



Review Article

Relationship Between Intellectual Capital and University Social Responsibility in Institutional Strengthening of Universities

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Abstract

Universities face global challenges that require the integration of intellectual capital management and social responsibility. This study aims to analyze how the articulation between intellectual capital and social responsibility contributes to institutional strengthening in universities. A mixed-method approach was applied, combining bibliometric analysis and systematic literature review following the PRISMA protocol, covering 62 relevant studies from 2019 to 2024. Academic databases, lexicometric techniques, and technological tools were used to ensure methodological rigor and thematic coherence. The bibliometric analysis shows that 96.77% of studies were concentrated mainly in the field of Sustainability, led by universities in the global North with multidisciplinary approaches. The findings reveal that intellectual capital management and university social responsibility reinforce academic quality, stimulate innovation, and foster social commitment, thereby significantly contributing to institutional strengthening. As a novelty, the study highlights that the articulation of these dimensions drives sustainable development, promotes ethical organizational cultures, and strengthens collaborative networks. It also suggests the need for coherent public policies to ensure a lasting impact on universities and society. This comprehensive perspective offers new insights for higher education institutions seeking to integrate these elements strategically to address global challenges and improve their contribution to sustainable development.

Keywords:

Intellectual Capital;
University Social Responsibility;
Institutional Strengthening.

Article History:

Received:	20	July	2025
Revised:	20	December	2025
Accepted:	27	December	2025
Published:	18	February	2026

1- Introduction

Higher education institutions are facing a complex situation, determined by the dynamics of globalization, the constant irruption of technologies, demographic transformations, and the intensification of social demands [1]. This

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DOI: <http://dx.doi.org/10.28991/ESJ-2025-SIED1-026>

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environment forces universities to redefine their roles and assume a leading position in the construction of sustainable and equitable development models. Consequently, the specialized literature has identified two strategic axes that shape this transformation: intellectual capital management and university social responsibility, which are articulated with contemporary approaches to institutional capacity building.

First, intellectual capital management is a process aimed at maximizing the value of intangible assets that support academic competitiveness and organizational sustainability [2, 3]. This perspective contemplates three fundamental dimensions, whose interactions strengthen the institutional structure: human capital, which is manifested in the specialized knowledge and experience of faculty and administrative staff; structural capital, which integrates information systems, internal processes, and management policies [4-6]; and relational capital, which encompasses the links sustained with external actors, including students, employers and civil society [7-10]. Thus, the coherent articulation of these dimensions makes it possible to improve academic quality, increase research capacity, and consolidate institutional resilience in the face of uncertain scenarios.

Similarly, university social responsibility has ceased to be a complementary function and has become a strategic imperative in the face of phenomena such as the environmental crisis, structural inequalities, and global health challenges [11-13]. Universities, therefore, make explicit commitments aimed at fostering equity, promoting social justice, and generating collective well-being through institutional practices that respond with transparency, inclusiveness, and sustainability [14-20].

Despite these theoretical advances, a critical review of previous studies shows that most research has addressed intellectual capital management and university social responsibility separately, without analyzing how their joint interaction can contribute to institutional strengthening [21-27]. Traditionally, intellectual capital and university social responsibility have been treated as separate categories: the former, linked to knowledge management and intangible assets; the latter, oriented to the social projection and ethics of universities. Authors such as Stewart & Ruckdeschel [28], Edvinsson & Malone [29], Vallaeys [30] or Sánchez et al. [31] addressed one or the other, but without integrating both concepts in the same theoretical model.

Along these lines, theories on institutional capacity building postulate that the strengthening of internal capacities and the redistribution of organizational power are necessary conditions to face highly complex contexts. These theories stress the need to consolidate horizontal leadership, expand collaborative networks, and foster a culture of institutional learning that stimulates innovation and raises collective performance standards. In addition, they highlight the relevance of strategic alliances as catalysts of resources and multipliers of impact.

Faced with this gap, this study proposes to systematically integrate the analysis of intellectual capital and university social responsibility as complementary factors of institutional strengthening. To this end, the available literature has been critically reviewed, the main conceptual and methodological gaps have been identified, and an analytical framework is offered to overcome the fragmented treatment observed in previous research.

However, despite the theoretical contributions available, most research has failed to systematically integrate these components. Thus, a fragmented treatment predominates that isolates the management of intangible assets from university social engagement, without thoroughly examining their interaction or the role played by public policies in this process [32]. This fragmentation evidences an analytical gap that limits the ability to design holistic and effective institutional strategies.

In view of this gap, the present study aims to analyze the relationship between intellectual capital and social responsibility in institutional strengthening in the university context. To achieve this objective, a methodology has been designed that combines bibliometric analysis with a systematic review of the literature aimed at connecting these elements in an articulated manner. Accordingly, two specific objectives guide the study:

- Analyze the management of intellectual capital in the university context.
- To explain the importance of university social responsibility.

Thus, the main contribution of this research is to offer a framework that articulates both strategic axes, and that allows not only to clarify their relationship, but also to provide useful conceptual and methodological tools for academics, institutional managers and public policy makers interested in enhancing the competitiveness, sustainability and social projection of the university system.

2- Material and Methods

The study adopts a mixed approach that articulates bibliometric analysis with a systematic literature review, with the aim of accurately examining institutional empowerment strategies in universities. This methodology responds to the approaches of Hamilton & Finley [33] and Lim [34], and allows us to identify recurrent patterns, establish solid conceptual links, and understand the interaction between university actors in complex organizational contexts.

The systematic review, complemented by rigorous bibliometric analysis along the lines of Arvanitis [35], provided a sound theoretical basis. This strategy facilitated the collection of substantive empirical evidence, the critical evaluation of the most influential studies in the field, and the coherent organization of the predominant approaches to university knowledge management. Thus, conceptual trends were recognized, theoretical gaps were delimited, and the key contributions that underpin institutional strengthening were systematized.

The research was structured on the basis of a delimited search strategy that ensured exhaustive and pertinent coverage of the phenomenon analyzed. The articulation between both methodological techniques allowed mapping thematic dynamics, locating relevant academic references, and tracing direct connections between the studies with the greatest impact in the area. To this end, we resorted to highly prestigious academic databases such as Scopus, Web of Science, SciELO, and Google Scholar, which provided access to indexed research and recent publications with verifiable scientific support.

The search equations were constructed from key terms directly linked to the objectives of the study. Their specific adaptation to each database optimized the retrieval of relevant information. The equations used are detailed below:

- Scopus/Web of Science: (“intellectual capital” OR “knowledge management”) AND (“university social responsibility” OR “higher education institutions”) AND (“institutional empowerment” OR “higher education policy” OR “public policy”);
- SciELO: (“capital intelectual” OR “gestión del conocimiento”) AND (“responsabilidad social universitaria” OR “instituciones de educación superior”) AND (“empoderamiento institucional” OR “políticas de educación superior” OR “políticas públicas”);
- Google Scholar: (“university intellectual capital” + “social responsibility” + “higher education policy” + “knowledge governance”).

The selection of studies responded to rigorous criteria of thematic relevance, timeliness, and methodological consistency. Only publications published between 2010 and 2024 were considered, which made it possible to capture the most recent approaches to the articulation between intellectual capital, university social responsibility, and institutional empowerment.

Both empirical and theoretical research were included. The former offered concrete evidence on institutional practices in universities, while the latter provided analytical frameworks and conceptual models that support the interpretation of the phenomenon. The selection prioritized articles published in journals indexed in recognized databases, which guaranteed high standards of methodological quality.

The selection of studies followed the PRISMA protocol (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). In the first phase, 1263 articles were identified using the equations applied to the selected databases, together with 3 additional records obtained from other sources. After initial cleaning, 318 duplicate or ineligible records were removed using automated tools, reducing the total to 948. After reviewing titles and abstracts, 561 studies that did not meet the previously defined criteria were excluded. Subsequently, 387 articles were retrieved, of which 240 could not be accessed. The evaluation of the full text of the remaining 147 studies led to the exclusion of 85 additional studies due to low thematic relevance or methodological weaknesses. Finally, 62 articles were selected to form the definitive corpus of analysis. This sample guarantees a high level of scientific soundness and ensures the coherence of the bibliographic and bibliometric analysis performed (Figure 1).

This process was supported by technological tools. Microsoft Copilot for Windows was used to write and improve the spelling of the text. The systematization of articles and the organization of citations were carried out with AI Coding Beta of Atlas.ti and Humata.ai, which facilitated the extraction of key ideas and thematic classification. The word clouds that accompanied the bibliometric analysis were generated using Python, which made it possible to visualize lexical frequency patterns. Finally, Microsoft Excel was used to process, sort, and debug the data obtained from the databases consulted, which guaranteed precision in the treatment of quantitative information.

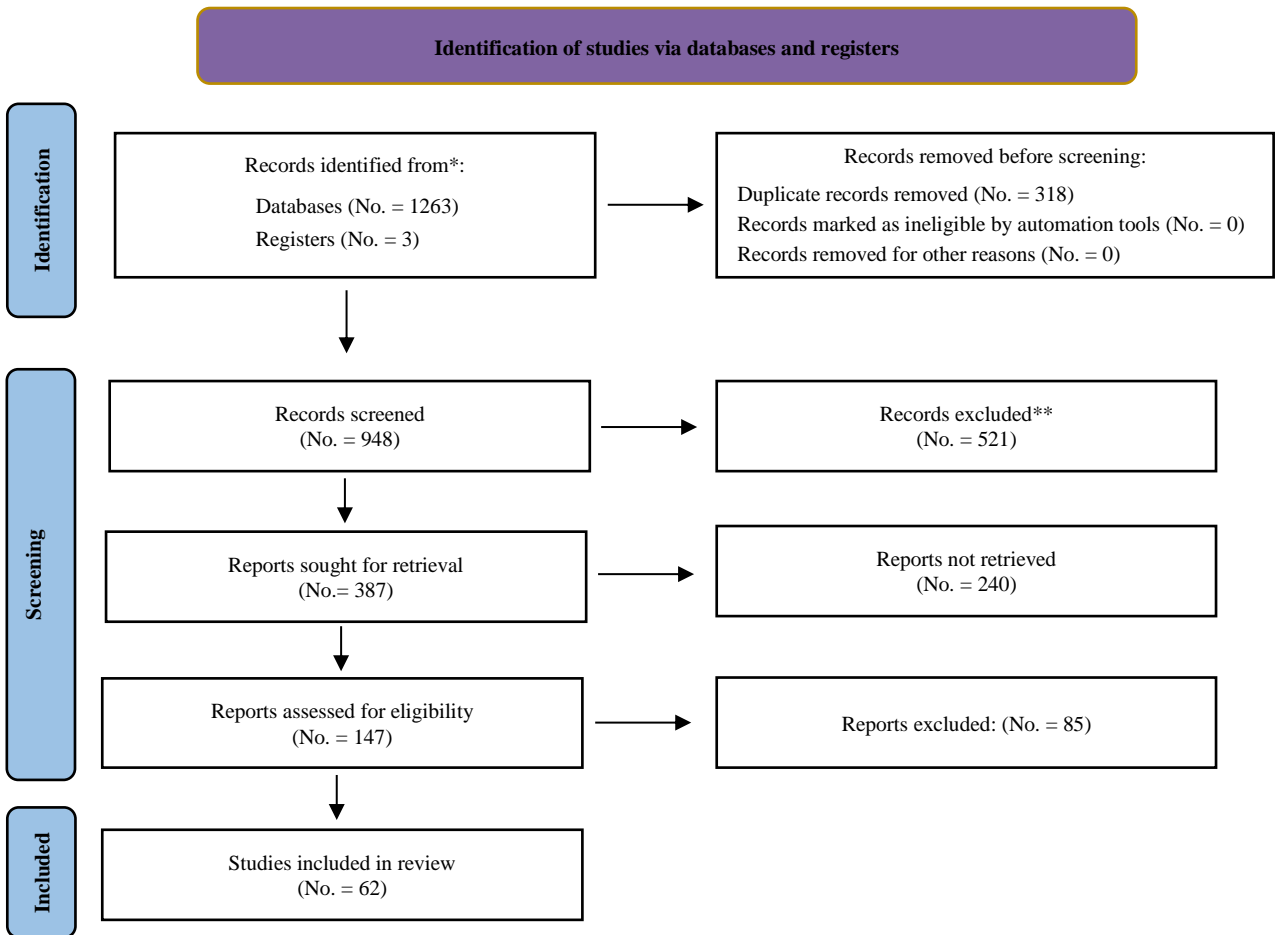


Figure 1. Prisma flowchart

3- Results

3-1- Bibliometric Analysis

Figure 2 shows the annual distribution of publications included in the systematic review. Between 2010 and 2015, the academic production was minimal, with only one study registered in each of those years, representing 1.61 % of the total, respectively. From 2019 onwards, a sustained increase is noticed, as in that year 9 studies were recorded (14.52 %); in 2020 the figure rose to 12 (19.35 %), and in 2021 the highest number of publications was reached with 13 studies (20.97 %). In 2022, a decrease was observed with 7 studies (11.29 %), although this drop was temporary, since in 2023, 9 studies (14.52 %) were recorded again, and in 2024, the figure increased to 10 (16.13 %). Overall, the period between 2019 and 2024 accounts for 96.77 % of the total number of studies identified.

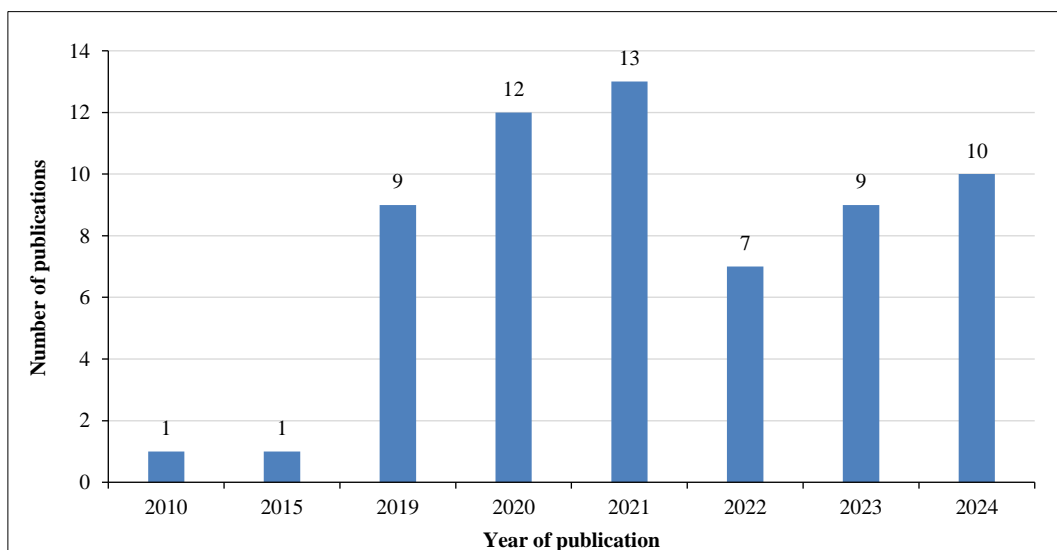


Figure 2. Annual distribution of publications

Table 1 shows the distribution of articles according to the scientific journal in which they were published. The journal Sustainability concentrates the largest number of studies, with a total of 11 articles, which represents 17.74% of the total analyzed, and confirms its position as the main editorial space on the subject. Next, BMJ Global Health, Social Enterprise Journal, and Teaching in Higher Education each have 2 publications, equivalent to 3.23% per journal. Together, these four journals have 17 articles, which corresponds to 27.42% of the total, and shows that more than a quarter of the research is concentrated in a small number of sources.

In contrast, the remaining 44 journals include only one article each, equivalent to 70.96 % of the total number of publications. This wide dispersion reflects that, although academic interest in how universities can mobilize their intellectual capital while strengthening their social responsibility is present in different editorial spaces, most of the studies have been published in isolation in journals with varied approaches. Therefore, a structure of dissemination is observed in which a thematic concentration in certain titles coexists with a diversity of editorial approaches, which reinforces the cross-cutting and multidisciplinary nature of the object of study.

Table 1. Distribution of publications by journals

Journal	Number of items
Sustainability	11
BMJ Global Health	2
Social Enterprise Journal	2
Teaching in Higher Education	2

From the analysis of the institutional origin of the authors, there is a clear concentration of publications in a few universities, according to Figure 3. The University of Ibadan, the University of Limerick, and the University of Texas at Austin top the list with five articles each, representing 2.72% of the total per institution. These universities show a continuous production and consolidate their presence in the academic field of intellectual capital management and university social responsibility.

In addition, PXL University and Virginia Commonwealth University have four publications, equivalent to 2.17% of the total. They are followed by Royal Roads University, Liverpool School of Tropical Medicine, and Bayero University, each with three articles, or 1.63%. Together, these eight universities account for 17.39% of the production analyzed, which means that they account for a significant part of the academic debate in this field. On the other hand, 119 universities have only one publication, representing 64.67% of the total.

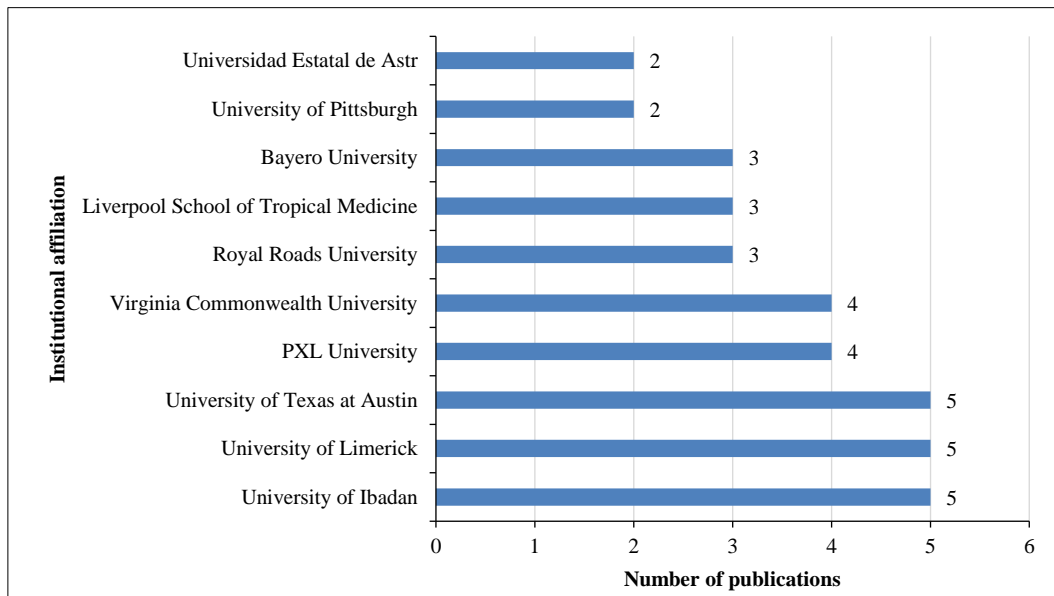


Figure 3. Universities with the greatest impact

According to Figure 4, the analysis by country shows an evident asymmetry in academic production: the countries of the global North dominate, while the global South maintains a marginal presence. Spain leads with 10 publications (12.5%), followed by the United States with 9 (11.25%), and then Brazil and China with 3 each (3.75%). The United Kingdom, France, Italy, India, Nigeria, Portugal, and Turkey have between 2 and 3 publications; the rest barely reach one.

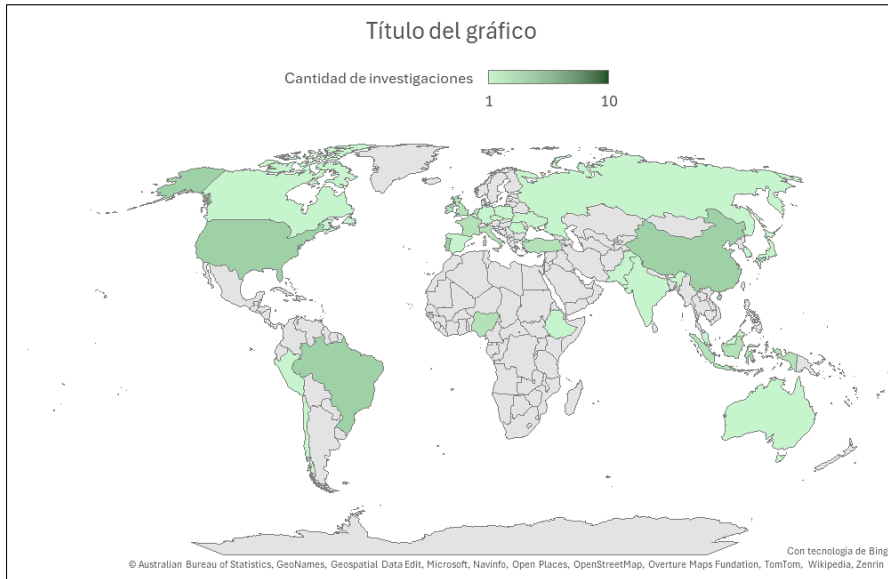


Figure 4. Countries with the greatest impact

The countries of the global north—Spain, the United States, the United Kingdom, Canada, Germany, Australia, France, Italy, Ireland, and the Netherlands—account for nearly 70% of total production. This dominance reveals an unequal structure based on greater resources, policies to promote research, and well-established academic networks. In contrast, countries in the global south—Nigeria, Peru, Ethiopia, Indonesia, Malaysia, Pakistan, and Chile—make sporadic contributions. Their publications are occasional, lack continuity, and rarely achieve sustained circulation. This gap reflects profound differences in access to funding, institutional development, and opportunities for international cooperation. Among the main barriers faced by the countries of the Global South are the limited availability of research funds, restrictions on access to databases and high impact journals, as well as insufficient institutional capacities that hinder the consolidation of research groups. In addition, there are initiatives that seek to reverse this inequality, such as international cooperation programs, regional academic networks and specific competitive funds for emerging researchers from these countries, although their scope remains partial and unequal.

Figure 5 shows that the titles of the studies reviewed highlight nouns such as education, university, development, sustainability, and innovation, indicating a clear interest in understanding the role of higher education institutions in social transformation. These terms do not appear in isolation, but are related to concepts such as impact, performance, participation, and knowledge, revealing a concern for both the generation of academic value and its effective transfer to society. Likewise, words such as research, teachers, and engagement reinforce the idea of a university committed to its environment and oriented toward sustainable institutional development. In this context, universities are positioned not only as centers of education but also as strategic agents that seek to integrate intellectual capital with actions that have a social impact.

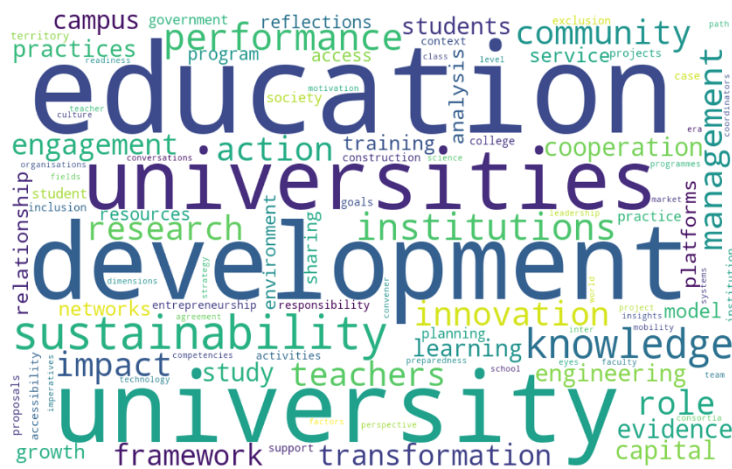


Figure 5. Most frequent nouns in titles

On the other hand, Figure 6 shows that the most frequent verbs in the titles are linked to specific actions, such as apply, explore, teach, develop, and evaluate, suggesting an active and proactive approach to academic production. In addition, the repeated presence of expressions such as based on and continue reflects a trend toward evidence-based

3-2- Systematic Review of the Literature

The findings of the review are organized into two main areas: intellectual capital management and university social responsibility. Regarding the first area, the studies analyzed emphasize the need to strategically manage intangible assets, such as staff knowledge, organizational infrastructure, and institutional networks, to strengthen educational quality and promote sustained innovation processes. Concerning the second area, the literature indicates that the inclusion of sustainability in curricula, the strengthening of links with the community, and the active promotion of social inclusion should be integrated into universities' strategic frameworks.

3-2-1- Intellectual Capital Management

The findings of the systematic review show that intellectual capital management is a strategic component in the institutional strengthening of universities. The specialized literature identifies that the differentiating value of higher education institutions does not lie exclusively in their physical infrastructure, but in their ability to manage knowledge in a structured way. Universities that implement effective knowledge management policies can consolidate their position in highly competitive environments, as they translate their intangible assets into visible academic results.

First, the studies reviewed highlight that the continuous training of academic staff is a central dimension of intellectual capital management [36, 37]. Universities invest in structured programs that include specialized courses, thematic workshops, and advanced seminars to keep teaching skills up to date [38-40]. These efforts are supported by digital platforms that expand access to training, while the certificates obtained formally recognize professional advancement [41]. In this way, up-to-date teachers transmit knowledge relevant to the labor market, which raises the level of preparation of graduates [42].

Secondly, it was identified that inter-institutional cooperation networks enhance intellectual capital by expanding opportunities for academic collaboration [43]. Partnerships between universities enable the exchange of knowledge and strengthen student and faculty mobility [44, 45]. Likewise, international projects promote multidisciplinary approaches and provide a multicultural perspective that enriches research. In addition, academic consortia optimize shared resources such as laboratories, libraries, and databases, which benefits institutions with fewer capabilities of their own [46, 47]. These collaborative dynamics reinforce scientific production and consolidate networks among experts with common interests, which favors comprehensive solutions to complex challenges [48].

Third, the review showed that knowledge management systems play a fundamental role in the preservation and transfer of university knowledge [49-51]. Universities develop digital repositories that store theses, articles, and teaching materials, ensuring open and permanent access to institutional output. In turn, the implementation of standardized protocols for documenting research improves traceability and methodological quality. Libraries have evolved into learning and research centers that offer integrated search tools and facilitate access to multiple collections [52, 53]. This cognitive infrastructure ensures academic continuity even in contexts of high staff turnover, as it allows institutional memory to remain active and accessible.

Fourth, the studies analyzed agree that technology transfer represents the culmination of the knowledge generation process in the university setting [54, 55]. Technology transfer offices articulate the relationship between research centers and the productive sector, allowing scientific results to be translated into applied solutions. In turn, universities promote business incubators on their campuses, and these initiatives favor the creation of spin-offs that boost the local economy [56, 57]. Patents protect the developments generated, while licensing agreements ensure sustainable economic benefits for the institution [58]. Similarly, university consulting services allow for the transfer of expert knowledge to external organizations, and this dynamic reinforces the social impact of academic work [59].

Finally, evidence shows that intellectual capital management requires specific organizational structures that ensure consistency and effectiveness in decision-making [60]. Vice-rectors and research commissions define strategic policies and allocate resources according to technical criteria aligned with social needs [61]. In addition, innovation support centers advise researchers on legal and technical matters, which streamlines intellectual property protection processes. On the other hand, bibliometric units measure the impact of academic output and guide publication strategies [62]. Legal services monitor the legality of transfer agreements, while scientific communication departments disseminate relevant findings to society [63]. At the same time, ethics committees ensure that fundamental research principles are upheld and respected.

3-2-2- University Social Responsibility

The studies reviewed show that university social responsibility (USR) is a central pillar in the transformation of higher education institutions. Far from being limited to professional training, universities play a decisive role in building fairer and more equitable societies, which gives them an expanded and deeply ethical mission [64]. In this sense, universities not only transmit technical knowledge but also cultivate social values, which have a significant impact on their immediate environments and society in general.

According to the literature, universities that exercise active social responsibility develop an ongoing dialogue with their communities, which allows them to incorporate local and global issues into their academic agendas [65, 66]. Thus, institutional prestige is redefined by integrating social and environmental impact criteria, beyond traditional academic indicators.

A key dimension identified in the studies is curricular sustainability, as curricula integrate sustainable development principles that strengthen the ethical and environmental awareness of future professionals [67, 68]. Courses include interdisciplinary content that addresses the interaction between ecological, economic, and social factors, enabling students to better understand the consequences of their decisions [69]. In addition, academic programs incorporate various tools, such as life cycle analysis and ecological footprinting, which introduce environmental criteria into decision-making processes [70].

Academic work applies this knowledge to real sustainability problems, reinforcing the link between theory and practice [71]. At the same time, universities promote skills such as critical thinking and long-term impact assessment, which are considered essential for addressing contemporary challenges [72, 73]. These strategies are complemented by volunteer activities and environmental certifications, which transform campuses into living learning spaces [74, 75].

The review also reveals that community engagement programs strengthen the social dimension of the university. Outreach initiatives respond to specific territorial demands and allow academic knowledge to be applied in concrete contexts [76, 77]. Through professional internships, students gain relevant experience that broadens their social perspective [78], while research projects involve local actors from the design stage, ensuring cultural relevance and social acceptance [79].

Universities also offer free services—legal, psychological, and technical—that expand access to fundamental rights, especially among vulnerable populations. Social innovation centers incubate proposals with a territorial impact, and open lectures promote public debate and civic education [80, 81]. These efforts are strengthened by citizen participation in advisory councils, which ensures that institutional decisions reflect legitimate social expectations [82].

The dimension of social inclusion is also identified as an institutional priority. Universities implement equity policies through scholarships, quotas, and affirmative action, which democratize access and promote diversity in the classroom [83, 84]. In addition, support departments for people with disabilities ensure adequate study conditions, while teacher training in inclusive education improves pedagogical practices [85, 86]. Furthermore, childcare facilities and flexible schedules make it possible to balance studies with family responsibilities, which expands opportunities for historically excluded groups [87].

Universities improve physical and communicational accessibility in their facilities while implementing protocols against harassment and discrimination, which strengthens student safety and well-being [88, 89]. They also integrate ancestral knowledge and intercultural perspectives into their curricula, which gives academic recognition to diverse forms of knowledge [90, 91].

Taken together, the findings suggest that university social responsibility is articulated in three interdependent dimensions: curricular sustainability, community engagement, and social inclusion. These dimensions require institutional coordination to avoid fragmented efforts. Therefore, strategic plans integrate them into common objectives, and quality systems consider both social and academic metrics [92]. Likewise, sustainability reports provide transparent accountability, and inter-university networks allow for the sharing of experiences and the acceleration of positive transformations [93, 94].

4- Discussion

The evidence analyzed confirms that intellectual capital management and university social responsibility are strategic dimensions that, far from operating independently, work together to consolidate the transformative role of universities. This convergence not only strengthens the substantive functions of higher education but also expands its capacity to influence processes of sustainable development and social cohesion.

Intellectual capital management—structured around the use of human, relational, and organizational resources—enables universities to increase their institutional effectiveness and improve the quality of their academic output [2, 6]. Through policies aimed at continuing staff training, building collaborative networks, and designing knowledge management systems, institutions are able to optimize their intangible assets and project them into the environment.

On the other hand, university social responsibility has evolved into a cross-cutting component of institutional management, integrating criteria of equity, sustainability, and inclusion into decision-making and curriculum design [11, 13]. Universities that take on this commitment not only open themselves up to the needs of their environment but also incorporate these demands into their educational, research, and outreach processes, which reinforces their social legitimacy.

The review shows that both dimensions converge in an institutional logic that prioritizes the social impact of knowledge. This orientation requires trained teachers, adequate technological infrastructure, and flexible organizational

frameworks. It also demands knowledge management systems that guarantee the continuity of organizational learning and facilitate the effective transfer of knowledge [49, 53].

Among the most effective strategies identified is the implementation of institutional platforms that systematize academic production and allow for its reuse. These tools not only prevent the loss of accumulated knowledge but also convert that experience into a strategic asset for decision-making and continuous improvement.

Second, the creation of academic and inter-institutional networks provides a space conducive to the exchange of experiences and the development of shared solutions. These alliances—based on cooperation rather than competition—allow universities to act as nodes for coordinating collective capacities, expanding their radius of action and influence [43, 44].

A third line of action is linked to the consolidation of organizational cultures focused on ethics, responsibility, and innovation. These institutional cultures do not emerge spontaneously but require leadership, strategic vision, and consistency between discourse and practice. A commitment to academic integrity, accountability, and the promotion of merit contributes to building trustworthy environments where knowledge circulates and is transformed into relevant solutions [23, 25].

Finally, the impact of these strategies depends on their connection with stable public policies that guide university processes toward long-term objectives. The articulation between the institutional and regulatory levels ensures that universities do not act in isolation, but rather as part of a system that values knowledge as a public good and recognizes it as an engine of development [27]. In this sense, we can take as an example the Campus of International Excellence program in Spain, which requires social knowledge transfer plans; the University Builds Country project in Chile (2001-2008), which articulated research and community services in fourteen Chilean universities; and in Argentina, Resolution 1404/2016 of the Ministry of Education, which requires fostering research, linking extension and transfer based on social and regional needs.

Furthermore, it is key to show how both dimensions mutually enhance each other: intellectual capital management provides the resources and capabilities that make university social responsibility possible, while USR strategically orients the use of those resources towards the common good. For this reason, a matrix of the relationship between these two categories is proposed (Table 2).

Table 2. Matrix of the relationship between intellectual capital and university social responsibility

Intellectual Capital Dimension	Contribution to USR	Strategic Impact
Human capital	Training of faculty and staff to engage in socially responsible initiatives	Improves relevance and quality of education and research
Organizational capital	Implementation of knowledge management systems and ethical frameworks	Facilitates accountability, transparency, and social impact measurement
Relational capital	Development of networks with communities, public institutions, and private sector	Expands outreach, cooperation, and shared solutions to societal challenges

As a projection for future research, it is necessary to explore how these dynamics manifest themselves in universities in peripheral contexts or with lower institutional density, where the conditions for managing intellectual capital and exercising social responsibility are more limited. It is also recommended to conduct in-depth longitudinal studies that evaluate the specific impact of these strategies on the transformation of communities, as well as to investigate how national public policies influence the adoption and sustainability of these approaches within the university system.

5- Conclusions

The analysis shows that the literature on university social responsibility has grown in recent years, but it still lacks thematic coherence and theoretical consistency. Although there have been significant advances in research focused on institutional management and the social function of the university, operational approaches that reduce social responsibility to welfare actions or specific projects predominate. This situation highlights an urgent need to deepen conceptual frameworks that link university ethics with sustainable development and social transformation. Furthermore, while some authors recognize the potential of the university as an agent of change, few address the effective articulation between academia and the community, which limits the practical scope of the proposals. Therefore, if scientific production does not go beyond an instrumental and fragmented approach, it will be difficult to consolidate a structural vision of social responsibility as the central axis of university work.

Universities cannot limit themselves to training professionals, because society demands that they actively contribute to human development and the strengthening of citizenship. In this sense, university social responsibility should not be assumed as an isolated policy, but as a cross-cutting dimension that reorganizes institutional management and guides academic action toward ethical and social ends. The comprehensive education of students requires coordination between

teaching, research, and social outreach, as this is the only way to build an academic community that critically reflects on its environment and acts in favor of the common good. Furthermore, if the university incorporates social problems into its educational processes, it not only transforms its institutional culture but also strengthens its legitimacy in the eyes of the community.

On the other hand, when universities assume shared responsibility with their environment, they create collaborative networks that broaden their impact and enrich the knowledge they produce. This interaction not only responds to external demands but also enhances academic innovation and curricular relevance.

Consequently, university social responsibility cannot be understood as a functional add-on or an institutional marketing strategy, because it represents an ethical commitment that redefines the very meaning of the university. If higher education institutions integrate this responsibility authentically and structurally, then they will contribute effectively to the construction of a more just, equitable, and democratic society.

In this line, an operational model is proposed based on three interrelated axes: (1) management of intellectual capital as a driver of institutional capabilities; (2) mainstreaming of social responsibility in the substantive processes of teaching, research and extension; and (3) creation of internal and external collaborative networks that allow university leaders to articulate knowledge, resources and actions to maximize the social impact of the university.

6- Declarations

6-1-Author Contributions

Conceptualization, A.T-M. and D.M.C-C.; methodology, F.H. G-C. and R.M.M-C.; software, M.G.Z-C.; validation, L.Ch-F. and R.O-S.; formal analysis, S.F.S-E. and A.T-M.; investigation, R.A.A-R.; resources, M.S.R-L.; data curation, R.O-S.; writing—original draft preparation, D.M.C-C.; writing—review and editing, F.H.G-C.; visualization, L.Ch-F.; supervision, A.T-M., F.H.G-C., and S.F.S-E.; project administration, M.G.Z-C.; funding acquisition, R.A.A-R. All authors have read and agreed to the published version of the manuscript.

6-2-Data Availability Statement

The data presented in this study are available on request from the corresponding author.

6-3-Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

6-4-Institutional Review Board Statement

Not applicable.

6-5-Informed Consent Statement

Not applicable.

6-6-Conflicts of Interest

The authors declare that there is no conflict of interests regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

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