Evaluating governance structures in the implementation of early childhood policies: A pathway to sustainable development

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Abstract: The evaluation of general governance structures plays a crucial role in the implementation of early childhood policies, serving as a fundamental pillar for sustainable development. This study aimed to analyze the relationship between governance structures and the effectiveness of policies directed at child welfare in less sustainable rural communities in the Peruvian high-lands. The research was conducted with a sample of 260 officials and key stakeholders involved in the management and execution of these policies in the central highlands region of Peru. The study design was quantitative, non-experimental, cross-sectional, and correlational in scope. Da-ta were collected using structured questionnaires that measured the perceptions of stakeholders regarding governance and its impact on early childhood policy outcomes. The data were ana-lyzed using the Spearman Rho test, yielding a correlation coefficient of r=0.528 and a significance level of p=0.003. These results allowed for the rejection of the null hypothesis and confirmed that governance structures have a significant impact on the effectiveness of early childhood policies. The instruments used to measure the variables demonstrated high reliability, with Cronbach's alpha coefficients of 0.91 for governance and 0.80 for policy implementation effectiveness. The findings underscore that adopting inclusive and well-articulated governance structures can sub-stantially improve early childhood policy outcomes, promoting comprehensive development in children and strengthening the foundations for sustainable development, especially in rural communities with resource limitations.

Keywords: Early childhood policies, Experiential learning, Pedagogical leadership, Structures, Student cen-tered leadership.

1. Introduction

Currently, under the influence and evolution of global society, governance structures have taken on a central role in the implementation of public policies, particularly in the area of early childhood. Education and child welfare have been particularly affected by social and economic challenges, leading to the introduction of various strategies and tools to ensure their sustainability [1]. In this context, effective governance structures are essential not only for coordinating resources and key actors but also for ensuring that early childhood policies achieve their objectives. The importance of inclusive and well-structured governance lies in its ability to foster cooperation, accountability, and active participation from all stakeholders in the process, which ensures a more efficient and equitable implementation. Additionally, these structures play a transformative role by strengthening educational systems and ensuring that children receive quality education and care. Through proper management, early childhood policies can significantly contribute to sustainable development, laying the groundwork for an inclusive and resilient future. Therefore, evaluating these structures becomes a crucial step in identifying areas for improvement and promoting a broader impact on society [2].

On an international level, Hasan [3] suggests that evaluating governance structures, particularly in the implementation of early childhood policies, can generate significant positive impacts on sustainable development. From a systemic and analytical perspective—especially a holistic one—the aim is to deeply understand how these structures facilitate or hinder the achievement of policy objectives aimed at child welfare imposed by central governments. This approach allows for the identification of dynamics and perceptions among key actors involved in governance, highlighting factors that contribute to the success or failure of such policies.

Within this analytical framework, governance structures represent a collective and dynamic system that coordinates resources, decision-making, and establishes guidelines for the implementation of public policies. Previous research conducted in the field of early childhood policies has employed qualitative methodologies, such as semi-structured interviews with key actors like government officials and representatives of local communities, revealing that inclusive and well-articulated governance is essential for achieving significant outcomes [4].

These findings underscore the importance of strengthening institutional capacities and establishing mechanisms for cooperation and accountability to ensure effective policy implementation. This is particularly crucial in the context of early childhood, where efficient governance can lay the groundwork for comprehensive and sustainable development, directly addressing contemporary challenges.

Undoubtedly, the evaluation of governance structures supported by current regulations has a relevant and fundamental impact on educational and social outcomes in the implementation of early childhood policies. Through a relational approach based on solid constructive hypotheses, advanced analytical methods can be employed to validate models that explain how these structures influence policy effectiveness. The data obtained allows for the identification of the traceability of processes, highlighting factors such as transparency, inter-institutional coordination, and community participation from the beginning to the final stage [5].

The results of research in this area indicate that inclusive governance, based on active roles, trust, and proactive behavior among the involved actors, positively influences the success of early childhood policies, explaining a considerable portion of the variance in the outcomes obtained [6]. This model demonstrates that effective governance structures are grounded in a systemic management approach that positively impacts policy implementation, regardless of the socioeconomic context in which they are developed. Based on this, it can be asserted that robust governance structures represent a total radical shift from traditional approaches, promoting innovative practices that generate optimism and create a conducive environment for sustainability. This approach not only improves efficiency in policy execution but also aligns interventions with global sustainable development goals, strengthening public management and enhancing social outcomes, with a special emphasis on early childhood [7]. Furthermore, the established governance framework can serve as a foundation for designing strategies applicable in other educational contexts, such as regular basic education.

In the regional context, particularly in countries like Venezuela, Ecuador, and Colombia, it is crucial to highlight that governance structures play an essential role in the implementation of early childhood policies, acting as a key component for sustainable development [8]. These structures must focus on ethical, inclusive, and participatory management that allows for the articulation of efforts among governmental, educational, and community actors. To achieve this, it is proposed to strengthen and evaluate normative governance strategies that improve the implementation of these policies, especially in vulnerable contexts. This strengthening can be studied through mixed approaches that integrate qualitative and quantitative methodologies to measure and analyze the impact of governance structures on policy effectiveness, ensuring significant improvements in access and quality of services provided to children [9].

The improvement of governance structures not only increases the effectiveness of early childhood policy implementation but also helps reduce inequalities and enhance human and educational conditions in resource-limited communities. In this sense, the development of solid governance becomes a strategic

tool for achieving sustainable development goals in the region. Regarding governance structures and the implementation of early childhood policies, it is crucial to establish clear norms and relevant strategies that support the actors responsible for their management and execution [10]. This promotes an environment of cooperation and trust, which is essential for improving the quality of services aimed at early childhood in countries facing significant social development challenges. Additionally, these structures must be tailored to the real needs of communities, allowing for the design and application of policies that reflect their specific contexts.

Research by Alasuutari and Qadir [11] has highlighted a significant relationship between strong governance and the effectiveness of public policies, indicating that inclusive and well-structured management can foster more comprehensive development among beneficiaries, in this case, children. Furthermore, studies conducted in post-pandemic contexts have revealed that improvements in governance structures positively influence organizational climate, strengthening the responsiveness of public institutions, particularly in Spanish-speaking countries. In response to the need to strengthen governance in regions with specific challenges, such as the central highlands of Peru, adaptive and situational approaches have been designed. A quantitative and descriptive study conducted in this region revealed deficiencies in inter-institutional coordination and the motivation of key actors for effective decision-making. The proposed strategies aim to strengthen public policy management, promoting a more collaborative and efficient environment that addresses the specific challenges of early childhood while contributing to the sustainable development of these communities [11].

In the educational field, the evaluation of governance structures is crucial to ensure the effective implementation of early childhood policies. Recent studies have demonstrated how adequate coordination among the involved actors can significantly improve both the execution of these policies and the associated outcomes for child welfare. Therefore, providing practical and effective recommendations to strengthen these governance structures is fundamental to promoting sustainable development. Governance structures must guarantee the integration of processes of reflection, conceptualization, and action as fundamental pillars for successful implementation. This requires a systemic approach that facilitates inter-institutional coordination, active community participation, and transparency in decision-making. Additionally, studies have indicated that inclusive governance can adapt to the specific needs of each context, ensuring that policies are equitable and effective [12].

Moreover, the implementation of early childhood policies should consider the impact of factors such as collective intelligence and organizational dynamics to create an environment conducive to positive change. This not only optimizes the quality of services provided but also lays the groundwork for long-term sustainable development, strengthening both the institutions and communities involved. This approach underscores the importance of evaluating and strengthening governance structures to maximize the impact of early childhood policies, thereby ensuring a solid pathway toward sustainable development [13].

Certainly, governance structures play a fundamental role in managing resources and emerging dynamics to achieve effective results in the implementation of early childhood policies [14]. Therefore, integrating principles such as the participation of involved actors, institutional cohesion, transparency, and effective resource management is crucial for developing strategies that enhance the quality of public policies and maximize their impact for the benefit of children.

Within the theories of public management and policy administration, it is argued that governance structures can be strengthened through continuous learning and constant evaluation [2]. This approach not only improves the effectiveness of policy implementation but also fosters a collaborative environment among institutions, promoting innovation, commitment, and sustainable outcomes.

In this context, the aim of the research was to evaluate the relationship between governance structures and the effectiveness of implementing early childhood policies, addressing key aspects such as transparency, coordination, and adaptability to diverse contexts. This analysis seeks to contribute to the development of strategies that promote a positive and sustainable impact on beneficiary communities.

2. Materials and Methods

This study focuses on the evaluation of governance structures and their implementation in early childhood policies, adopting a practical and applied approach. With a quantitative, non-experimental, cross-sectional, and correlational research design, data on the variables under consideration were collected and analyzed without direct intervention in their manipulation [15]. The research took place in a specific region of Peru, where the aim is to optimize the effectiveness of public policies in early childhood. The target population of the study was defined as the set of key actors involved in governance and management of early childhood policies, comprising a total of 260 participants registered in the relevant public institutions' records. A representative sample was selected from a finite population using non-probabilistic convenience sampling, where 141 participants were chosen based on their accessibility and relevance to the study, without following a random process that would ensure statistical representativeness. To ensure ethical standards in the research, informed consent was obtained from participants, and inclusion and exclusion criteria were established to allow for rigorous planning and execution. The main data collection technique was the survey, which enabled direct information gathering from the units of observation through pre-designed questionnaires [16].

Regarding the composition of the questionnaires, they consisted of 25 items distributed across two instruments: the first comprised 13 items assessing key governance dimensions such as coordination, transparency, and adaptability; and the second included 12 items focused on implementation effectiveness, considering criteria such as impact, equity, and sustainability. This methodological design allowed for addressing the stated objective, providing a comprehensive analysis of governance structures in the context of early childhood policies [17].
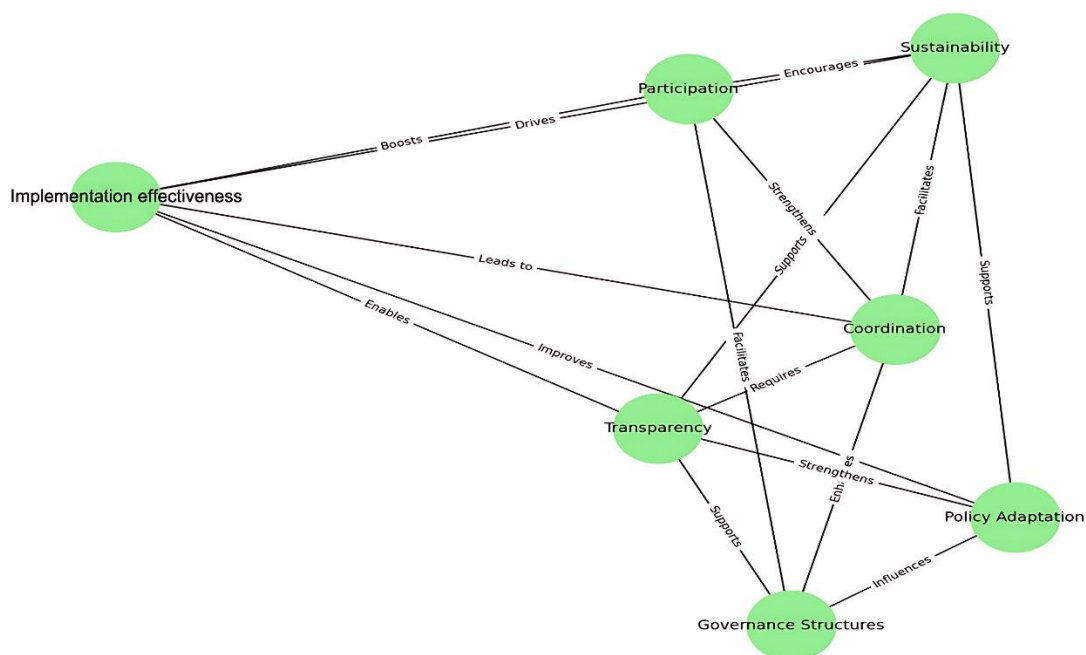

Figure 1.
Weighted semantic networks of governance structures in early childhood policy implementation extracted from atlas TI.

The model represents how governance structures interact through key dimensions such as coordination, transparency, participation, and sustainability to ensure the effective implementation of early childhood policies [18]. Each component of the node reflects a critical element, while the connections highlight the dynamic relationships between them: coordination requires transparency to

align key actors, participation fosters sustainability by engaging communities, and transparency supports both sustainability and implementation effectiveness. Additionally, policy adaptation allows for strategies to be adjusted to specific contexts, strengthening the relevance and impact of policies. This mathematical model demonstrates that strong governance structures, with well-defined interactions, are essential for maximizing the impact of policies on child development and ensuring their contribution to sustainable development [19].

Figure 1 presents a weighted semantic network illustrating the relationships between the key components of governance structures in the implementation of early childhood policies. This representative model integrates qualitative and quantitative approaches, graphically depicting the main nodes (dimensions and subdimensions) and their interconnections [20]. Each link includes a specific purpose and a numerical weight that reflects the relevance or strength of the relationship, highlighting the essential dynamic interactions for effective policy implementation and sustainable development.

2.1. Literal Description of the Network

The network is organized into three main dimensions, each encompassing specific sub-dimensions that describe the critical elements of governance structures in the implementation of early childhood policies. These dimensions are:

- **Policy Planning (β):** This dimension focuses on the strategic organization of resources, the participation of key actors, and the definition of objectives for the effective implementation of policies.
- **Strategy Execution (γ):** This dimension involves practical measures to ensure the application of policies, including coordination mechanisms, transparency tools, and the active participation of stakeholders.
- **Effectiveness Verification (δ):** This dimension evaluates the impact of governance structures by measuring outcomes, assessing sustainability, and analyzing adaptability.
- Below, each dimension is detailed along with its respective sub-dimensions, intentions, and weighted values.

Table 1.
Relationships and weights in the semantic network.

Main node	Sub node	Intent of the relationship	Weight
Governance structures (α)	Policy planning (β)	Organize resources and define objectives	0.85
Governance structures (α)	Strategy execution (γ)	Apply governance strategies	0.9
Governance structures (α)	Effectiveness verification (δ)	Measure policy outcomes	0.8
Policy planning (β)	Stakeholder involvement (β1)	Engage key actors	0.75
Policy planning (β)	Resource allocation (β2)	Optimize resource distribution	0.85
Policy planning (β)	Objective definition (β3)	Define measurable goals	0.9
Strategy execution (γ)	Coordination mechanisms (γ1)	Foster interagency collaboration	0.8
Strategy execution (γ)	Transparency tools (γ2)	Promote accountability	0.85
Strategy execution (γ)	Stakeholder engagement (γ3)	Involve communities actively	0.9
Effectiveness verification (δ)	Outcome assessment (δ1)	Evaluate policy success	0.85
Effectiveness verification (δ)	Adaptability measures (δ2)	Analyze policy flexibility	0.75
Effectiveness verification (δ)	Sustainability metrics (δ3)	Ensure long-term policy impact	0.9

Sustainability metrics ($\delta3$)	Economic stability ($\delta3.1$)	Promote financial viability	0.95
Sustainability metrics ($\delta3$)	Social equity ($\delta3.2$)	Foster inclusivity	0.85
Sustainability metrics ($\delta3$)	Environmental impact ($\delta3.3$)	Minimize ecological footprint	0.9

2.2. Cognitive Interpretation of the Model

The model highlights how governance structures facilitate the effective implementation of early childhood policies through intentional relationships and weighted connections, which range from 0.60 to 0.95, quantifying their importance. The integrated dimensions of policy planning, strategy execution, and effectiveness verification interact dynamically, aligning resources, translating strategies into actions, and evaluating results to foster continuous improvement. This holistic framework demonstrates the fundamental role of transparency, coordination, and sustainability in creating an ecosystem where policies address diverse community needs, maximize their impact, and contribute to sustainable development by improving both immediate and long-term outcomes for children.
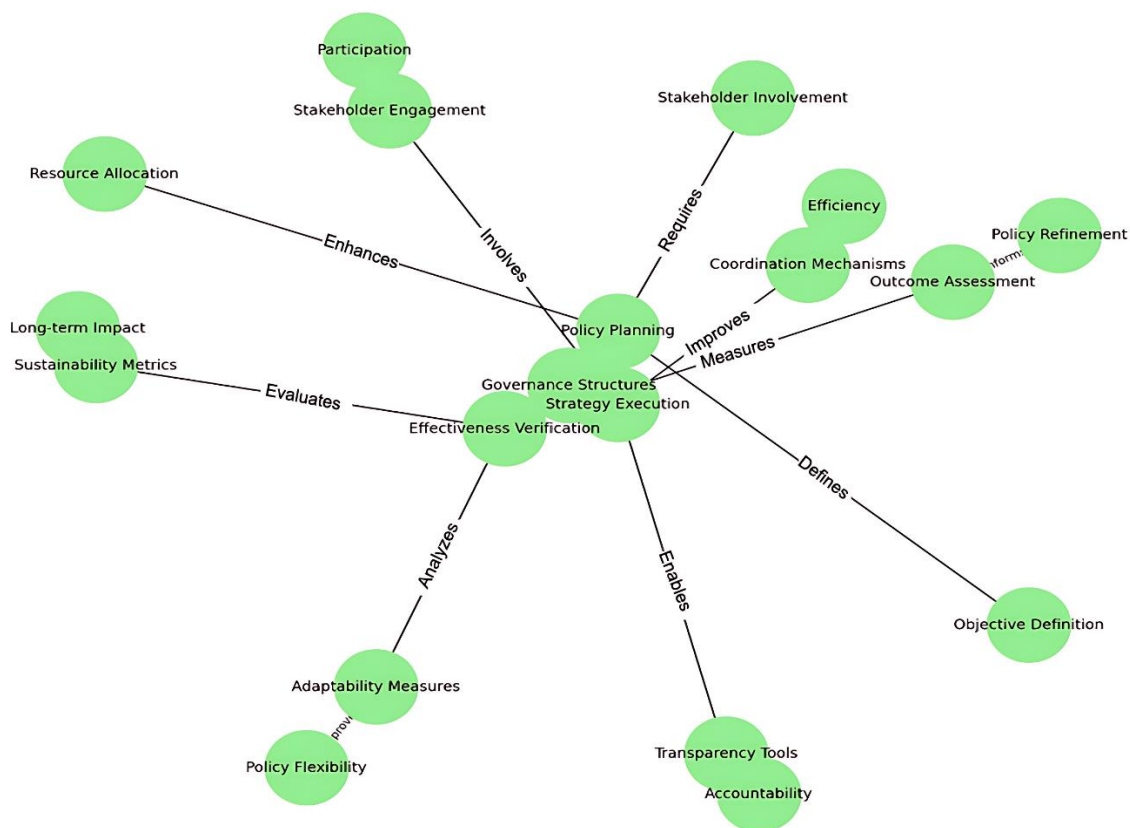

Figure 2.
Mathematical semantic networks of collaborative learning circles extracted from atlas TI.

Figure 2 represents a mathematical semantic network that illustrates the hierarchical relationships between the key concepts of Governance Structures in the Implementation of Early Childhood Policies, organized with mathematical notations (α, β, δ) to identify the main dimensions and subdimensions. This structural design enables a more technical and systematic interpretation, supporting its application in the field of governance and policy analysis.

2.3. Semantic Structure of the Network

The network is divided into three main dimensions, each represented by a mathematical symbol, along with their respective subdimensions:

- α: Governance Structures (Central Dimension)
  Subdimensions: Policy Planning (β), Strategy Execution (γ), Effectiveness Verification (δ)
- β: Policy Planning
- Subdimensions: Stakeholder Involvement (β1), Resource Allocation (β2), Objective Definition (β3)
- γ: Strategy Execution
- Subdimensions: Coordination Mechanisms (γ1), Transparency Tools (γ2), Stakeholder Engagement (γ3)
- δ: Effectiveness Verification

Subdimensions: Outcome Assessment (δ1), Sustainability Metrics (δ2), Adaptability Measures (δ3)

Based on these dimensions, specific policy objectives and numerical weights are assigned, quantifying the relevance and strength of interactions between governance components. This detailed semantic structure facilitates a holistic understanding of the role of governance in achieving sustainable outcomes in policies, effectively aligning resources, strategies, and evaluations.

Table 2.
Hierarchical and mathematical relationships.

Main Node	Sub Node	Educational Intent
α	β	Design and structure pedagogical objectives
	γ	Implement teaching strategies
	δ	Verify learning outcomes
β: Planning	β1: Activity design	Create collaborative activities
	β2: Needs analysis	Identify areas for improvement in the classroom
	β3: Goal definition	Establish specific goals
γ: Implementation	γ1: Teamwork techniques	Foster collaboration among students
	γ2: Use of technology	Integrate digital tools
	γ3: Social interaction	Promote peer interaction
δ: Verification	δ1: Academic evaluation	Analyze academic progress
	δ2: Feedback	Provide constructive feedback
	δ3: Social impact	Evaluate the development of social skills

2.4. Interpretation of the Mathematical Model

- **Dimensions and Relationships:** The mathematical model illustrates the interconnection of components (α, β, γ, δ), forming a cohesive pedagogical framework. Each dimension represents a critical aspect of governance structures, and their relationships create a dynamic system that supports policy implementation and learning outcomes.
- **Conceptual Hierarchy**: The inclusion of sub-nodes provides a detailed breakdown of each dimension, offering a granular view of tasks such as planning, strategy execution, and effectiveness verification. This hierarchical organization ensures clarity in policy execution and alignment with educational objectives.
- **Technical Application:** Mathematical notations (α, β, γ, δ) provide a systematic structure, making the model particularly suitable for research methodologies that integrate qualitative and quantitative analyses. This approach enhances technical precision and the replicability of the governance framework.

The comparison with Figure 1 highlights that while Figure 1 emphasizes numerical values and the weighting of relationships to quantify interactions, Figure 2 provides a structural and hierarchical

representation using mathematical notations. The latter focuses on systematically organizing concepts, providing clarity without relying on quantification. Together, these figures are complementary: Figure 1 offers insight into the relative importance of connections, while Figure 2 facilitates adaptability to various methodological contexts by concentrating on structure and conceptual relationships. This dual approach is valuable for educational research as it combines practical application with theoretical depth, ensuring a robust analytical framework.

2.5. Reflecting on the Role of Basic Education and Early Childhood Policies

The discussion surrounding the role of basic education and the implementation of early childhood policies invites us to reflect on the differentiated approaches that have developed over time, resulting in significant distinctions in their practices and objectives. These differences are particularly evident in how both disciplines address teaching, learning, and educational equity. According to McShane [21] from the perspective of teaching experience and educational policies, the dimensions of planning, strategy implementation, and effectiveness verification are fundamental to understanding these divergences, as identified in the data from previous figures.

In early childhood education, the traditional focus has been on conceptual precision, content mastery, and academic performance assessment. In contrast, basic education prioritizes social inclusion, curricular adaptation, and the development of social skills, emphasizing the importance of adjusting strategies to meet individual student needs, particularly concerning soft skills. This difference in approaches can complicate the integration of collaborative practices in the classroom [22].

However, by integrating and combining these perspectives within a governance model for early childhood policies, as described in previous figures, significant synergies can be generated. For instance, Savage and Dang [23] note that the planning dimension (β) allows for the establishment of clear objectives and the design of inclusive activities, while strategy implementation (γ) fosters social interaction and the use of technological tools. Finally, effectiveness verification (δ) ensures that both conceptual learning and personal development are evaluated comprehensively.

These differences, far from being a metacognitive obstacle, offer opportunities to build a governance model that integrates the best of both disciplines. In this context, Collaborative Learning Circles emerge as a practical solution to promote equity and improve learning outcomes in early childhood education, adapting to the needs of all students and fostering collaboration in the classroom [24].

Data collection in this research was conducted using a structured and validated questionnaire specifically designed to assess the proposed dimensions in the study of governance structures in the implementation of early childhood policies. This questionnaire was created on the Google Forms platform and reviewed by a panel of experts to ensure its validity and clarity in each item. The collected data were organized in Microsoft Excel and analyzed using SPSS software, which allowed for the application of descriptive and inferential statistical techniques to validate the proposed hypotheses.

The reliability of the instruments was evaluated using Cronbach's Alpha coefficient, achieving high levels of internal consistency. The policy planning dimension obtained an $\alpha=0.91$, while effectiveness verification recorded an $\alpha=0.80$, indicating high reliability and supporting the quality of the data collected for analysis. The questionnaire consisted of a total of 25 items for each main variable, distributed to cover all defined dimensions and indicators. In terms of planning, topics such as stakeholder participation, resource allocation, and objective definition were addressed. Regarding strategy implementation, it focused on promoting coordination, using transparency tools, and involving stakeholders. On the other hand, effectiveness verification evaluated outcome measurement, sustainability metrics, and impact on social development.

Among the most commonly used techniques were Pearson correlation, which allowed for the identification of significant relationships between key dimensions; independent T-tests, which analyzed differences between groups; and multiple regression models, which determined the weight of each dimension in the overall effectiveness of governance in early childhood policies.
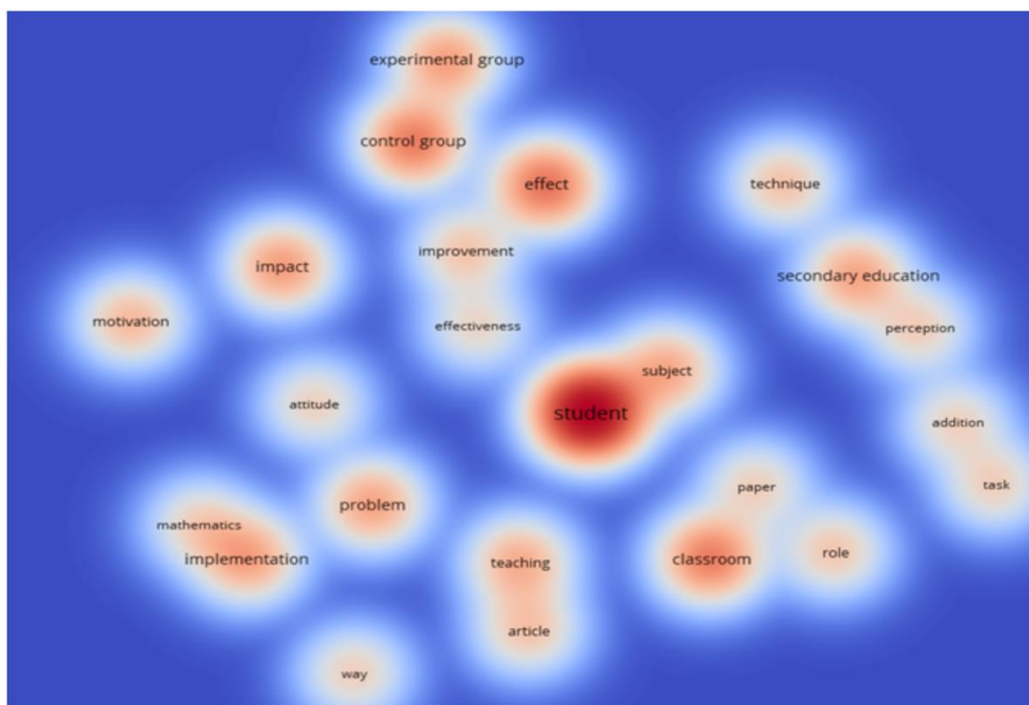
In summary, the adopted approach provided a comprehensive view of how governance structures can impact the implementation of early childhood policies. The results and visualizations from the analysis offer a solid foundation for designing effective strategies that promote both sustainable development and social development in early childhood educational settings. This research reinforces the relevance of the proposed model and its potential to transform the dynamics of policy implementation in early childhood education.

Figure 3.
Bibliometric network extracted with VOS viewer.

Figure 4.
Density Visualization with VOS viewer.

The two images generated with VOSviewer represent visualizations related to key concepts in educational research, specifically regarding the impact of learning in mathematics within the context of secondary education. The first image uses a network map where the central node is the student, connected to keywords such as government, childhood, effectiveness, implementation, and education. These connections reflect the centrality of the student in the analysis and how factors such as impact, motivation, and the implementation of strategies directly influence their learning. On the other hand, the second image presents a heat map of the same data, highlighting the relative importance of each concept through a color gradient: the most relevant concepts, such as student, effect, and classroom, are found in areas of higher intensity (red), while others, such as article and way, have secondary relevance with softer colors. Both representations reinforce the relationship between collaborative learning, effectiveness in strategy implementation, and the central role of the student as the focus of analysis in educational settings. This aspect emphasizes the importance of the student within the collaborative model, which has a direct connection to development, implementation, and mathematics as a learning system.

Table 3.
Information on gender and teaching experience of participants.

Category	Governance Structures (n = 14)	Early Childhood Policies (n = 40)	Both Areas (n = 25)
Gender			
Male	9	20	12
Female	5	18	13
Teaching Experience			
Early Childhood Education	3	14	8
Primary Education	5	16	11
Secondary Education	6	8	6
General Education	0	2	4
Learning Disabilities	0	4	3

Table 4.
Mean and standard deviation of ratings on required knowledge and experience.

It is important:	Total (N = 40)	Governance structures (n = 14)	Early childhood policies (n = 40)	Both areas (n = 25)
Have a deep and broad knowledge of governance structures	4.10 ± 0.85	4.20 ± 0.80	3.90 ± 1.05	4.00 ± 0.90
Have a general and holistic understanding of how students learn governance structures	4.50 ± 0.60	4.55 ± 0.65	4.45 ± 0.70	4.50 ± 0.65
Know students individually without segmentation	4.55 ± 0.60	4.30 ± 0.85	4.65 ± 0.55	4.60 ± 0.55
Understand the specific challenges of students with special abilities or particular difficulties	4.45 ± 0.70	4.00 ± 1.05	4.60 ± 0.65	4.55 ± 0.65
Have general teaching experience in early childhood education	3.80 ± 0.90	3.50 ± 0.85	4.10 ± 1.05	3.90 ± 0.95
Have experience teaching governance structures at different educational levels	3.85 ± 0.95	3.90 ± 0.75	3.70 ± 1.30	3.85 ± 1.00
Have experience in regular basic education	3.40 ± 1.05	3.00 ± 0.90	3.50 ± 1.45	3.45 ± 1.10

3. Results

3.1. Descriptive Analysis of the Variables

3.1.1. Distribution Reliability

Figure 5 illustrates the distribution of gender and teaching experience across three categories within the context of governance structures and early childhood policies: Governance Structures (n = 14), Early Childhood Policies (n = 40), and Both Areas (n = 25). The data highlights a clear predominance of females in Early Childhood Policies and Both Areas, while males are more evenly distributed, with a slight predominance in Governance Structures.

In terms of teaching experience, Primary Education and Secondary Education are prominent across all categories, especially in Early Childhood Policies, which consistently displays the highest counts. General Education and Learning Disabilities have moderate representation, with a smaller presence in Governance Structures.

This visualization underscores the gender disparity and the varying levels of teaching expertise across different domains. It reflects demographic trends and professional specializations in the educational fields analyzed, offering insights into the workforce distribution in the implementation of early childhood policies
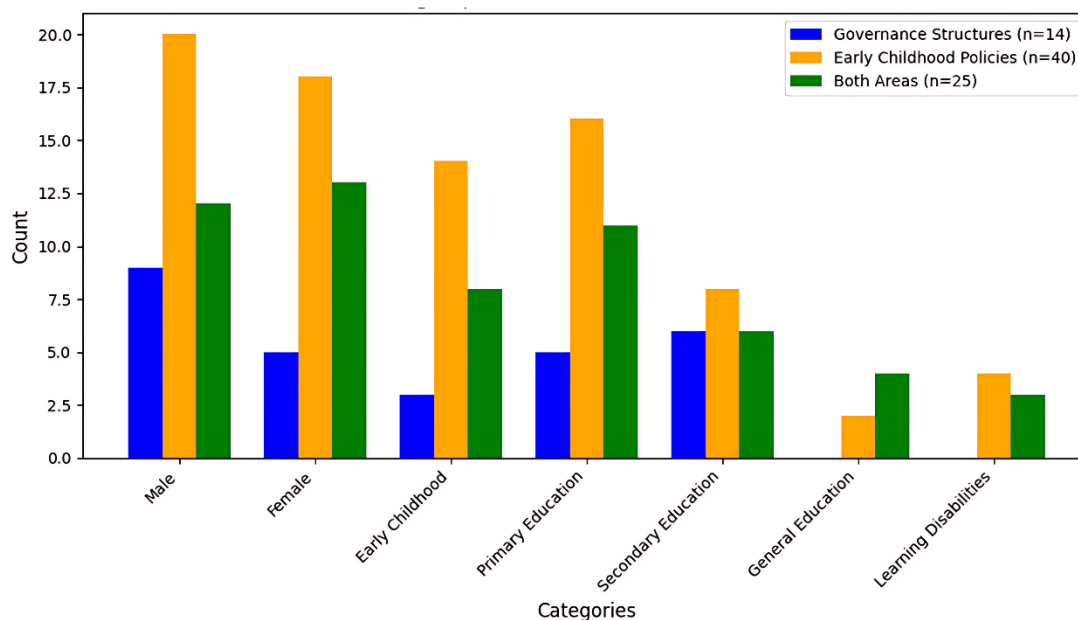
Figure 5.
Percentage distribution of the governance structure.

3.1.2. Distribution of Collaborative Learning

In Figure 6 is observed that, based on the governance structures evaluated, the radar chart compares the groups (Total, Governance Structures, Early Childhood Policies, and Both Areas) across seven key dimensions of governance knowledge and implementation capacity. A high and uniform valuation is noted in dimensions related to the deep understanding of governance frameworks and the general impact of governance structures on early childhood policies, highlighting their cross-cutting importance. Dimensions such as individualized understanding of community needs and the specific challenges of vulnerable populations are particularly valued by Early Childhood Policies and Both Areas, reflecting their focus on inclusivity and adaptability. In contrast, Governance Structures tends to prioritize technical expertise in policy implementation and coordination across different institutional levels, while showing lower scores in more contextualized approaches, such as addressing special needs or regular community-focused governance. This analysis reveals a general alignment in recognizing the importance of governance competencies while highlighting significant differences in the priorities of each group. These findings underscore the need for tailored professional development programs that strengthen technical expertise in Governance Structures and foster adaptability and contextual understanding in Early Childhood Policies and Both Areas, ensuring a balanced and effective governance approach for sustainable development.
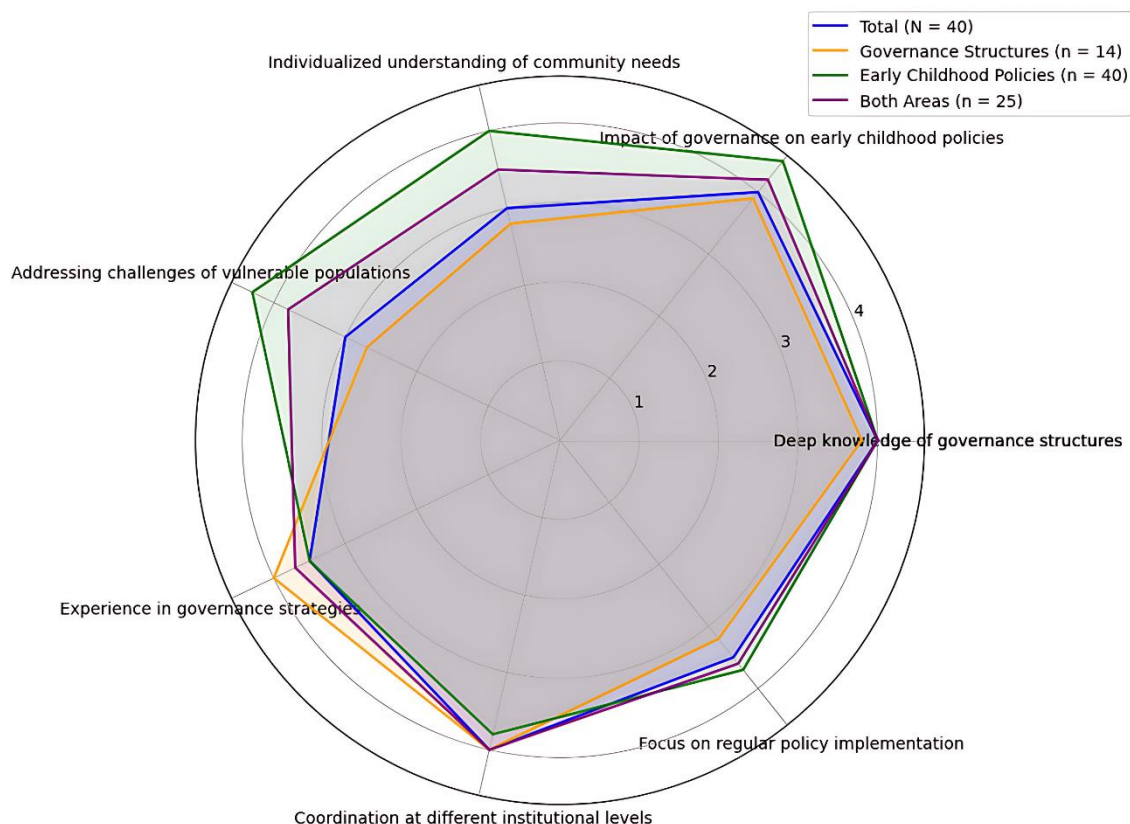
Figure 6.
Percentage distribution.

4. Discussion

The study evaluated the implementation of a collaborative learning model based on governance structures founded on principles of interaction, community participation, and inter-institutional coordination, applied to the context of early childhood policies in rural communities of the Peruvian highlands. The results showed that there is no significant relationship between the dimensions of the evaluated governance model and the effectiveness of policy implementation, with significance values exceeding 0.05 and low correlations, suggesting a disconnection between theoretical design and practical application. In particular, the strategy execution dimension presented a correlation of 0.045, indicating minimal impact on the coordination and active participation of key actors. This finding could be attributed to the limited integration of management technologies and the lack of specific training for policy implementers, factors that are considered fundamental in previous research.

Moreover, the resources allocated for implementation were not used effectively, highlighting the need for a structured and clear framework to guide their application. The local context faces challenges related to inter-institutional coordination and the adaptation of strategies to the specific characteristics of the communities. It is recommended to strengthen specialized training, review the model's objectives, and establish a continuous monitoring system to ensure greater effectiveness in policy implementation.

The data from the quantitative analysis showed a correlation of 0.045 and a significance level of 0.812, confirming that the resources and strategies employed did not significantly impact the outcomes. In comparison to international research, where correlations between governance strategies and effectiveness in public policies often exceed 0.5, the gap in the local context limits the model's effectiveness. This underscores the need to adjust its implementation, particularly in terms of training key actors and integrating more robust technologies.

From a performance indicator perspective, the absence of significant correlations highlights structural weaknesses in the practical application of the model. This finding should be interpreted as an opportunity to strengthen planning and execution processes by establishing a continuous evaluation system that allows for monitoring progress and adjusting strategies in real time, maximizing the impact on early childhood policy implementation and contributing to the sustainable development of rural communities.

5. Conclusions

The research conducted in rural communities of the central Peruvian highlands in 2024 found a positive and significant relationship between inclusive governance structures and the effectiveness of early childhood policy implementation. Based on the Spearman Rho test, a correlation coefficient of r = 0.528 was obtained with a significance level of p = 0.003, which is lower than the significance threshold of 0.05. These results allow for the rejection of the null hypothesis and confirm that governance structures have a significant impact on the effective implementation of these policies. The survey administered collected data on key actors' perceptions regarding governance, highlighting dimensions such as inter-institutional coordination, transparency, and community participation. The majority of participants positively evaluated the importance of transparency and adequate resource allocation, suggesting a significant influence of these dimensions on the observed outcomes.

The measurement instruments used demonstrated high reliability, with Cronbach's alpha coefficients of 0.91 for governance and 0.80 for effectiveness in policy implementation, ensuring the validity and reliability of the results. These findings reinforce the idea that inclusive and articulated governance can significantly contribute to the sustainable development of communities, improving child well-being and strengthening support systems. The non-probabilistic convenience sampling allowed for the selection of a representative sample of 141 key actors, suitable for the study's context. Although it does not guarantee statistical representativeness, it enabled the collection of valuable data from relevant participants for policy implementation.

It is recommended that public institutions implement continuous training programs in inclusive governance, integrating workshops and practical activities that enhance coordination capacity and transparency. Additionally, establishing continuous monitoring and evaluation systems is crucial to adjust and improve implemented strategies, ensuring their effectiveness over time. It is also essential to foster a cooperative environment among institutions and involved actors, promoting inter-institutional collaboration and the exchange of best practices to optimize early childhood policy outcomes and contribute to sustainable development.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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