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Quality of Life in University Governance of the Sustainable Development Goals

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Abstract: The relationship between quality of life and university governance has been close, but only in those areas where a correlation between the two categories prevails. Within the framework of implementing the SDGs in universities, quality of life is considered an indicator. Therefore, the objective of this work was to establish a model to analyze the relationship between the categories. A cross-sectional, psychometric, and confirmatory study was conducted with a sample of 100 students selected for their affiliation with universities committed to implementing the SDGs. Four of the six dimensions of quality of life reported in the literature were confirmed. In relation to the state of the art, where the link between the categories is highlighted, this work corroborates this relationship and recommends extending the sample to confirm the two pending factors.

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1. Introduction

The quality of life at a university encompasses a wide range of factors that significantly affect the well-being of students, faculty, and staff within higher education institutions [1]. This comprehensive concept has developed over time, incorporating vital components such as campus infrastructure, the academic environment, access to psychosocial support, levels of student engagement, and, more recently, an emphasis on sustainability and inclusivity. During the 1960s and 1970s, discussions surrounding the quality of university life began to flourish, heavily influenced by student movements that passionately advocated for improved campus conditions. These movements called for increased participation in decision-making processes and sought substantial reforms in both academic and administrative structures [2]. Their efforts underscored the need for a university environment that not only fosters intellectual development but also prioritizes the overall well-being of its community members. Focused on academic performance, but also on mental health, equity, and the general well-being of the university community. During the 1980s and 1990s, a transformative period occurred; research into college quality of life began to adopt more systematic and structured approaches. Innovative models emerged that not only evaluated academic performance but also delved into essential aspects of psychosocial well-being, student satisfaction, and equitable access to vital resources. Simultaneously, as universities expanded globally, the spotlight shifted to pressing concerns around equity, quality, and the need for universal access to higher education.As we entered the early 21st century, the concept of university life quality continued its evolution, now encompassing a broader spectrum of elements related to mental health, work-life balance, active community engagement, campus safety, and equitable academic opportunities. With the forces of globalization and an increasingly diverse student population, issues of inclusion, diversity, and sustainability took center stage, becoming critical components of the collegiate experience.The theory of university quality of life integrates multidimensional approaches that consider a multitude of essential factors:

-Physical and mental well-being: This vital domain encompasses not only health and nutrition but also exercise, access to medical services, and psychosocial support systems. As mental well-being is recognized as a cornerstone of student success, universities have intensified their focus on proactive measures to counteract stress and anxiety among both students and staff.

-Infrastructure and resources: The provision of adequate facilities—such as well-stocked libraries, cutting-edge laboratories, modern classrooms, and inviting recreational spaces—plays a crucial role in enhancing the overall university experience and fostering student well-being.

-Academic and social environment: A nurturing environment that champions inclusion, equity, and active participation is integral to enriching the quality of university life. This encompasses the cultivation of positive, collaborative relationships between students and faculty, as well as the creation of a dynamic, cooperative learning atmosphere where diverse ideas can flourish.

-Participation and governance: Empowering students to engage in institutional decision-making, along with providing ample opportunities for extracurricular involvement, significantly enhances their satisfaction and sense of belonging. A democratic and transparent approach to university governance is instrumental in nurturing a genuinely inclusive community.

-Equity and social justice: Ensuring equitable access to higher education, providing scholarship opportunities, mitigating economic barriers, and fostering an inclusive environment are all essential elements that profoundly transform the quality of university life for all students.

-Sustainability and social responsibility: In recent years, sustainability has emerged as a key pillar of quality of life at universities, aligning with the overarching objectives of the Sustainable Development Goals (SDGs). This commitment encompasses proactive initiatives designed to promote environmentally responsible practices, minimize ecological footprints, and equip students with knowledge about climate change and environmental

justice. The Sustainable Development Goals (SDGs), established by the United Nations in 2015, provide a comprehensive framework for improving the quality of life and promoting equitable and sustainable development globally. Within the context of higher education, several SDGs are closely linked to various aspects of university life, guiding institutions towards a more inclusive and sustainable future. SDG 3 (Health and Well-Being) focuses on enhancing the physical and mental health of students, faculty, and staff. In response, universities have prioritized the establishment of psychological support programs, improved health services, and initiatives to encourage physical activity. SDG 4 (Quality Education) aims to provide inclusive and equitable quality education for all. For universities, this goal translates into efforts to increase accessibility, relevance, and overall quality of education, ensuring that all students can pursue educational opportunities without facing discrimination. SDG 5 (Gender Equality) emphasizes the importance of promoting gender equality within universities and institutions. This involves implementing anti-discrimination and anti-harassment policies, as well as fostering gender equity to enhance the quality of life for the entire university community. SDG 10 (Reducing Inequalities) advocates for equal access to higher education, aiming to eliminate barriers related to economic, social, or cultural factors. This goal emphasizes the necessity for disadvantaged groups to have access to quality educational resources. SDG 11 (Sustainable Cities and Communities) highlights the role of universities in creating sustainable communities and promoting urban sustainability. This involves initiatives to minimize the environmental impact of university campuses, enhance green infrastructure, and promote sustainable practices within university operations. SDG 13 (Climate Action) positions universities as key players in climate change education and awareness. Efforts aimed at sustainability and reducing carbon emissions are integral to enhancing the quality of life on campus, with student involvement in responsible practices being a crucial element. The SDG framework has encouraged universities to integrate sustainability and well-being into their operational agendas, ultimately resulting in a positive influence on the quality of university life. By implementing sustainable policies, enforcing equality, ensuring equitable access to resources, and fostering environments that support both physical and mental well-being, universities can significantly enhance their educational environments. The concept of quality of life at universities has expanded beyond mere infrastructure and academic performance, evolving to encompass a more holistic approach that includes various dimensions of student and staff well-being. Well-being, equity, participation, sustainability, and social responsibility are all key concepts outlined in the Sustainable Development Goals. However, the dimensions of quality of life have not been associated with university governance as a management system for the SDGs [19]. Therefore, the objective of this work was to confirm the factorial structure of an instrument that measures the dimensions of university quality of life in relation to the implementation of the SDGs in governance. Are there significant differences between the theoretical structure of quality of life and the empirical structure of university governance in the context of the implementation of the SDGs? The premise on which this work begins warns that the quality of university life is a result of implementing governance based on the SDGs [20]. Consequently, differences are expected, as each governance system is built according to a set of priorities that the parties involved agree upon, based on the capacities the system allows them to utilize in implementing the SDG guidelines.

2. Method

Design. A cross-sectional, psychometric, and confirmatory study was conducted with a sample of 100 students selected based on their affiliation with institutions committed to the implementation of the SDGs:Instrument. The Quality of Life Scale was used (see Appendix A). It includes the following dimensions: 1) Physical and Mental Well-being, 2) Infrastructure and Resources, 3) Educational and Social Environment, 4) Participation and Governance, 5) Sustainability and Social Responsibility, 6) Equity and Social Justice. Reliability reached alphas and omegas higher than the minimum required of 0.70, with respective values of 0.769 and 0.798. Adequacy reached a value of 0.654, and sphericity was found to be significant. Validity ranged between 0.435 and 0.675, explaining 65% of the variance. Procedure. Respondents were invited to a focus group to discuss the concepts of the instrument. They were asked to evaluate the instrument's items using the Delphi technique. They were surveyed at their university facilities. Before the study, participants were informed about its objectives and responsibilities. Analysis. The data were captured in Excel and processed in Google Colab (see Appendix B). The coefficients of reliability, adequacy, validity, adjustment, and residual were estimated to contrast the

hypothesis regarding the differences between the theoretical and empirical structures. Values close to unity were assumed as evidence of non-rejection of the null hypothesis.

3. Results

The analysis of covariances between the indicators suggests whether other indicators are involved in the observable structure. Values approaching zero indicate the inclusion of different indicators in the observed structural model. The analysis of the factor structure reveals the relationships between the variables and measurement errors with respect to the first-order factors and a second-order factor, which the literature identifies as quality of life. The results suggest that quality of life is structured into four factors related to 1) infrastructure and resources, 2) Social and Environmental Education, 3) Participation and Governance, 4) Sustainability and Social Responsibility, all with their respective 12 indicators. The fit and residual values [$x2 = 411.332$ (50 gl) p > 0.001; GFI = 0.979; RMSEA = 0.000; SRMR = 0.091], as well as the R2 percentages of explained variance (IR = 0.919; ESE = 0.880; PG = 0.791) suggest the non-rejection of the null hypothesis regarding the differences between the theoretical structure with respect to the observed empirical structure.

4. Discussions

The contribution of this work to the state of the art lies in establishing a confirmatory factor model of four of the six theoretical dimensions that comprise the quality of life in a university governance scenario related to the SDGs. The literature on quality of life and university governance covers various aspects of governance and its impact on the well-being of individuals within educational institutions [21]. The relationship between social capital and government performance in American cities underscores the significance of social connections in enhancing the quality of government services. The correlation between students' use of campus green spaces and perceptions of quality of life emphasizes the role of environmental factors in shaping student well-being. The association between e-governance and quality of life on a global scale emphasizes the importance of digital platforms in improving quality of life.Municipal services and citizen engagement. The effects of massive university enrollment on non-academic activities, including student quality of life, underscore the impact of student population size on university operations [22]. The quality of life of medical students highlights the importance of well-being in the context of medical education. The role of governance quality in influencing the impact of public health spending on health outcomes highlights the importance of effective governance in healthcare systems. University governance and quality of life at work emphasize the importance of a balanced approach to governance in higher education institutions [23]. The relationship between governance and quality of life in smart cities highlights the importance of sustainable development goals in urban governance. The literature review indicates a growing interest in understanding the intersection of governance, quality of life, and well-being in various contexts, including educational institutions and urban environments. These studies underscore the importance of effective governance practices in improving the quality of life for individuals and communities. In line with the literature reviewed, this paper found that the quality of life derived from university governance of the SDGs includes dimensions related to 1) infrastructure and resources, 2) Social and Environmental Education, 3) Participation and Governance, and 4) Sustainability and Social Responsibility. In this sense, the area of opportunity lies in confirming two factors related to Physical and Mental Well-being, as well as Equity and Social Justice. It is recommended to increase the sample size to confirm the theoretical structure of quality of life in university governance related to the SDGs.

5. Conclusions

The goal of this study is to develop a confirmatory factorial model that assesses the quality of life in the context of university governance in relation to the Sustainable Development Goals (SDGs). The findings validate four out of the six factors identified in the existing literature. This work reinforces the established relationship among quality of life, university governance, and the SDGs. By confirming the inclusion of the four identified factors

and highlighting the need to verify the two additional factors, this underscores the significance of this framework in understanding the intersection of these themes.

Author Statements:

- **Ethical approval:** The conducted research is not related to either human or animal use.
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