Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 8, No. 6, 9702-9716
2024
Publisher: Learning Gate
DOI: 10.55214/25768484.v8i6.4092

Experiential learning to foster transformational leadership in students from the highlands of Peru

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Abstract: The importance of transformational leadership assumes a very significant role in the educational field, especially in basic education, highlighting the enhancement of experiential learning and the comprehensive development of students. This research aimed to establish the relationship between experiential learning and transformational leadership among students in a rural com-munity in the Peruvian highlands. The study was conducted with a sample of 253 teachers from the central highland region. The research design was quantitative, non-experimental, cross-sectional, and correlational in nature. Questionnaires were used to collect data, which were ana-lyzed using the Spearman Rho test, yielding a correlation coefficient of r=0.512 with a signifi-cance level of 0.002. These results allowed for the rejection of the null hypothesis and confirmed the hypothesis that transformational leadership has a significant impact on students' experiential learning. The instruments used to measure the variables showed high reliability, with Cronbach's alpha coefficients of 0.863 and 0.847 for transformational leadership and experiential learning, respectively. It was concluded that effective transformational leadership can signifi-cantly contribute to the academic and personal development of students, creating an enriching and stimulating educational environment, especially in remote areas with limited access to reg-ular education.

Keywords: *Educational leadership, Experiential learning, Pedagogical leader-ship, Rural poverty, Student-centered leadership, Transformational leadership.*

1. Introduction

Currently, under the influence and evolution of global society, various aspects, including education, have been affected, leading to the introduction of diverse strategies and tools to address the situation. Additionally, incorporating leadership styles and highlighting aspects that can help advance the transformational model contributes to the improvement process for educational institutions. In today's dynamic society, the importance of having transformational leaders capable of inspiring and motivating people to achieve their most ambitious goals has intensified. Similarly, transformational leadership is conceptualized by its ability to encourage and empower individuals, making it crucial for the reception and assimilation of information for greater learning among students. For this reason, experiential learning develops through a evaluative process in which individuals can acquire their own knowledge, skills, and values through direct practice, emphasizing student commitment and cooperation in the learning process.

At the international level, research is proposed under the approach of transformational leadership, understood and practiced from a humanistic perspective, which can generate a significant and positive impact on higher education. Using the phenomenological-hermeneutic method, the experiences and perceptions of key informants regarding transformational leadership and humanistic pedagogy were explored and deeply understood. This approach contributes to forming students who are not only successful academically but also ethically committed and prepared to face the challenges of society and the real world (Rojas Carrasco et al., 2020).

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Within this pedagogical and academic framework, leadership is a collective and dynamic capacity of teachers to promote teaching within the school community, leading each educational process. Consequently, studies conducted in basic education institutions used semi-structured interviews with 44 students and teachers, revealing that teachers are crucial figures in students' lives. These findings underscore the importance of continuous pedagogical training for teachers, especially those in basic education (Pérez Pertuz et al., 2023).

The impact of academic leadership by teachers on students' meaningful learning is undoubtedly relevant and fundamental. Through a relational model with various hypotheses and surveys conducted on a significant sample of students, advanced statistical methods were employed to validate the model, yielding unique traceable data. The results indicate that trust, the active role, and the proactive behavior of teachers positively influence meaningful learning, explaining a considerable part of its variance as a result. It is determined that academic leadership is based on the systemic management of transformational and educational leadership, positively and indirectly influencing student learning regardless of the context in which they operate (Cabana Villca et al., 2022).

Based on this, it can be asserted that transformational leadership in universities represents a radical change in traditional practices, promoting innovative strategies that inspire optimism and create an environment conducive to change. This approach not only fosters leadership skills but also aligns universities with global educational trends, strengthening management and elevating academic outcomes. However, the context involves leadership training for teachers in universities with applications for regular basic education (Esquivel García et al., 2018).

In the regional context of South America, it is crucial to highlight that transformational leadership emerges as a fundamental achievement for educational development, focusing on the ethical and formative management of educational leaders. To achieve this, it is proposed to promote transformational leadership strategies in educational management, specifically in basic education. These studies can be conducted using mixed approaches that allow for measuring and quantifying the impact generated, aiming to improve the quality of the teaching-learning process for students, especially those living in basic human and pedagogical conditions (Elizalde et al., 2022).

Regarding transformational leadership and regular basic educational management, it is essential to establish clear and relevant standards that support teachers from their training and application. This promotes an environment of trust and support necessary to improve educational quality in countries with low educational levels and adjust experiential learning objectives to the real needs of students according to their academic context (Abregu, 2023). Furthermore, the transformational leadership of teachers influences students' emotional intelligence. Previous studies highlight a significant relationship between these two factors, indicating that inspiring leadership can promote greater emotional development among students, thereby contributing to learning and leadership within the context (Abanto Quintana, 2023). Additionally, in another context, the contribution of transformational leadership to organizational climate during post-pandemic times is emphasized, revealing a significant correlation that strengthens both learning and leadership within state entities, especially in Spanish-speaking countries (Moya Rojas & Taboada Arévalo, 2024).

In response to the need to strengthen leadership among teachers working in the central highlands of Peru, strategies based on Hersey and Blanchard's situational leadership theory were designed. This quantitative and descriptive study revealed a low development of leadership skills among educational staff, highlighting a lack of motivation and decision-making abilities. The proposed strategies aim to improve educational management and promote a more collaborative and effective work environment (Flores Guevara de Baldera, 2019).

In educational institutions, especially in rural areas, leadership is crucial for driving the desired change in schools. With a significant sample, studies show how transformational leadership can improve both student learning and the professional development of educators. Therefore, offering practical and effective recommendations for implementing transformative educational policies in the region is fundamental (Monteza, 2017). This perspective is attributed to transformational leadership theory, characterized by its focus on influencing members of an organization toward achieving common goals

Edelweiss Applied Science and Technology
ISSN: 2576-8484
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through charisma, individual consideration, and intellectual motivation, keeping in mind that student's study under suboptimal conditions due to their geographical nature (Díaz Rosas et al., 2019).

Linked to the importance of direct experience in acquiring knowledge and skills, emphasizing the integration of reflection, conceptualization, and experimentation as essential elements for effective learning, there are very challenging educational contexts to explore. Here, the intersection between emotional intelligence and social skills among students, viewed through the lens of multiple intelligences, complicates measurement (Ascencio et al., 2019). This revolutionary theory challenges traditional conceptions of intelligence by recognizing eight distinct types, such as spatial, linguistic, and musical intelligences. Each of these intelligences not only influences how we learn and solve problems but also our capacity for transformational leadership. This approach underscores the importance of cultivating and valuing the diverse skills of each individual, thus promoting a more comprehensive and personalized learning experience (Ramírez, 2021).

Certainly, leadership plays a fundamental role in managing resources and emerging dynamics to achieve outcomes such as high group performance. Therefore, integrating learning about diversity among team members, group commitment, internal cohesion, and effective conflict management within teams is crucial for developing effective strategies that enhance both transformational leadership and group performance in organizations for the benefit of students (Zamarripa Montes et al., 2022).

Behavioral theories support those leaders can be formed and developed through continuous learning and experience (Zuñiga de la Cruz, 2023). This focus on educational leaders can not only be attributed to experience and ongoing training but can also positively influence the school environment through leadership practices that foster innovation, commitment, and the academic and personal growth of all involved, including various actors within the basic education training process for students. Based on this context, the research objective was to determine the relationship between experiential learning and transformational leadership among students in the central region of Peru, especially in the highlands.

2. Materials and Methods

This study focuses on practical application, being of an applied type, collecting updated information on experiential learning with the aim of promoting transformational leadership among teachers applied to students in special conditions (Castro Maldonado et al., 2023). It adopts a quantitative approach with a non-experimental design, cross-sectional and correlational in nature, as data on the variables of interest were collected and analyzed without directly manipulating them (Cvetkovic-Vega et al., 2021). The study took place in the central highlands of Peru, defining our population as a complete set of elements or individuals possessing certain characteristics on which this study was desired (Villavicencio Caparó, 2018). Our population included 232 teachers duly registered in the regional education management records. Additionally, the representative sample is from a finite population, meaning that accurate estimates were made using an accessible sample size. This competitive advantage arose from having access to all relevant data from the education management, avoiding the need to extrapolate results from a sample to a broader population (Molina, 2022). Thus, the acquired sample consisted of 121 teachers, obtained through non-probabilistic convenience sampling, where elements were chosen based on their accessibility and convenience for the researcher, particularly in the geographical area, without following a random process that guarantees statistical representativeness (Del Carmen, 2019).

Consequently, informed consent was obtained from participants and their inclusion in the study was confirmed. Inclusion and exclusion criteria were established, allowing for more rigorous planning and execution of the research to meet the proposed objective (Berra, 2020). Likewise, the technique applied within the research was the survey, which is one of the data collection methods that allowed obtaining information directly from the observation units through pre-designed questionnaires (Espinoza Freire, 2019). The composition of the questionnaires included 25 items; the first questionnaire comprised 13 items representing three dimensions: intellectual stimulation, idealized influence, and inspirational motivation. The second questionnaire consisted of 12 items representing three dimensions: concrete experience, reflective observation, and abstract conceptualization (Sánchez Martínez, 2022).

The questionnaires were administered in May 2024 via the digital platform Google Forms, where they were designed and distributed. The task was carried out by seeking information from reliable sources

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related to the study topic. The obtained data were exported to Microsoft Excel for organization and preliminary analysis. Subsequently, the data were validated and statistically analyzed using SPSS software (Cisneros-Caicedo et al., 2022) (Borjas García, 2020).

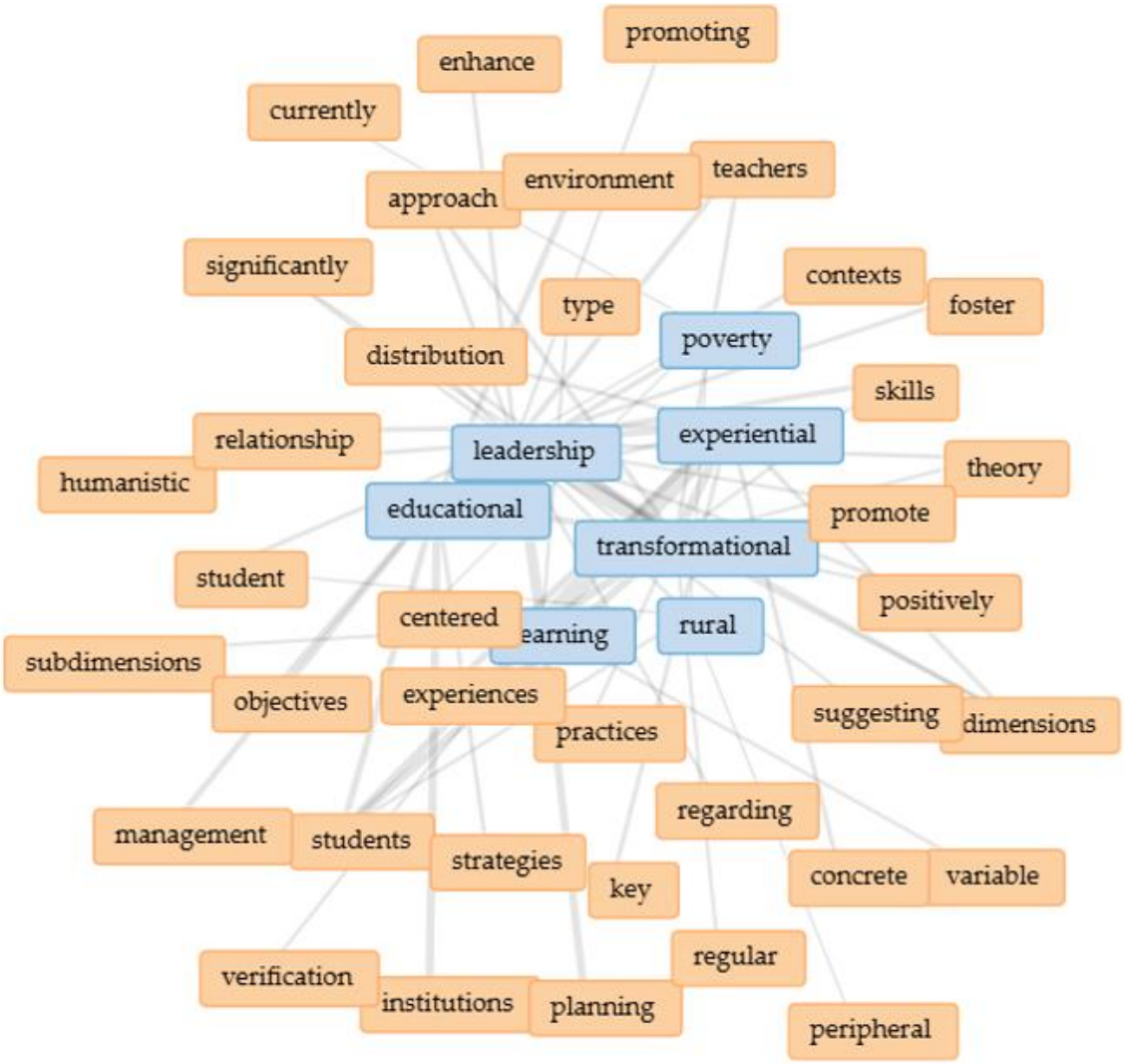

Figure 1.
Weighted semantic networks of governance structures in the implementation of policies for early childhood extracted from Voyant tools.

The model explores how experiential learning interacts with critical dimensions such as reflection, collaboration, action, and sustainability, strengthening transformational leadership in students. Each node represents a key element of experiential learning, while the connections highlight dynamic relationships: reflection fosters collaboration, action supports sustainability, and collaboration amplifies the capacity for social transformation. Adapting to specific contexts ensures that educational strategies respond to unique cultural and social needs.

This model demonstrates that integrated pedagogical approaches are essential for maximizing the impact of learning on the development of transformative competencies. Figure 1 visualizes these interactions through weighted nodes and links that quantify the relevance of each relationship.

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2.1. Main Dimensions and Subdimensions of the Network

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

- **Learning Planning (β):** Focuses on designing strategic activities that align educational objectives with community goals, from which the following subdimensions arise: Key Stakeholder Engagement (β1) and Definition of Measurable Objectives (β2), for the effective implementation of policies.
- **Strategic Implementation (γ):** Involves practical measures to ensure policy application, including coordination mechanisms, transparency tools, and active stakeholder participation. This facilitates group dynamics and the application of collaborative technologies. The following subdimensions are included here: Teamwork Techniques (γ1) and Digital Tools (γ2).
- **Effectiveness Verification (δ):** Evaluates the impact of governance structures by measuring outcomes, assessing sustainability, and analyzing adaptability. This includes Academic Evaluation (δ1) and Social Impact (δ2) as subdimensions.

Below are detailed descriptions of each dimension along with their respective subdimensions, intentions, and weighted values.

Table 1.
Relationships and weights in the semantic network.

Main node	Sub node	Purpose of the relationship	Weight
Learning planning (β)	Key stakeholder engagement (β1)	Engage key stakeholders and align educational objectives with community goals	0.75
Learning planning (β)	Definition of objectives (β2)	Establish clear and measurable goals for educational effectiveness	0.90
Strategic implementation (γ)	Teamwork techniques (γ1)	Promote group dynamics that strengthen collaboration	0.80
Strategic implementation (γ)	Digital tools (γ2)	Integrate collaborative technology to optimize learning	0.85
Effectiveness verification (δ)	Academic evaluation (δ1)	Measure academic progress and acquired competencies	0.85
Effectiveness verification (δ)	Social impact (δ2)	Analyze how leadership transforms and benefits the community	0.80

2.2. Cognitive Interpretation of the Model

The model highlights how experiential learning fosters transformational leadership in students through intentional relationships and weighted connections, with values ranging from 0.75 to 0.90, quantifying their relevance. The integrated dimensions of learning planning, strategic implementation, and effectiveness verification interact dynamically, aligning educational objectives, promoting collaborative dynamics, and evaluating social impact. This holistic framework demonstrates the importance of critical reflection, collaborative action, and sustainability in creating an educational environment where students develop transformative leadership skills, address local issues, and maximize positive impact in their communities.

The semantic network illustrates how elements of experiential learning, organized hierarchically, interact to facilitate the integration of critical, social, and technical competencies. This approach enables students not only to adapt to their sociocultural contexts but also to lead initiatives that generate sustainable changes and shared benefits.

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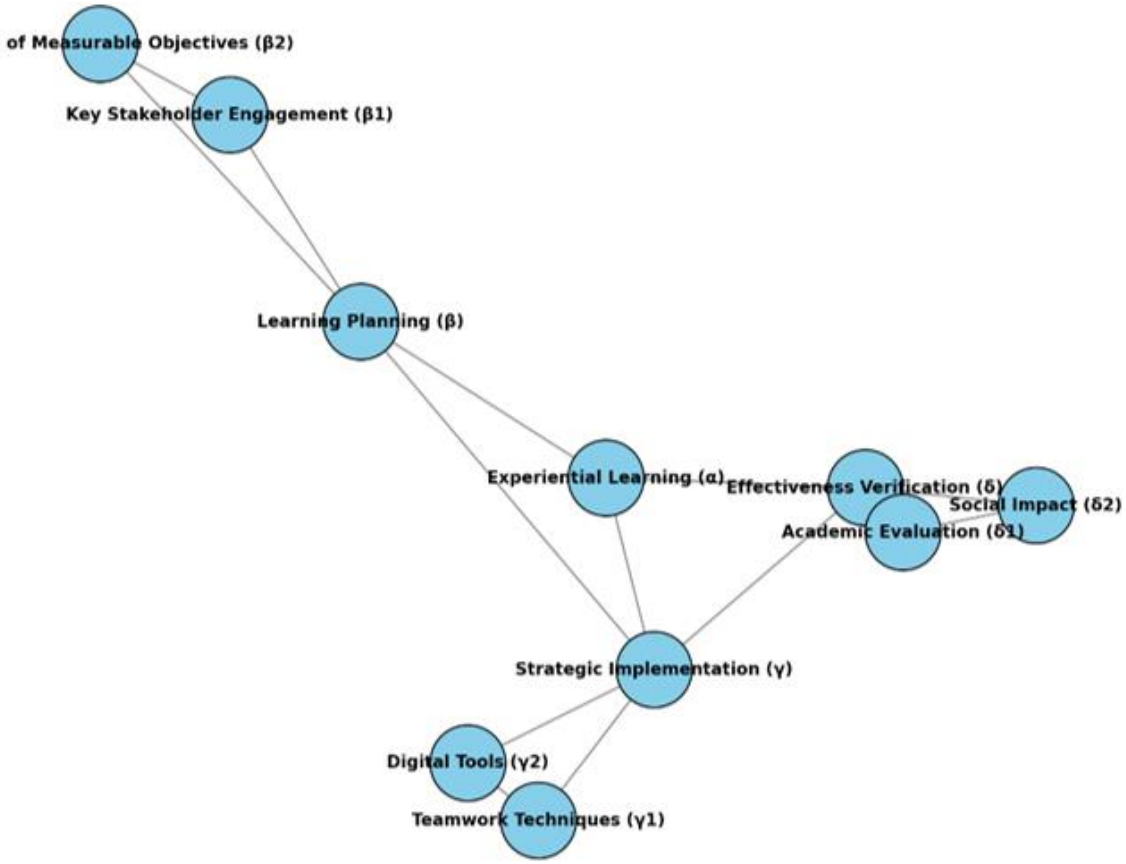

Figure 2.
Mathematical semantic networks of collaborative learning circles extracted from atlas TI.

The Figure 2 represents a mathematical semantic network illustrating the hierarchical relationships among key concepts of experiential learning for transformational leadership, using mathematical notations (α, β, γ) to identify the main dimensions and subdimensions. This structural design allows for a more technical and systematic interpretation, supporting its application in the educational and community leadership fields.

2.3. Semantic Structure of the Network

The network is organized into three main dimensions, represented with mathematical symbols, each of which includes specific subdimensions that describe critical elements of experiential learning to foster transformational leadership:

- **α: Experiential Learning (Central Dimension)** Subdimensions: Learning Planning (β), Strategic Implementation (γ), Effectiveness Verification (δ)
- **β: Learning Planning** Subdimensions: Key Stakeholder Participation (β1), Definition of Measurable Objectives (β2)
- **γ: Strategic Implementation** Subdimensions: Teamwork Techniques (γ1), Digital Tools (γ2)
- **δ: Effectiveness Verification**
  Subdimensions: Academic Evaluation (δ1), Social Impact (δ2)

Each dimension and subdimension plays a crucial role in aligning educational objectives with implementation and evaluation strategies, quantifying importance and strengthening interactions among key components of experiential learning.

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Table 2.
Hierarchical and mathematical relationships.

Main node	Sub node	Educational purpose
α: Experiential learning	β: Learning planning	Design strategic activities and align them with community goals
	γ: Strategic implementation	Apply collaborative strategies
	δ: Effectiveness verification	Evaluate results and ensure sustainable impact
β: Learning planning	β1: Key stakeholder participation	Involve students and communities
	β2: Definition of measurable objectives	Establish clear and achievable goals
γ: Strategic implementation	γ1: Teamwork techniques	Promote collaboration and peer learning
	γ2: Digital tools	Integrate collaborative technologies
δ: Effectiveness verification	δ1: Academic evaluation	Analyze academic progress
	δ2: Social impact	Evaluate community benefit and transformation

2.4. Interpretation of the Mathematical Model

- **Dimensions and Relationships:** The network illustrates how the components of experiential learning (α, β, γ, δ) interrelate, forming a cohesive pedagogical framework. Each dimension represents a critical aspect of developing transformational leadership competencies, and their relationships create a dynamic system that supports the implementation of educational policies and learning outcomes in students. This structure allows for the alignment of strategies, resources, and evaluations with educational and community objectives, fostering meaningful and transformative learning.
- **Conceptual Hierarchy:** The inclusion of sub nodes provides a detailed breakdown of each dimension, offering a more granular view of tasks such as planning, implementation, and verification of educational strategies. This hierarchical organization ensures clarity in policy execution, facilitating alignment with educational and community objectives while ensuring effective impact in local educational contexts.
- **Technical Application:** The mathematical notations (α, β, γ, δ) provide a systematic structure, making the model particularly suitable for research integrating qualitative and quantitative analyses. This approach enhances technical precision and replicability of the governance framework, allowing its use in various methodological contexts.

2.5. Comparison with Figure 1

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 while providing clarity without relying on quantification. Together, these figures are complementary: Figure 1 provides insights into the relative importance of connections, while Figure 2 facilitates adaptability to diverse methodological contexts by focusing 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.

3. Results

3.1. Analytical Description of the Variables

3.1.1. Distribution of Transformational Leadership Dimensions

Table 3 shows that, out of 65 students from rural areas, the majority perceived intellectual stimulation and idealized influence as occurring "Sometimes," with 81.5% and 80%, respectively.

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Inspirational motivation was also mostly perceived as "Sometimes" by 71.6% of respondents. A small percentage, 9.2%, indicated "Never" and "Always" for the intellectual stimulation dimension, while 15.3% and 4.6% reported the same for idealized influence. Regarding inspirational motivation, 23.7% stated "Never," and 4.6% said "Always." The table indicates that students interpret the dimensions of transformational leadership inconsistently. Predominantly, intellectual stimulation and idealized influence are seen as actions that occur sporadically, suggesting that leaders do not implement these tactics continuously. Similarly, inspirational motivation is perceived as an intermittent experience, indicating that leaders do not consistently inspire and motivate their teams. These findings underscore the importance of a more sustained and robust approach in implementing transformational leadership practices to ensure a positive and lasting impact on students.

In Figure 3, it is evident that most participants, 81.5%, indicated that this type of leadership is present "Sometimes." A total of 16.9% of respondents considered that transformational leadership "Never" manifests, while only 4.6% experienced it "Always." In total, 36 individuals were surveyed, and the valid percentages fully reflected the distribution of responses, with a cumulative percentage reaching 100%. These findings reveal that most participants perceive transformational leadership as sporadic, suggesting that such leadership practices are not consistently implemented. A significant group of respondents believes that this leadership is not reflected at all, indicating insufficient implementation. Only a minority experiences this leadership consistently, highlighting the need to reinforce and maintain these practices to generate a positive and lasting effect on teams.

Table 3.
Distribution of transformational leadership dimensions.

	Never	Sometimes		Always	Total	
	%	N	%	%	N	%
Intellectual stimulation	9.2	53	81.5	9.2	65	100%
Idealized influence	15.3	52	80	4.6	65	100%
Inspirational motivation	23.7	47	71.6	4.6	65	100%

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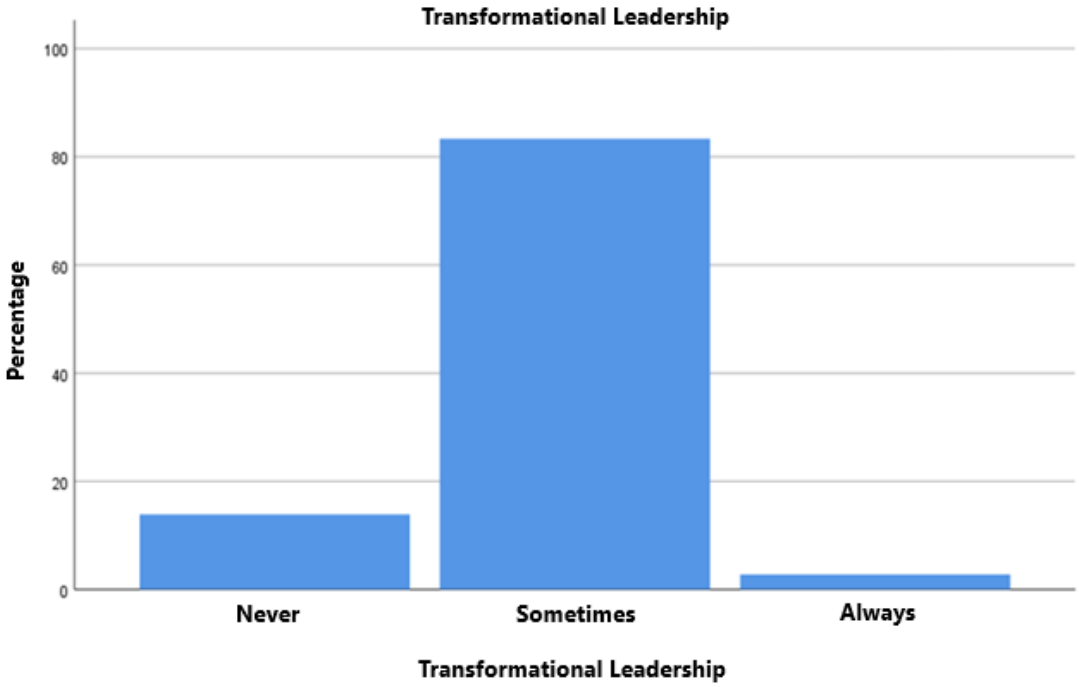

Figure 3.
Percentage distribution of transformational leadership dimension.

3.1.2. Experiential Learning

In Table 4, the distribution of the dimensions of the experiential learning variable indicates that the majority of participants perceive "Always" the dimensions of concrete experience, reflective observation, and abstract conceptualization, with percentages of 71.1%, 75%, and 75%, respectively. A total of 20.9% of respondents indicated that concrete experience occurs "Sometimes," while reflective observation and abstract conceptualization were perceived as occurring "Sometimes" by 14.9% and 10.4% of participants, respectively. On the other hand, a small percentage indicated "Never" for concrete experience (8%), reflective observation (8%), and abstract conceptualization (12.3%). These results reveal that a large portion of participants perceive the dimensions of experiential learning as practices that are implemented consistently. This implies that experiential teaching methods are frequently applied and valued. However, a considerable group of respondents perceives these practices only occasionally, suggesting there is room for improvement in the frequency of their implementation. Additionally, a small group of participants indicates that these practices are never implemented, which could indicate fluctuations in teaching quality or discrepancies in students' perceptions.

In Figure 4, we observe that the distribution of the experiential learning variable showed that the majority of participants, 76.9%, indicated that this type of learning is present "Always." A total of 20.9% of respondents considered it occurs "Sometimes," while only 8% stated that experiential learning "Never" manifests. These results suggest that most participants perceive experiential learning as a constant practice in their educational environment. This indicates that activities and teaching methods promoting direct and participatory experiences are being implemented effectively and frequently. A smaller group believes this type of learning occurs only occasionally, which may indicate variability in its application or in the perception of its presence. Evidently, very few participants believe that experiential learning does not manifest, highlighting its importance and presence in most educational experiences. These results underscore the effectiveness of experiential learning methodologies and their positive impact on the educational process.

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Table 4.
Distribution of experiential learning dimensions.

	Never	Sometimes		Always		Total
	%	N	%	N	%	%
Concrete experience	8	14	20.9	46	71.1	100%
Reflective observation	8	6	14.9	50	76.9	100%
Abstract conceptualization	12.3	7	10.4	50	76.9	100%

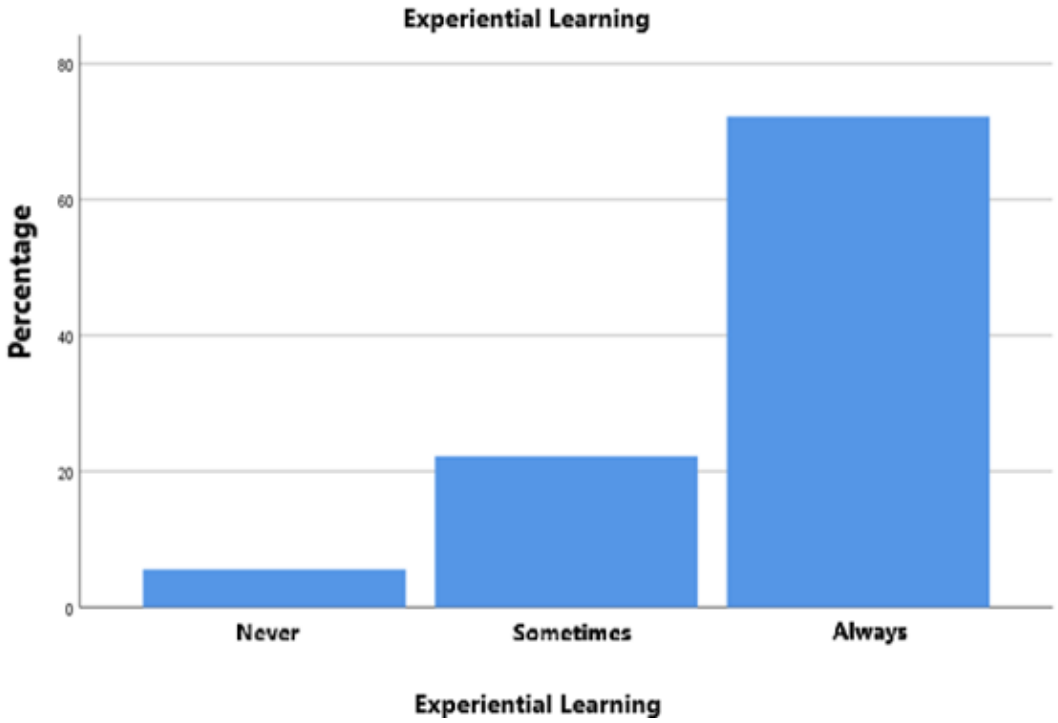

Figure 4.
Percentage distribution of experiential learning dimension.

3.2. Inferential Analysis of the Variables
3.2.1. Hypothesis Testing

Table 5 presents the results obtained from the Peruvian highlands, where the Spearman correlation coefficient was 0.453 and the bilateral significance was 0.002. Since the p-value was less than the significance level $\alpha = 0.05$, the null hypothesis (H0) was rejected, and the alternative hypothesis (H1) was accepted. This indicates that there is a significant and strong relationship between experiential learning and transformational leadership among students from various educational institutions in the Peruvian highlands during the year 2024. Based on this, we can infer that experiential learning has a positive and relevant effect on the development of transformational leadership skills among students in this region. This is because practical and participatory experiences, characteristics of experiential learning, not only provide theoretical knowledge but are also effective in promoting transformational leadership skills.

These findings align with previous research conducted in the Peruvian highlands, which has shown that transformational leadership positively influences educational management and teacher performance. For example, studies conducted in Cusco and Ayacucho have discovered notable connections between these variables, reinforcing the idea that a transformational approach to educational leadership can enhance learning quality and motivation among students. The effective implementation of experiential

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learning methods in the highlands is essential for developing capable leaders who contribute to Peru's educational progress.

Table 5.
Hypothesis testing results.

			T.L.	E.L.
Spearman's Rho	Transformational leadership (T.L.)	Coefficient of correlation	1.000	0.453
		Significance (bilateral)		0.002
		N	65	65
	Experiential learning (E.L.)	Coefficient of correlation	0.453	1.000
		Significance (bilateral)	0.002	
		N	65	65

3.2.2. Specific Hypothesis Testing 1

In Table 6, the data obtained from the Peruvian highlands indicated a correlation coefficient of 0.123 with a bilateral significance of 0.457. This low correlation coefficient suggests a weak relationship between concrete experiences of experiential learning and intellectual stimulation among students from various educational institutions in the Peruvian highlands during the year 2024. Furthermore, since the obtained p-value of 0.457 is significantly greater than the significance level $\alpha = 0.05$, the null hypothesis (H0) is accepted, and the alternative hypothesis (H1) is rejected. This means that, according to the examined data, no relevant correlation can be deduced between the analyzed variables. Therefore, experiences related to learning do not seem to significantly influence intellectual stimulation in the observed context of the Peruvian highlands. This lack of a relevant link could be attributed to several factors, such as the quality or design of experiential experiences, the method used to assess intellectual stimulation, or specific characteristics of the samples analyzed in different educational institutions in the highlands.

These findings highlight an alarming trend in the educational system of Peru's mountainous region, where experiential learning methodologies still fail to establish a clear and positive connection with the growth of intellectual skills among students. The implementation of experiential experiences may be hindered by factors such as insufficient teacher training in these techniques or inadequate incorporation of these practices into educational programs. To address this situation, it is essential to conduct a more thorough study on how these experiences are created and established in educational centers in the highlands. Only then can we determine what elements need improvement to promote experiential learning as a tool that fosters not only active student engagement but also their intellectual and critical development within the educational environment of the Peruvian highlands.

Table 6.
Specific hypothesis testing 1 results.

			I.S.	C.E.
Spearman's Rho	Intellectual stimulation (I.S.)	Coefficient of correlation	1.000	0.123
		Significance (bilateral)		0.457
		N	65	65
	Concrete experience (E.C.)	Coefficient of correlation	0.123	1.000
		Significance (bilateral)	0.457	
		N	65	65

3.2.3. Specific Hypothesis Testing 2

In Table 7, the results obtained from the Peruvian highlands showed a correlation coefficient of 0.279 with a bilateral significance of 0.198. Since the p-value was greater than the significance level $\alpha = 0.05$, the null hypothesis (H0) was accepted, and the alternative hypothesis (H1) was rejected. This suggests that there is no relevant correlation between reflective observation of experiential learning and idealized influence among students from various educational institutions in the Peruvian highlands

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during the year 2024. This finding indicates that the studied sample and the interaction between the involved variables are not robust enough to generate a significant effect. Therefore, strategies based on reflective observation to enhance idealized influence may require revision or supplementation.

On a broader scale in the Peruvian highlands, the lack of a significant relationship could represent a common challenge in the regional educational system, where experiential learning tactics and transformational leadership practices fail to establish solid and effective connections. The implementation of classroom experiences may be limited for various reasons, such as inadequate teacher training in reflective observation techniques or the absence of a systematic approach to incorporate these practices into the curriculum. To address this challenge, it is crucial for educational entities to reconsider the design and implementation of these experiences, ensuring they align with the goals of developing transformational leadership among students.

Table 7.
Specific hypothesis testing 2 results.

			I.I.	R.O.
Spearman's Rho	Idealized influence (I.I.)	Coefficient of correlation	1,000	0.279
		Significance (bilateral)		0.198
		N	65	65
	Reflective observation (R.O.)	Coefficient of correlation	0.279	1.000
		Significance (bilateral)	0.198	
		N	65	65

4. Discussion

In the research conducted in the Peruvian highlands, the aim was to determine the relationship between experiential learning and transformational leadership among students from various educational institutions in this region during 2024. Using the Spearman Rho test, a significance of 0.002 and a correlation coefficient of 0.512 were obtained, which allowed for the rejection of the null hypothesis. These results demonstrated a positive and significant relationship between transformational leadership and experiential learning, confirming that the implementation of transformational leadership in educational environments promotes deeper and more meaningful learning among students in the highlands.

These findings are consistent with research by Cabana Villca (2022), which indicates that factors such as trust, active roles, and intrapreneurial behavior positively impact meaningful learning, explaining a considerable part of its variability. This reinforces the idea that both transformational and educational leadership positively and indirectly influence meaningful learning among students.

Regarding the first specific objective of the research, the relationship between concrete experiences of experiential learning and intellectual stimulation was determined among students from various educational institutions in the Peruvian highlands during 2024. The Spearman correlation coefficient showed a value of 0.123 with a bilateral significance level of 0.457; therefore, the null hypothesis (H0) was accepted, and the alternative hypothesis (H1) was rejected. This finding indicates that there is no statistically significant relationship between intellectual stimulation and concrete experiences of experiential learning in the studied sample from the highlands.

These results align with findings from research by Ascencio et al. (2019), titled "Artistic Activities in Transformational Leadership Among Students in a Business Ethics Course at a Private University in Lima During 2019." The study focused on having students analyze, reflect on, and find meaning in artistic experiences to enhance their transformational leadership and knowledge, applying them in their daily lives. Utilizing David Kolb's experiential learning theory, it emphasized the importance of concrete experiences as a foundation for observation and reflection. This suggests that experiential experiences do not seem to have a relevant impact on intellectual stimulation in the observed context of the Peruvian highlands. The lack of a significant relationship could be attributed to various factors, such as the quality or design of experiential experiences, as well as specific characteristics of the educational environment in this region.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 8, No. 6: 9702-9716, 2024
DOI: 10.55214/25768484.v8i6.4092

The second specific objective focused on evaluating how reflective observation of experiential learning relates to idealized influence among students in the Peruvian highlands. The Spearman correlation coefficient yielded a value of 0.279 with a significance level of 0.198, which also led to accepting the null hypothesis (H0) and rejecting the alternative hypothesis (H1), indicating that there is no relationship between these dimensions. These results highlight the need to strengthen educational practices to maximize the positive impact of experiential learning and transformational leadership in educational institutions in the Peruvian highlands.

In contrast to findings by Rojas Carrasco et al. (2020), where their study aimed to develop a theory about transformational leadership from a humanistic pedagogy perspective. A qualitative methodology grounded in phenomenological-hermeneutic approaches was used, with five key informants selected for their experience in higher education and their connection to humanistic pedagogy. The interviews identified five fundamental categories and 59 subcategories interpreted based on transformational leadership and humanistic pedagogy. From an axiological, ontological, and teleological perspective, they emphasized humanistic leaders' commitment to their students' overall success. They asserted that direct interaction with tangible tasks and real circumstances is essential for knowledge acquisition. This supports the relevance of reflective observation. Additionally, it was evident that experiential learning, which includes abstract conceptualization, is essential for enhancing students' leadership capabilities.

5. Conclusion

The study conducted in the Peruvian highlands in 2024 identified a positive and relevant connection between transformational leadership and experiential learning among students from various educational institutions in the region. By utilizing the Spearman Rho test, a correlation coefficient of $r = 0.512$ and a significance level of 0.002 were achieved, which is below the significance threshold of 0.05. These findings allow for the rejection of the null hypothesis and confirm that transformational leadership in educational contexts promotes deeper and more meaningful learning among students in the Peruvian highlands.

The survey collected information regarding students' perceptions of transformational leadership and its influence on experiential learning. The majority of participants perceived intellectual stimulation and idealized influence as occurring "sometimes," suggesting a relevant appreciation for both elements.

The measurement instruments used demonstrated reliability, with Cronbach's alpha coefficients of 0.863 for transformational leadership and 0.847 for experiential learning, ensuring the validity and reliability of the results at a regional scale. These discoveries reinforce the notion that effective transformational leadership can significantly contribute to the academic and personal growth of students in the highlands, creating an enriching and motivating educational environment in rural and peripheral areas of Peru. The non-random convenience sampling allowed for the selection of a representative sample, which, while not the most ideal method, proved appropriate for this study given the population size and ease of access to participants.

The findings indicate that transformational leadership has a considerable effect on students' experiential learning in the Peruvian highlands, suggesting that teachers with a transformational perspective can positively impact students' mindsets and individual development, fostering emotional well-being and advancing the educational community in this region.

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Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 8, No. 6: 9702-9716, 2024
DOI: 10.55214/25768484.v8i6.4092