the SDGs are crucial for the potential for cooperative and joint work towards common core objectives. And Faria et al. (2018) reinforce, stating that this integration should aim at focusing on perceptions about the SDGs and, more than that, disseminating the concept to embed these beliefs in the academic formation process, aiming for students to develop the necessary skills on sustainability.

Therefore, educating for sustainability is just one more way to improve or even change students' beliefs and values so that sustainable attitudes and behaviors can be adopted (Faria et al., 2018).

The focus of the debate when measuring the knowledge of these students in HEI management courses on the SDGs aligns with the need and challenge of training management professionals with this new administrator profile. HEIs, even in their efforts to expand studies, research, and courses focused on sustainability, still have deficiencies in objectively incorporating the SDGs into their curricula, considering that the economic aspect, treating the socio-environmental as accessory, is still prevalent in various HEIs, reflecting Brazilian society (Serafim; Leite, 2021).

Here, it is reinforced that there is still resistance to planning and building strategies in an interdisciplinary manner. Courses, in general, still carry within their curricular profile a significant challenge on the path to reinforce the debate and encourage sustainable awareness and knowledge. Serafim; Leite, 2021, warn that simply including a subject in the course curriculum is not enough; the theme must be addressed in all curricular disciplines to train managers with a sustainable vision in all areas of Administration.

Melo et al. (2018) emphasize that as management courses have a strong preference for economic and financial matters, they still stand out in qualitative results regarding sustainable practices. And students may still be conditioned to sustainable rational consumption practices, considering more the potential financial losses they may incur than through a collective conscious education construction of sustainability.

Therefore, in view of the challenge of building a sustainable consciousness motivated by social and community interest and the desire for change attributed to personal, collective, and citizen responsibility, avenues must be opened to expand SDG practices in HEIs with strategies such as exclusive classes, sustainability-focused disciplines, promotion of research, and development of academic extension programs. Involvement is expected among university and student actors, with teachers and researchers capable of shaping students with a citizen, community, and sustainable vision, aiming to develop interdisciplinary practices attentive to the changes and trends of a sustainable world (Mainginski, 2017).

Pacheco et al. (2023) advocate the idea that academics should be better prepared regarding sustainability and should involve teachers, coordinators, and institutional management.

The interest in measuring the degree of knowledge of Management course students at Unicentro represents the need to measure the knowledge and themes surrounding the SDGs in HEIs, given the issue of sustainable knowledge against the challenge of the 2030 agenda. In this sense, Pacheco et al. (2023) emphasize that a sustainable university is one that promotes

teaching, creation, innovation, and becomes a model for other universities and organizations, allowing the insertion of its graduates into the labor market.

Directed towards the fulfillment of the 2030 agenda and the strategies for fostering the SDGs for the formation of managers capable of developing sustainable administration, this work is proposed. Still following a principle of the 2030 Agenda (UN, 2015), of not leaving anyone behind, it is understood that the University's participation is of paramount importance as a shaper of consciousness and professionals capable of sustainable practices in society. Furthermore, HEIs as catalysts for human and social value are significant and essential in the sustainable cause (Horst et al., 2023). The following section will present the methodology of this study.

### 3. Methodological Procedures

This study is based on a descriptive and quantitative research perspective, related to the analysis of data obtained through questionnaires applied to students in the Management course at a State University called Unicentro, located in the central-southern region of Paraná state, in Brazil. It also includes the description of characteristics aimed at identifying social representations and the profile of individuals and groups, as well as studies aimed at identifying structures, forms, functions, and content (Monzato; Santos, 2012).

This work consists of analyzing results obtained through a structured questionnaire developed by the authors of this study based on the SDGs and levels of knowledge. It was administered (via Google Forms) between June 13, 2023, and July 5, 2023, at the Santa Cruz campus of Unicentro, and it was promoted in classrooms and WhatsApp groups of the students. The questionnaire was structured as follows: 12 questions about the students' profile, 8 specific questions about the SDGs, including 7 objective questions and 1 descriptive question. The questions were developed by the authors based on the literature, and a pre-test of content and internal consistency (Cooper; Schindler, 2010) was conducted on June 10, 2023, by members of the Research Group registered with CNPQ, including professors, doctoral students, master's students, undergraduate students, and scientific initiation students.

The universe refers to a set of individuals who share common characteristics, and the subset of this universe is called a sample. The representativeness of the sample occurs by including elements that proportionally possess all the characteristics that define the universe (Santos, 2018). Therefore, the questionnaire was made available to a universe of 241 students



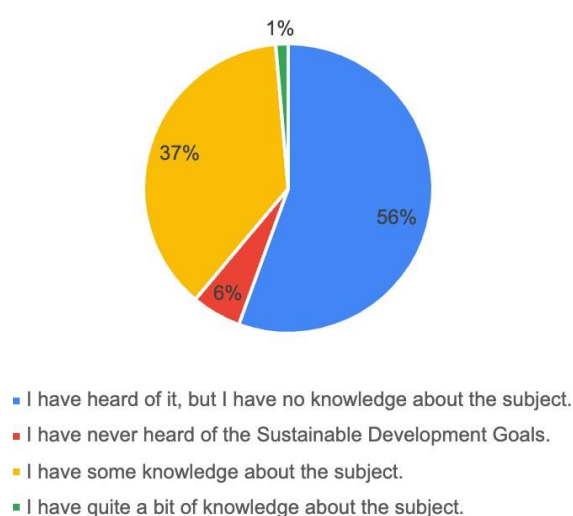
enrolled in the Management Course on the campus. From this universe, a random convenience sample of 72 responding students was obtained, representing a percentage of 29.88% of the total students distributed among daytime and evening classes from 1st to 4th year of the course.

The data were tabulated using Google Forms and Microsoft Excel software. The results were presented through tables and graphs, and the analysis used was descriptive statistics, aiming to describe the data by summarizing them into a series of values of the same nature, corroborating with the referenced authors (Mancuso et al., 2018). Based on this, the results and discussion of the study are presented.

#### 4. Results and Discussion

The identified profile of the respondents was as follows: 45 identified themselves as female (62.5%), while 27 individuals identified themselves as male (37.5%). Regarding age groups, there were 38 students aged 18 to 22 years (52.8%), 26 students aged 23 to 30 years (36.1%), and 8 students aged 31 to 44 years (11.1%). In terms of their academic year, 31 students stated they were in their second year (43.1%), 22 students mentioned they were in their fourth year (33.3%), 11 students were in their third year (15.3%), and only 6 students claimed to be in their first year (8.3%). The level of knowledge about the SDGs was questioned, as shown in Graph 1.

Graph 1 - Knowledge about Sustainable Development Goals with all percentages



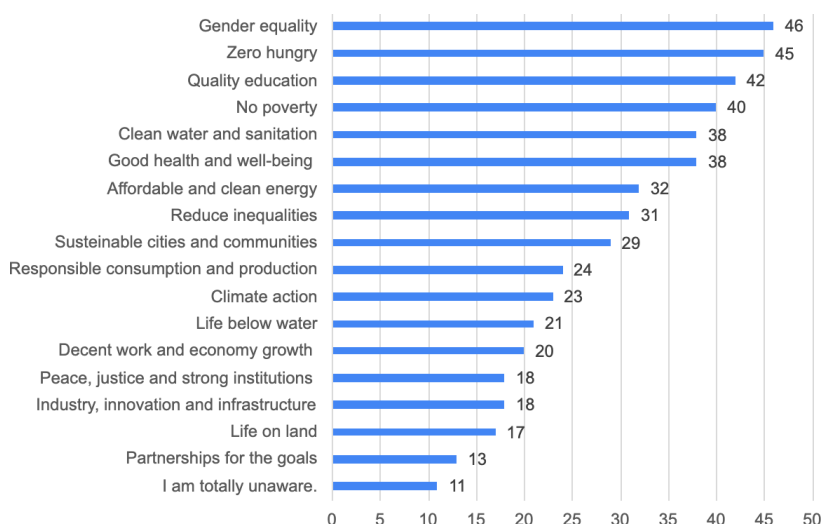
Source: Research data (2023).



It is observed that more than half of the respondents (62%) have only heard about the Sustainable Development Goals but do not have more knowledge about the subject or "have never heard about the SDGs," indicating total or partial ignorance of the topic.

These results are consistent with the study by Farias, Coelho, and Coelho (2019), which showed the lack of knowledge among respondents, undergraduate students in Management at UFPB, about the SDGs. Many of them exhibited either no knowledge or very superficial knowledge of the Sustainable Development Goals.

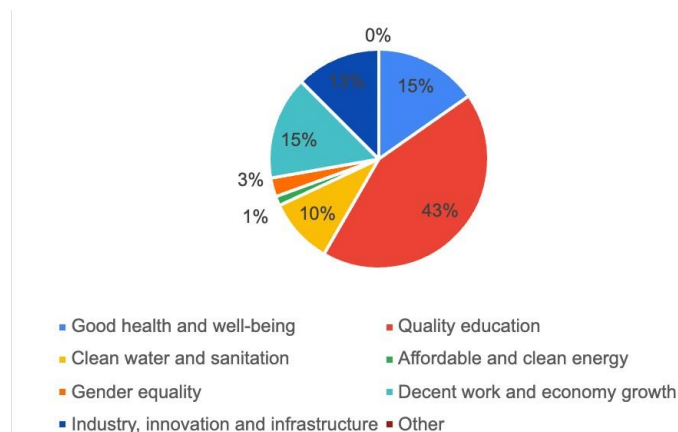
Graph 2 - Most well-known Sustainable Development Goals in order:



Source: Research data (2023).

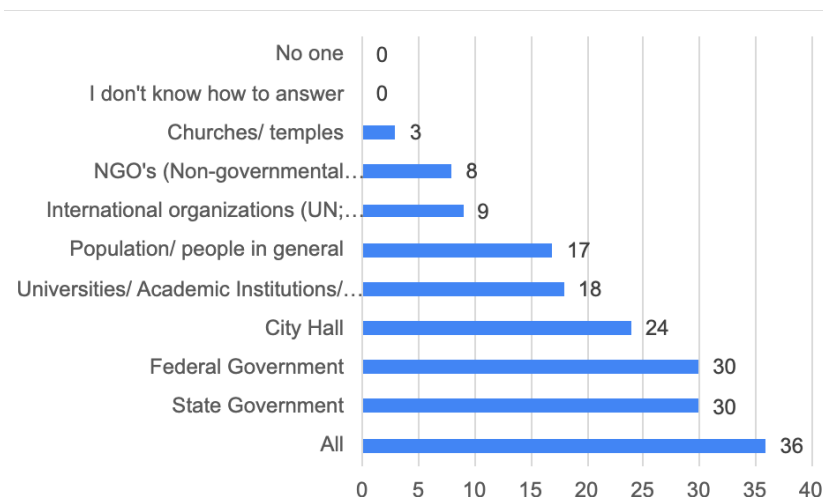
In order to have more specific data about each SDG, it was found that SDG 5, Gender Equality, had the highest recognition rate at 63.9%, followed by SDG 2, Zero Hunger and Sustainable Agriculture, with 62.5%. Therefore, the least known objective was Partnerships for the Goals, with a percentage of 18.1%, and 15.3% of respondents are completely unaware of the SDGs. Regarding which service is considered essential to students, it is shown in Graph 3. These data are in line with the research by Guimarães and Serafim (2018), which showed the SDGs most known by FAE SJP students. In this case, the most prominent goal was SDG 4, Quality Education, and one of the least mentioned was also SDG 17, Partnerships for the Goals (Guimarães; Serafim, 2018).

Graph 3 - Essencial services



When asked which essential service would be most beneficial for Brazil, a large portion of students believed it to be Quality Education (43.1%), followed by Health and Well-being and Decent Work and Economic Growth (15.3%). These services refer to SDGs 3, 4, and 8 respectively (UN, 2016).

Graph 4 - SDG's implementation responsibility

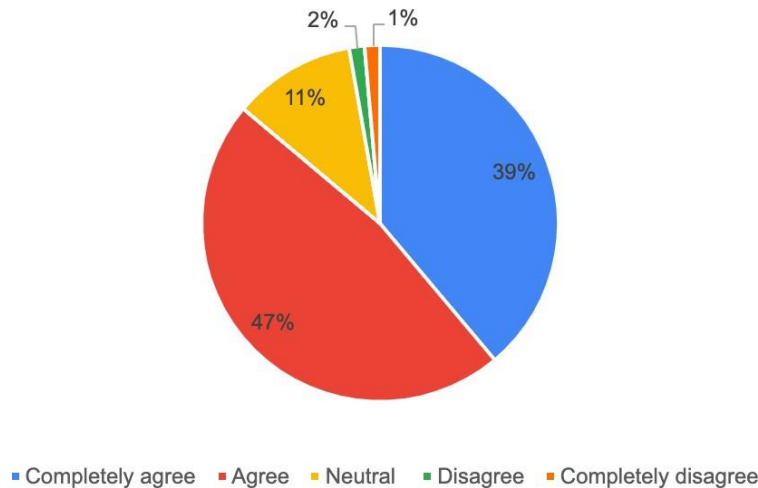


Source: Research data (2023).

It is noteworthy that 50% of the respondents consider the implementation of the SDGs in the listed institutions to be of utmost importance, with greater relevance given to the State Government and the Federal Government. However, only 4.2% of the respondents believe it is not the total responsibility of Churches and/or Temples. This opinion aligns with the results of the study by Silva, Limeira Filho, and Martins (2022), which extend this responsibility to all

organizations and highlight governance as one of the essential factors for the implementation and monitoring of the SDGs worldwide.

Graph 5 - Approach to SDGs in graduation



Source: Research data (2023).

In Graph 5, the vast majority of respondents, 86%, fully agree or agree with the inclusion of the SDGs throughout the Management undergraduate program at the researched University. The studies by Leal Filho; Manolas, and Pace (2015) reinforce these findings, reaffirming the importance of integrating the SDGs into universities. According to the authors, the more solid involvement of higher education institutions is one of the key points for achieving the objectives proposed by the UN (2015). For UNESCO (2017), it is vital to include content related to the SDGs in curricula and to use a transformative pedagogy focused on practice.

Additionally, students provided suggestions on what the university could do to achieve the SDGs, as shown in Table 1.

Table 1 - How the University could help achieve the SDGs

STUDENT'S SUGESTIONS	OCCURENCE
Raise awareness: Conducting Courses, Lectures, Seminars, Study Weeks, Providing Information, etc.	27
Extension Projects: Projects in society and/or organizations	20
Classroom: In subjects with content about the SDG'S	14
Research Projects: scientific initiation and/or research	9

Source: Research data (2023).

The suggestions were grouped into four aspects. They are based on educating and raising awareness among students about the SDGs, addressing this topic in both curricular and extracurricular subjects. This point demonstrates great importance, as more than half of the surveyed students revealed having little knowledge of the SDGs. Other suggestions mentioned the implementation of research and extension projects with the aim of extending these objectives beyond the university.

These suggestions corroborate the study by Farias; Coelho, and Coelho (2019), which presented the main recommendations of undergraduate students in Management at UFPB regarding what the University can do to achieve the SDGs, such as addressing sustainability in an interdisciplinary manner, conducting institutional awareness campaigns, and encouraging scientific initiation projects focused on sustainability and the SDGs. These ideas align with the study by Leal Filho; Manolas, and Pace (2014), which states that research and extension projects in higher education institutions should be aligned with societal needs, such as sustainable development. Below are the final considerations of the research.

## 5. Conclusions

The research results have demonstrated that the aim of the study was evidenced through the respondents' answers and their analyses. The majority of surveyed students claim to know little or nothing about the SDGs. It is understood that there are strategic needs and deficiencies in disseminating information about the process of meeting the SDGs' targets within the institution.

This scenario appears to be problematic, as the sustainability theme is increasingly discussed and demanded from administrative professionals, and the lack of addressing this topic in undergraduate education may present weaknesses in the profiles of professionals graduated from the University.

The University plays a relevant role in shaping conscious and engaged citizens in the sustainability cause, and it should act as a multiplier agent of the SDGs. It is essential to have a joint effort between the academic community, society, and governmental bodies for the Sustainable Development Goals to be achieved, contributing significantly to the construction of a fairer, more equitable, and sustainable society.

Higher education institutions (HEIs) must join efforts to achieve the 17 SDGs, and students must be protagonists in this process, but they need information and concrete actions

in teaching, research, and extension activities from undergraduate and graduate programs for this to be achieved.

The study approach motivated by the need to measure the level of knowledge of HEI students about the SDGs should serve as a guiding thread for fostering new research challenges and academic debates. It is hoped that the Sustainable Development Goals will gain increasing visibility and viability in university and student circles. The need to expand study horizons to social practices with HEIs as necessary actors in this process plays a fundamental role in the 2030 agenda.

It may also enable an important contribution to HEI management as managerial contributions in training graduates from undergraduate and graduate programs, focusing on forming managers capable of addressing current changes and sustainable demands, shedding light on the collective challenge of the SDGs. Adapting them to the global sustainability scenario is a central objective for the perception not only of meeting targets but also for anchoring them within a pedagogical project that enables awareness building for coordinated goal-setting from a sustainability perspective.

For the advancement of science, it presents relevant contributions to the discussion and implementation of the SDGs in undergraduate students' education and also for future managers to incorporate these demands into organizational strategies and actions that are important for society as a whole.

This research presents limitations regarding the research sample, which only covers undergraduate students, excluding professors, graduate students, and professionals in the field. This limitation paves the way for new studies to be conducted, focusing on the entire academic environment of Administration.

Suggestions for future research agendas include: a) academics from all areas of Applied Social Sciences at HEIs; b) students from all courses and campuses of HEIs; c) students from all levels: undergraduate and graduate; d) also researching public servants and faculty members of HEIs; e) making comparisons of this HEI with other state, federal, and/or private HEIs; f) making comparisons with HEIs from other countries; g) expanding the number of respondents to enable more refined statistical analyses, among others.

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