

Article

Co-Creating Authentic Rural Tourism Experiences: Pre–Post Evidence on Preference Fit, Learning, Local Interaction, and Purchase Intention

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Abstract

This study assesses perceived changes associated with the application of a structured co-creation process to the redesign of an authentic rural tourism product by aligning local resources, stakeholder knowledge, and potential users' expectations. The empirical context is Salinas de Guaranda, Ecuador, where a tourism product was redesigned and evaluated through an applied one-group pretest–posttest design involving a purposive evaluation panel of 28 participants, including tourism stakeholders, local representatives, and potential users with direct knowledge of the product and destination. The assessment covered perceived preference fit, learning opportunities, participation in activities, social interaction potential, memorability, purchase intention, and willingness to share experiences, all measured using five-point Likert scales. The results show statistically significant perceived improvements across all indicators after the redesign, even after applying the Bonferroni correction for multiple comparisons ($p < 0.00556$). The largest increases were observed in satisfaction with interests and preferences ($\Delta = 1.32$; $dz = 2.78$), purchase intention ($\Delta = 1.21$; $dz = 1.32$), and learning ($\Delta = 1.07$; $dz = 2.83$). Significant increases were also found in perceived interaction with the local community ($\Delta = 0.64$), participation in activities ($\Delta = 0.55$), memorability ($\Delta = 0.82$), and willingness to share experiences. These findings suggest that structured co-creation may help strengthen the perceived fit between rural tourism products and user expectations while enhancing the anticipated experiential and relational potential of authentic tourism products, including situated learning, active participation, and social interaction. The article contributes applied pre–post evidence on how participatory tourism design may support more marketable, memorable, and locally grounded rural tourism experiences, while recognizing that the design does not establish definitive causal effects.



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1. Introduction

Rural and community-based tourism has become an important strategy for diversifying local economies, enhancing territorial resources, and creating direct encounters between visitors and host communities. In these contexts, tourism products are not limited to transportation, accommodation, or attractions; rather, they are built around situated experiences in which local culture, productive practices, landscape, hospitality, and social interaction become central components of value creation. Recent systematic evidence shows that rural tourism can support the sustainable development of traditional villages through heritage conservation, income generation, community participation, and territorial revitalization, although these benefits depend on how tourism is planned and governed (Li et al., 2024). This is especially relevant for rural and agritourism destinations, where visitors increasingly seek authentic, participatory, and locally embedded experiences. However, when products are designed mainly from an operator-driven perspective, with limited participation of local actors and potential users, the resulting offer may fail to reflect visitor expectations, local identity, and the experiential resources that make the destination distinctive.

Recent tourism and hospitality research reflects a broader transition from firm-centered product delivery toward value co-creation. From this perspective, value does not reside exclusively in a predefined tourism product but emerges through interaction, resource integration, and collaboration among visitors, service providers, local communities, intermediaries, and destination managers. Bibliometric and systematic reviews confirm that tourism co-creation has become an expanding research domain, with growing attention to stakeholder interaction, experience design, innovation, perceived value, satisfaction, loyalty, and behavioral intentions (Ribeiro et al., 2023; John & Supramaniam, 2024; Orts-Cardador et al., 2025). In parallel, tourism living labs have been proposed as applied environments for organizing stakeholder collaboration, experimentation, and iterative value co-creation in real destination contexts (Dickinger & Kolomoyets, 2024). This shift is particularly relevant for tourism products whose value depends on intangible and relational components, such as authenticity, learning, participation, social contact, and memorability.

Despite this progress, effective stakeholder participation remains uneven in rural tourism development. Recent evidence on collaborative governance suggests that although many rural tourism initiatives are framed as community-based or participatory, tourists and potential users often remain among the least involved actors in governance and design processes (Reina-Usuga et al., 2024). This participation gap is important because rural tourism products are expected to satisfy heterogeneous motivations, including learning about local life, engaging in cultural or productive activities, interacting with residents, enjoying natural and built heritage, and accessing experiences perceived as authentic. Research on community-based tourism experiences shows that co-creation can help integrate visitor participation, local interaction, and experiential value, reinforcing the role of tourists and host communities as active contributors rather than passive recipients of tourism services (Liang et al., 2023). If these expectations and local perspectives are not incorporated into design, products may show weak preference fit, limited experiential differentiation, and lower commercial attractiveness.

Rural and agritourism settings provide especially fertile conditions for co-creation because the experience depends on the alignment between local resources and visitor expectations. Agritourism integrates agricultural landscapes, productive practices, local food, family or community hospitality, and place-based learning. Martinus et al. (2024) identify authenticity, interaction, learning, and location as core dimensions of experiential agritourism, while Deng et al. (2024) propose a systematic scale for co-created tourism experiences that includes entertainment, immersion, achievement, novelty, authenticity, uniqueness, education, and interaction. These contributions suggest that co-creation

should not be understood only as a participatory management principle, but also as an experiential design process capable of modifying concrete and measurable attributes of tourism products.

Authenticity and memorability are central to this discussion. In rural and community-based tourism, authenticity refers not only to the preservation of heritage or local traditions, but also to the perceived coherence between the tourism proposal and the everyday life, productive practices, identity, and social relations of the host context. Evidence from heritage tourism shows that perceived authenticity can activate dimensions of the experience economy, such as entertainment, aesthetics, education, and escapism, and can contribute to satisfaction and positive service evaluations (Zhu et al., 2025). Similarly, studies in ancient village contexts indicate that authenticity, involvement, and destination image are positively related to tourist satisfaction (Zhao et al., 2024). Memorable tourism experiences are also relevant because the value of tourism often persists beyond consumption through recall, storytelling, recommendation, and willingness to share (González-Reverté et al., 2025). Prior research shows that engagement, authenticity, and destination image can influence revisit intention and electronic word-of-mouth through memorable tourism experiences (Rasoolimanesh et al., 2021), while broader reviews emphasize that tourists seek meaningful, authentic, emotionally engaging, and socially embedded experiences (Hosany et al., 2022).

Nevertheless, co-creation should not be presented as automatically beneficial. Recent research warns that the relationship between tourist co-creation and marketing outcomes may be curvilinear, suggesting that excessive or poorly managed participation can generate diminishing returns or even value co-destruction (Zhang, 2023). Studies on agritourism also show that tourism activity can create tensions for host families and local communities when it increases workload, reduces free time, or weakens community interaction (Grillini et al., 2025). These findings highlight the need to approach co-creation as a structured and balanced design process rather than as an informal consultation exercise. The challenge is not merely to involve more actors, but to organize participation in a way that aligns visitor value, local authenticity, operational feasibility, and community well-being.

A further gap concerns methodology. Much empirical research on tourism co-creation relies on cross-sectional surveys, post-consumption evaluations, or correlational designs. Although valuable for identifying associations among co-creation, experience quality, satisfaction, and behavioral intentions, such studies provide limited evidence on whether a specific co-created redesign improves the same tourism product compared with its previous configuration. Methodological reviews in tourism and hospitality have emphasized the importance of experimental, quasi-experimental, and field-based approaches for generating more actionable evidence and stronger practical implications (Viglia & Dolnicar, 2020; Dolnicar et al., 2026). This is particularly relevant for rural tourism product development, where managers and local actors need evidence not only about what visitors value, but also about whether a redesign intervention produces measurable improvements in experiential and market-related indicators.

In response, this study evaluates the application of a structured co-creation procedure to the redesign of a tourism product in Salinas de Guaranda, Ecuador. It adopts an applied one-group pretest–posttest evaluation design to compare two versions of the same product: an initial version developed through a traditional design logic and a redesigned version developed through co-creation. Rather than estimating population-level tourist demand, the study assesses perceived changes through comparable pre–post measurements provided by a purposive panel involved in the co-design evaluation process and connected to the local tourism ecosystem. The assessment focuses on experiential attributes—authenticity, learning, participation, interaction with the local community, and interaction with other

clients—and outcome-related indicators, including preference fit, memorability, purchase intention, and willingness to share ideas and experiences.

This study responds to the identified gap by providing applied pre–post evidence on co-creation as a structured experiential design logic for locally grounded rural tourism products. Its contribution is not limited to showing that a redesigned product was evaluated more favorably. Rather, it examines how the same tourism product’s perceived performance changed following a co-created redesign across concrete experiential, relational, perceptual, communicative, and behavioral indicators. In doing so, the study extends previous co-creation research by shifting attention from general associations between co-creation and tourist outcomes to the evaluation of a specific product-level redesign intervention. It also connects co-creation with dimensions especially relevant to rural and agritourism experiences, including authenticity, situated learning, participation, local interaction, memorability, preference fit, willingness to share experiences, and purchase intention. This approach helps clarify how co-creation may translate local resources, stakeholder knowledge, and potential users’ expectations into a more coherent and marketable rural tourism product, while recognizing that the one-group pretest–posttest design does not establish definitive causal effects.

2. Theoretical Background

2.1. Value Co-Creation as an Experiential Design Logic in Rural Tourism

Value co-creation has become a central perspective in tourism and hospitality research because tourism value is increasingly understood as emerging from interaction, collaboration, and resource integration among multiple actors rather than from the unilateral delivery of a predefined product. In tourism contexts, these actors include visitors, service providers, intermediaries, local communities, public institutions, and destination managers. From this perspective, co-creation allows tourism products to be reconfigured according to what users and stakeholders perceive as meaningful, feasible, authentic, and valuable (Font et al., 2021; Lyu et al., 2022).

Recent reviews confirm the growing relevance of co-creation in tourism and hospitality. The literature has linked co-creation to antecedents such as interaction, engagement, service innovation, and stakeholder participation, and to outcomes such as perceived value, satisfaction, loyalty, destination image, and behavioral intentions (Ribeiro et al., 2023; John & Supramaniam, 2024). Bibliometric evidence also shows that tourism co-creation has become an increasingly diversified research stream, with growing attention to experience design, digital environments, stakeholder interaction, and destination value (Orts-Cardador et al., 2025). However, much of this literature remains based on cross-sectional or post-consumption evidence, which limits the ability to assess whether a specific co-created redesign improves the same tourism product when compared with its previous configuration.

This issue is especially relevant in rural and community-based tourism, where the product depends on the alignment between local resources and visitor expectations. Rural tourism experiences usually combine cultural identity, productive practices, local food, landscape, hospitality, learning, and social interaction. Systematic evidence suggests that rural tourism can contribute to the sustainable development of traditional villages, but these benefits depend on governance, community participation, and the ability to connect tourism activity with local identity and territorial resources (Li et al., 2024). Likewise, research on community-based tourism shows that co-creation can strengthen visitor participation, local interaction, and experiential value by positioning tourists and host communities as active contributors to the experience rather than passive recipients of tourism services (Liang et al., 2023).

In this sense, co-creation should be understood not only as a participatory management approach, but also as a structured experiential design logic. Tourism living labs, for instance, have been proposed as collaborative environments where stakeholders jointly identify needs, experiment with solutions, and refine tourism experiences in real-life contexts (Dickinger & Kolomoyets, 2024). This view is consistent with the present study, which evaluates whether a structured co-creation procedure improves the perceived attributes of a rural tourism product by comparing its traditional and redesigned versions.

2.2. Authenticity, Learning, Participation, and Interaction in Co-Created Rural Experiences

Rural and agritourism experiences are particularly suitable for co-creation because their value depends strongly on authenticity, participation, interaction, and learning. Martinus et al. (2024) identify authenticity, interaction, learning, and location as key dimensions of experiential agritourism. Similarly, Deng et al. (2024) propose a systematic assessment scale for co-created tourism experiences that includes dimensions such as entertainment, immersion, achievement, novelty, authenticity, uniqueness, education, and interaction. These contributions support the idea that co-creation can modify concrete experiential attributes rather than merely improving general attitudes toward a product.

Authenticity is especially relevant in rural tourism because visitors often evaluate the experience according to the perceived coherence between the tourism proposal and the host context. In this setting, authenticity is not limited to heritage preservation or cultural symbolism; it also involves real contact with local practices, productive activities, social relations, and ways of life. Evidence from heritage tourism shows that perceived authenticity can activate dimensions of the experience economy, including entertainment, aesthetics, education, and escapism, while contributing to satisfaction and positive service evaluations (Zhu et al., 2025). Similarly, research in ancient village tourism shows that authenticity, involvement, and destination image are positively associated with tourist satisfaction (Pérez-Campdesuñer et al., 2017; Zhao et al., 2024).

Learning is another central dimension. In rural and agritourism products, visitors are not only spectators; they may learn about production processes, local food systems, cultural practices, environmental conditions, and community life. This situated learning can increase the perceived relevance of the experience and strengthen the connection between the visitor and the destination. Participation in activities also matters because it shifts the visitor from passive consumption to active involvement, increasing immersion, control, and personal relevance. For this reason, co-created rural tourism experiences are expected to perform better when they increase opportunities for meaningful participation and learning.

Social interaction is also a core mechanism of co-created value. In tourism, value is often produced through encounters with hosts, guides, service personnel, local residents, and other visitors. In sustainable tourism, co-creation has been explained through service-dominant logic, where value emerges through reciprocal interactions among actors across the tourism system (Font et al., 2021). In rural contexts, interaction with the local community can reinforce perceived authenticity, trust, hospitality, and place attachment, while interaction with other clients can contribute to enjoyment, shared meaning, and memorability. Therefore, interaction is not simply a contextual feature of tourism experiences; it is part of the mechanism through which co-created value becomes visible to users.

2.3. Memorability, Sharing, and Purchase Intention as Outcomes of Co-Created Design

The outcomes of co-created tourism design can be observed not only in satisfaction or perceived fit, but also in memorability, willingness to share experiences, and purchase intention. Memorable tourism experiences are important because tourism value often

extends beyond the immediate moment of consumption through recall, storytelling, recommendation, and digital sharing. Research on heritage tourists shows that engagement, authenticity, and destination image can influence revisit intention and electronic word-of-mouth through memorable tourism experiences (Rasoolimanesh et al., 2021). Broader reviews also emphasize that memorable experiences are usually meaningful, authentic, emotionally engaging, and socially embedded (Hosany et al., 2022).

In contemporary tourism markets, willingness to share experiences is especially relevant because visitors participate in the circulation of destination meanings through social media, reviews, photos, stories, and recommendations. Recent research shows that tourism experiences can be co-created on social media, where tourists contribute to shaping expectations, meanings, and content before, during, and after the visit (Huang et al., 2024). Similarly, emerging research on tourism live shopping suggests that interaction and co-creation can influence behavioral responses in digital environments (Zhang & Prebensen, 2025). These findings support the inclusion of willingness to share ideas and experiences as an indicator of the communicative and reputational potential of a redesigned tourism product.

Purchase intention is also a relevant outcome because a tourism product must be not only authentic and meaningful, but also attractive and marketable. Prior research has shown that co-creation in tourism can influence revisit intentions and market-related outcomes (Monteiro et al., 2023; Zhou & Chen, 2023). However, co-creation should not be assumed to produce uniformly positive effects. Zhang (2023) suggests that the relationship between tourist co-creation and marketing outcomes may be curvilinear, meaning that excessive or poorly managed participation can generate diminishing returns or even value co-destruction. Studies on agritourism also warn that tourism development may create tensions for host families and communities when it increases workload or weakens local interaction (Grillini et al., 2025). Therefore, co-creation requires structure, balance, and contextual sensitivity.

2.4. Hypotheses' Development

Based on the previous literature, this study assumes that a structured co-creation procedure can improve the perceived performance of a rural tourism product by aligning local resources, stakeholder knowledge, and user expectations. In this design, the intervention is the application of the co-creation procedure, while the evaluated indicators capture changes in experiential, relational, and behavioral dimensions of the product.

First, if co-creation improves the alignment between the product and what potential users value, it should increase the perceived fit between the tourism offer and users' interests and preferences. This expectation is consistent with the literature linking co-creation with perceived value, satisfaction, and experience quality (Ribeiro et al., 2023; Deng et al., 2024). Therefore:

H1. *The application of the co-creation procedure significantly improves satisfaction with users' interests and preferences.*

Second, co-creation is expected to strengthen experiential dimensions of rural tourism, particularly authenticity, learning, and participation in activities. These dimensions are central to agritourism and community-based tourism because they connect the visitor with local resources, productive practices, cultural identity, and active involvement (Martinus et al., 2024; Zhu et al., 2025). Therefore:

H2. *The application of the co-creation procedure significantly improves the experiential dimensions of the tourism product, particularly authenticity, learning, and participation in activities.*

Third, because co-created value emerges through interaction, the redesigned product should improve relational dimensions, including interaction with the local community and interaction with other clients. These interactions are central to service-dominant logic and to the construction of authentic and socially embedded tourism experiences (Font et al., 2021; Liang et al., 2023). Therefore:

H3. *The application of the co-creation procedure significantly strengthens relational dimensions, including interaction with the local community and interaction with other clients.*

Fourth, improvements in authenticity, learning, participation, and interaction are expected to enhance memorability and willingness to share experiences. This expectation is consistent with research on memorable tourism experiences and digital sharing behavior in tourism (Hosany et al., 2022; Huang et al., 2024; Rasoolimanesh et al., 2021). Therefore:

H4. *The application of the co-creation procedure significantly improves memorability and willingness to share ideas and experiences.*

Finally, if the redesigned product achieves stronger preference fit, richer experiential attributes, and greater memorability, it should also become more attractive from a market perspective. Prior studies have linked co-creation with behavioral intentions, revisit intention, destination brand equity, and market-related outcomes (Monteiro et al., 2023; Zhou & Chen, 2023). Therefore:

H5. *The application of the co-creation procedure significantly increases purchase intention.*

2.5. Evaluation Dimensions

Table 1 summarizes the main evaluation dimensions used in the study and the literature supporting their inclusion. Rather than treating these dimensions as independent variables in a causal model, they are understood as pre–post indicators used to assess whether the co-created redesign improved the perceived experiential, relational, and behavioral performance of the tourism product.

Table 1. Evaluation dimensions associated with co-created tourism product design.

Dimension Category	Evaluation Dimension	Supporting Literature
Experiential attributes	Authenticity	Martinus et al. (2024); Zhao et al. (2024); Zhu et al. (2025)
Experiential attributes	Learning	Deng et al. (2024); Martinus et al. (2024); Zhu et al. (2025)
Experiential attributes	Participation in activities	Deng et al. (2024); Liang et al. (2023); Martinus et al. (2024)
Relational attributes	Interaction with the local community	Font et al. (2021); Liang et al. (2023); Martinus et al. (2024)
Relational attributes	Interaction with other clients	Deng et al. (2024); Font et al. (2021)
Experiential outcome	Memorability	Hosany et al. (2022); Rasoolimanesh et al. (2021)
Market/perceptual outcome	Satisfaction with interests and preferences	Deng et al. (2024); Ribeiro et al. (2023)
Communicative outcome	Willingness to share ideas and experiences	Huang et al. (2024); Zhang and Prebensen (2025)
Behavioral outcome	Purchase intention	Monteiro et al. (2023); Ribeiro et al. (2023); Zhou and Chen (2023)

3. Materials and Methods

3.1. Research Design

This study adopted an applied one-group pretest–posttest evaluation design to assess whether a structured co-creation procedure was associated with perceived improvements in the experiential and market-related attributes of a tourism product in Salinas de Guaranda, Ecuador. The design compared two versions of the same product: an initial version developed through a traditional, operator-driven design logic and a redesigned version developed through a structured co-creation process.

Participants did not consume the complete initial and redesigned products as ordinary tourists. Instead, both versions were evaluated through standardized product presentations describing their itineraries, activities, participating local actors, learning components, opportunities for participation and social interaction, and other relevant operational and experiential characteristics. Therefore, the study assessed the perceived experiential and relational potential embedded in each product design rather than the quality of an experience observed after actual consumption.

The use of a pretest–posttest design was appropriate because the objective was not to estimate population-level tourist demand, but to evaluate perceived changes in the same tourism product before and after the co-created redesign. This design allowed the study to compare equivalent assessment dimensions across both moments while reducing variation associated with differences in product type, destination context, and target experience. However, given the absence of a control group, the design does not support strong causal identification. The comparison indicates whether the redesigned version was evaluated more favorably than the initial version by the same evaluation panel, but it cannot fully rule out alternative explanations such as expectancy effects, familiarity with the assessment process, social desirability, or changes in participants' perceptions unrelated to the intervention. Therefore, the study is positioned as an applied pre–post evaluation of perceived product improvement rather than as a causal experiment.

3.2. Co-Creation Process and Design Team

The co-creation process was developed in two main stages. In the first stage, the initial version of the tourism product was assessed based on a traditional design approach. In the second stage, the product was redesigned through co-creation methods, incorporating input from actors in the local tourism ecosystem. These actors contributed to the identification of experience attributes, operational feasibility, local authenticity, communication, risk management, and perceived market attractiveness.

The core design team included 16 participants representing different stakeholder groups involved in the tourism product and destination ecosystem. Their roles are summarized in Table 2.

To clarify the intervention, Table 3 summarizes the main differences between the initial and redesigned versions of the tourism product. The initial version followed a more traditional product logic, organized mainly around the presentation of destination attractions and available services. The redesigned version was structured as a more integrated rural experience, in which local resources, stakeholder knowledge, visitor expectations, learning opportunities, participation, and interaction were explicitly connected. Therefore, the redesign did not consist only of adding new activities, but of reorganizing the product around a clearer experiential value proposition.

This comparison shows that the co-created redesign sought to strengthen the product by improving the alignment between local resources, stakeholder roles, visitor expectations, and concrete experiential attributes. The changes were expected to influence the evaluation

dimensions measured in the pre–post assessment, particularly preference fit, learning, authenticity, participation, interaction, memorability, and purchase intention.

Table 2. Characterization of the core co-creation design team.

Actor Group	Main Role in the Co-Creation Process	Number of Representatives
Tourists/potential users	Validate attractiveness, experience design, price perception, and communication	8
Tourism service providers	Define a feasible and authentic tourism offer	1
Local community	Safeguard cultural and social legitimacy	1
Local guide	Translate local resources into an educational and safe experience	1
Food and restaurant services	Design a coherent gastronomic experience	1
Tour operator	Integrate the product, facilitate delivery, and support quality control	1
Technology support	Facilitate co-creation channels and commercialization support	1
Safety and risk management	Minimize incidents and define safety protocols	1
Local government	Support permits, territorial coordination, signage, and local planning	1

Table 3. Main changes introduced during the co-created redesign of the tourism product.

Product Component	Initial Version	Redesigned Version after Co-Creation	Main Expected Effect
Overall product logic	The product was presented mainly as a sequence of visits to local attractions and services.	The product was reorganized as an integrated rural experience with a clearer thematic narrative connected to local identity, productive practices, and community life.	Stronger preference fit, authenticity, and memorability.
Itinerary structure	The itinerary was relatively descriptive and operator-driven, with limited explanation of how each activity contributed to the overall experience.	The itinerary was restructured to follow a more coherent experiential sequence, linking arrival, interpretation, participation, local interaction, gastronomy, and closing reflection.	Greater clarity, perceived coherence, and purchase intention.
Learning components	Learning opportunities were implicit and depended mainly on visitors' observation of the destination.	Specific learning moments were incorporated, including the interpretation of local productive activities, cultural practices, and the social meaning of the destination.	Stronger perceived learning and educational value.
Visitor participation	Visitors were mostly positioned as observers of the destination and its services.	The redesigned product included more opportunities for active participation in local or experiential activities, according to operational feasibility and community availability.	Stronger participation, involvement, and experiential value.
Local community involvement	The role of local actors was present but not fully articulated as part of the value proposition.	The participation of local actors was made more visible through guided interaction, community-based interpretation, and clearer roles for hosts, guides, service providers, and local representatives.	Stronger perceived authenticity and interaction with the local community.

Table 3. *Cont.*

Product Component	Initial Version	Redesigned Version after Co-Creation	Main Expected Effect
Interaction design	Interaction with residents and other visitors was expected to occur naturally but was not deliberately structured.	Specific moments and spaces for host–guest and visitor–visitor interaction were incorporated into the experience design.	Stronger relational value and social interaction potential.
Gastronomic and cultural integration	Food and cultural elements were included as complementary services.	Gastronomy and cultural references were integrated as experiential components connected to local identity, learning, and storytelling.	Stronger authenticity, memorability, and perceived distinctiveness.
Communication of the experience	The product was communicated mainly through generic destination attributes.	The redesigned version clarified what visitors could learn, do, experience, and share, making the value proposition more concrete and easier to understand.	Stronger preference fit and purchase intention.
Operational coordination	Operational aspects were mainly handled by the tour operator or service provider.	Roles, timing, local participation, visitor flow, safety considerations, and service coordination were clarified through the co-creation process.	Greater feasibility, confidence, and perceived product quality.
Elements reduced or consolidated	Some generic or weakly connected activities were presented without a clear experiential function.	Activities that made limited contributions to learning, authenticity, participation, or interaction were consolidated or reframed within the broader experiential narrative.	Greater coherence and reduced dispersion of the product.

3.3. Evaluation Panel and Participants

After both versions of the product had been defined, a purposive evaluation panel was formed to assess the product before and after the co-created redesign. The panel consisted of 28 participants selected because of their direct or contextual knowledge of the destination, the tourism product, or the target experience. Therefore, the study did not use a probabilistic sample of tourists. Instead, it relied on an informed evaluation panel, consistent with the applied and intervention-oriented nature of the research. The purpose was not to generalize statistically to the entire tourist population or to estimate market demand, but to obtain informed pre–post assessments of the perceived experiential, relational, and commercial potential of a specific tourism product.

This sampling strategy should therefore be understood as appropriate for formative product evaluation, but not for drawing conclusions about the broader population of rural tourists or about actual tourist behavior in real consumption conditions. The panel provided informed judgments about the perceived potential of the redesigned product, while subsequent validation with independent tourists in real market settings remains necessary.

The design and evaluation functions were not completely independent. Of the 28 members of the evaluation panel, 16 had participated directly in the co-creation process as members of the core design team. Participants were also aware of which product version represented the co-created redesign. Consequently, the evaluation was not blinded, and involvement in the redesign may have influenced some participants' posttest assessments. This overlap is treated as a methodological limitation rather than as evidence that the observed changes resulted exclusively from the intervention.

The panel included both national and international participants, providing diversity in origin and potential market perspectives. Its composition by nationality is shown in Table 4. The panel had a balanced composition of national (50%) and international (50%) participants, with representation from relevant source markets such as the United States, Canada, and several European countries. It also showed diversity in travel patterns: 39.3% traveled individually, 25.0% with family, 25.0% as couples, and 10.7% with friends. The age range was 18 to 62 years, with a mean age of 35.18 years, indicating participation by adults across young and middle-aged age groups. This composition allowed the formative evaluation to incorporate diverse perspectives on the redesigned product's perceived attractiveness, relevance, and experiential potential.

Table 4. Composition of the evaluation panel by nationality.

Nationality	Frequency	Percentage
Ecuador	14	50.0
Argentina	1	3.6
United States	6	21.4
Canada	3	10.7
Uruguay	1	3.6
France	2	7.1
Germany	1	3.6
Total	28	100.0

Before completing each measurement, participants received a structured and comparable presentation of the corresponding product version. The same categories of information were provided at both assessment moments to facilitate comparison between the original and redesigned configurations. Participants evaluated the extent to which each version appeared capable of providing the proposed experiential, relational, and market-related benefits.

3.4. Measurement Instrument

The instrument included nine evaluation dimensions associated with the experiential, relational, perceptual, communicative, and behavioral performance of the tourism product: learning, authenticity, participation in activities, interaction with the local community, interaction with other clients, memorability, satisfaction with interests and preferences, willingness to share ideas and experiences, and purchase intention. All items were measured using a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. The complete wording of the questionnaire items is provided in Appendix A. Table 5 summarizes the dimensions, their classification, and the number of items used to measure each dimension.

Rather than treating these dimensions as independent and dependent variables in a causal structural model, this study used them as pre–post evaluation indicators. The intervention was the application of the structured co-creation procedure, while the indicators captured perceived changes in the product after the redesign.

Accordingly, items referring to learning, authenticity, participation, memorability, and interaction measured participants' anticipated evaluations of the opportunities offered by the product design. Relational indicators did not measure interactions that had already occurred; they captured the perceived capacity of the proposed product to facilitate interaction with local community members and other clients.

Table 5. Evaluation dimensions measured before and after the co-creation procedure.

Dimension Category	Evaluation Dimension	Number of Items
Experiential attributes	Learning	3
Experiential attributes	Authenticity	3
Experiential attributes	Participation in activities	3
Relational attributes	Interaction with the local community	4
Relational attributes	Interaction with other clients	2
Experiential outcome	Memorability	3
Perceptual/market outcome	Satisfaction with interests and preferences	3
Communicative outcome	Willingness to share ideas and experiences	2
Behavioral outcome	Purchase intention	2

3.5. Content Validity and Reliability

The content and face validity of the instrument were assessed by a panel of seven experts, 85% of whom held doctoral degrees. All experts had more than five years of experience in tourism services, tourism product design, or applied research in the sector. The expert panel reviewed the semantic clarity of the items, the relevance of each indicator to its theoretical dimension, and the adequacy of the instrument for the specific tourism product and destination context.

Internal consistency was assessed separately for each evaluation dimension at both measurement points because the instrument was multidimensional and was not intended to represent a single underlying construct. Accordingly, Cronbach's alpha was calculated for the initial product evaluation (M1) and the redesigned product evaluation (M2). As shown in Table 6, the coefficients ranged from 0.69 to 0.88 at M1 and from 0.74 to 0.90 at M2. The coefficients should be interpreted cautiously because of the small panel size ($n = 28$), particularly for dimensions measured with only two items.

Table 6. Internal consistency of the evaluation dimensions at M1 and M2.

Evaluation Dimension	Items	Cronbach's α (M1)	Cronbach's α (M2)
Learning	3	0.81	0.86
Authenticity	3	0.83	0.88
Participation in activities	3	0.76	0.82
Interaction with the local community	4	0.88	0.90
Interaction with other clients	2	0.71	0.77
Memorability	3	0.84	0.87
Satisfaction with interests and preferences	3	0.87	0.90
Willingness to share ideas and experiences	2	0.69	0.74
Purchase intention	2	0.79	0.84

Note. M1 = evaluation of the initial product; M2 = evaluation of the redesigned product. Estimates for two-item dimensions should be interpreted cautiously because Cronbach's alpha is sensitive to the number of items.

3.6. Data Analysis

Data were processed using RStudio 2026.04.0 (Posit Software, PBC). Descriptive statistics included means, medians, standard deviations, and frequencies to characterize the evaluation panel and summarize pre–post scores. To support interpretation, two graphical representations were produced: (i) a dumbbell plot comparing mean scores before and after the intervention and (ii) a forest plot showing mean differences ($\Delta = M2 - M1$) with 95% confidence intervals.

Before hypothesis testing, the normality of the paired differences was assessed using the Shapiro–Wilk and Kolmogorov–Smirnov tests. The results indicated significant

deviations from normality across the assessed indicators ($p < 0.05$). Considering the ordinal nature of the Likert-scale data, the small sample size, and the non-normal distribution of the paired differences, the Wilcoxon signed-rank test was used as the main inferential procedure.

Because nine pre–post comparisons were conducted, the Bonferroni correction was applied to control the family-wise error rate. The adjusted significance level was calculated as $\alpha = 0.05/9 = 0.00556$. Although this correction is conservative and may increase the risk of Type II errors, it was adopted to provide a more robust assessment of statistical significance across multiple indicators.

Effect sizes were also estimated to assess the practical magnitude of the observed changes. For the non-parametric comparisons, the effect size was calculated as $r = Z/\sqrt{N}$. In addition, standardized mean differences were reported to support substantive interpretation of the magnitude of change in the context of tourism product redesign.

The interpretation criteria were as follows: statistical significance was assessed using the Bonferroni-adjusted threshold ($p < 0.00556$); effect sizes were interpreted using conventional guidelines for r , where values around 0.10 indicate small effects, values around 0.30 indicate medium effects, and values of 0.50 or higher indicate large effects; and practical consistency was assessed by examining the direction and proportion of participants showing improvement between the pretest and posttest.

Because the study used a small paired evaluation panel and five-point Likert-type indicators, the effect sizes were interpreted with caution. In paired designs, standardized mean differences may become very large when most participants change in the same direction, and the variability of the paired differences is low. Therefore, effect sizes were used to describe the magnitude and consistency of perceived change within the evaluation panel, not to estimate population-level effects. The non-parametric effect size from the Wilcoxon signed-rank test was considered the primary effect-size indicator, while standardized mean differences were reported only as complementary descriptive information.

4. Results

Paired measurements were compared before (M1) and after (M2) the implementation of the structured co-creation procedure. All indicators were measured using five-point Likert scales. For each evaluation dimension, the normality of the paired differences ($M2 - M1$) was assessed using the Shapiro–Wilk test. Since the normality assumption was not met across the indicators ($p < 0.05$), the Wilcoxon signed-rank test was used as the main inferential procedure. The paired-samples t -test is also reported as a robustness check.

4.1. Overall Pre–Post Changes

The results show positive changes across all evaluation dimensions after the co-created redesign of the tourism product. The largest mean increases were observed in satisfaction with interests and preferences ($\Delta = 1.32$), purchase intention ($\Delta = 1.21$), learning ($\Delta = 1.07$), and authenticity ($\Delta = 0.96$). Moderate but statistically significant improvements were also found in memorability ($\Delta = 0.82$), interaction with other clients ($\Delta = 0.68$), interaction with the local community ($\Delta = 0.64$), participation in activities ($\Delta = 0.55$), and willingness to share ideas and experiences ($\Delta = 0.50$).

All pre–post comparisons were statistically significant according to the Wilcoxon signed-rank test ($p < 0.001$). Therefore, all observed changes remained significant after applying the Bonferroni correction for multiple comparisons, using an adjusted threshold of $p < 0.00556$.

4.2. Changes in Preference Fit and Purchase Intention

Satisfaction with interests and preferences increased from $M1 = 3.11$ ($SD = 0.69$) to $M2 = 4.43$ ($SD = 0.50$), with a mean difference of $\Delta = 1.32$ points. This was the largest observed improvement among all evaluated dimensions. The change was statistically significant in both the paired-samples t -test ($t = 14.70, p < 0.001$) and the Wilcoxon signed-rank test ($p < 0.001$), with a large standardized effect size ($d_z = 2.78$).

Purchase intention also increased substantially, from $M1 = 3.14$ ($SD = 0.71$) to $M2 = 4.36$ ($SD = 0.56$), with a mean difference of $\Delta = 1.21$ points. This change was statistically significant ($t = 7.01, p < 0.001$; Wilcoxon $p < 0.001$), with a large effect size ($d_z = 1.32$). These results indicate that the co-created version of the tourism product was evaluated more favorably in terms of both perceived fit with participants' interests and market attractiveness.

4.3. Changes in Experiential and Relational Dimensions

The experiential dimensions also showed significant improvements. Learning increased from $M1 = 3.25$ ($SD = 0.52$) to $M2 = 4.32$ ($SD = 0.55$), with $\Delta = 1.07$ points ($t = 15.00, p < 0.001$; Wilcoxon $p < 0.001$; $d_z = 2.83$). Authenticity increased from $M1 = 3.25$ ($SD = 0.59$) to $M2 = 4.21$ ($SD = 0.63$), with $\Delta = 0.96$ points ($t = 27.00, p < 0.001$; Wilcoxon $p < 0.001$; $d_z = 5.10$). Participation in activities increased from $M1 = 3.70$ ($SD = 0.56$) to $M2 = 4.25$ ($SD = 0.59$), with $\Delta = 0.55$ points ($t = 4.90, p < 0.001$; Wilcoxon $p < 0.001$; $d_z = 1.02$).

Relational dimensions followed the same pattern. Interaction with the local community increased from $M1 = 3.68$ ($SD = 0.55$) to $M2 = 4.32$ ($SD = 0.48$), with $\Delta = 0.64$ points ($t = 6.97, p < 0.001$; Wilcoxon $p < 0.001$; $d_z = 1.32$). Interaction with other clients increased from $M1 = 3.43$ ($SD = 0.63$) to $M2 = 4.11$ ($SD = 0.31$), with $\Delta = 0.68$ points ($t = 5.87, p < 0.001$; Wilcoxon $p < 0.001$; $d_z = 1.11$). These findings indicate that the redesigned product was perceived as more participatory, more authentic, and more socially interactive.

4.4. Changes in Memorability and Willingness to Share Experiences

Memorability increased from $M1 = 2.96$ ($SD = 0.64$) to $M2 = 3.79$ ($SD = 0.42$), with $\Delta = 0.82$ points. The change was statistically significant ($t = 7.10, p < 0.001$; Wilcoxon $p < 0.001$), with a large effect size ($d_z = 1.34$). Willingness to share ideas and experiences also increased, from $M1 = 4.00$ ($SD = 0.55$) to $M2 = 4.50$ ($SD = 0.64$), with $\Delta = 0.50$ points ($t = 4.91, p < 0.001$; Wilcoxon $p < 0.001$; $d_z = 0.95$). Although the increase in willingness to share was smaller than those observed in preference fit, purchase intention, and learning, it remained statistically significant and practically meaningful.

4.5. Visual Summary of the Pre–Post Changes

Figures 1 and 2 provide a visual summary of the pre–post results. Figure 1 compares mean scores before and after the co-creation procedure for each evaluation dimension. The figure shows that all posttest scores were higher than their corresponding pretest values, indicating a consistent positive shift after the redesign.

Figure 2 presents the mean differences ($\Delta = M2 - M1$) with 95% confidence intervals. The figure confirms that all changes were positive, with the strongest improvements concentrated in satisfaction with interests and preferences, purchase intention, learning, and authenticity.

Table 7 summarizes the descriptive statistics, paired comparisons, and standardized effect sizes for all evaluation dimensions.

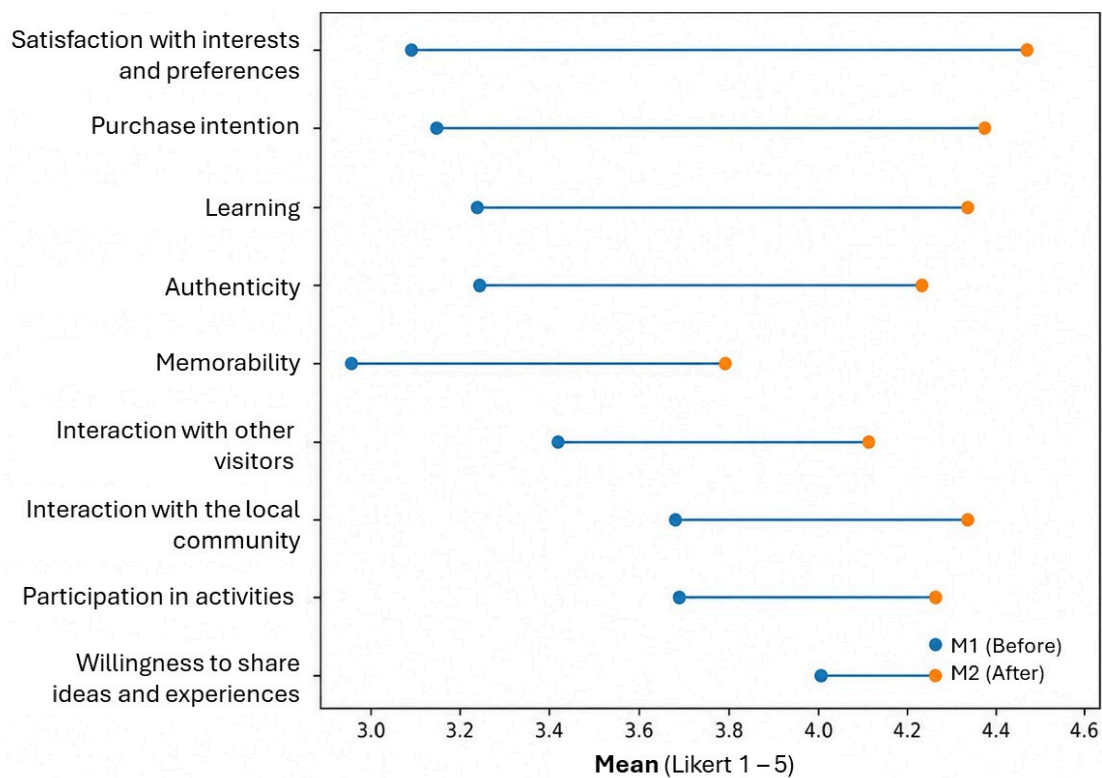


Figure 1. Pre-post changes (M1 vs. M2) by evaluation dimension.

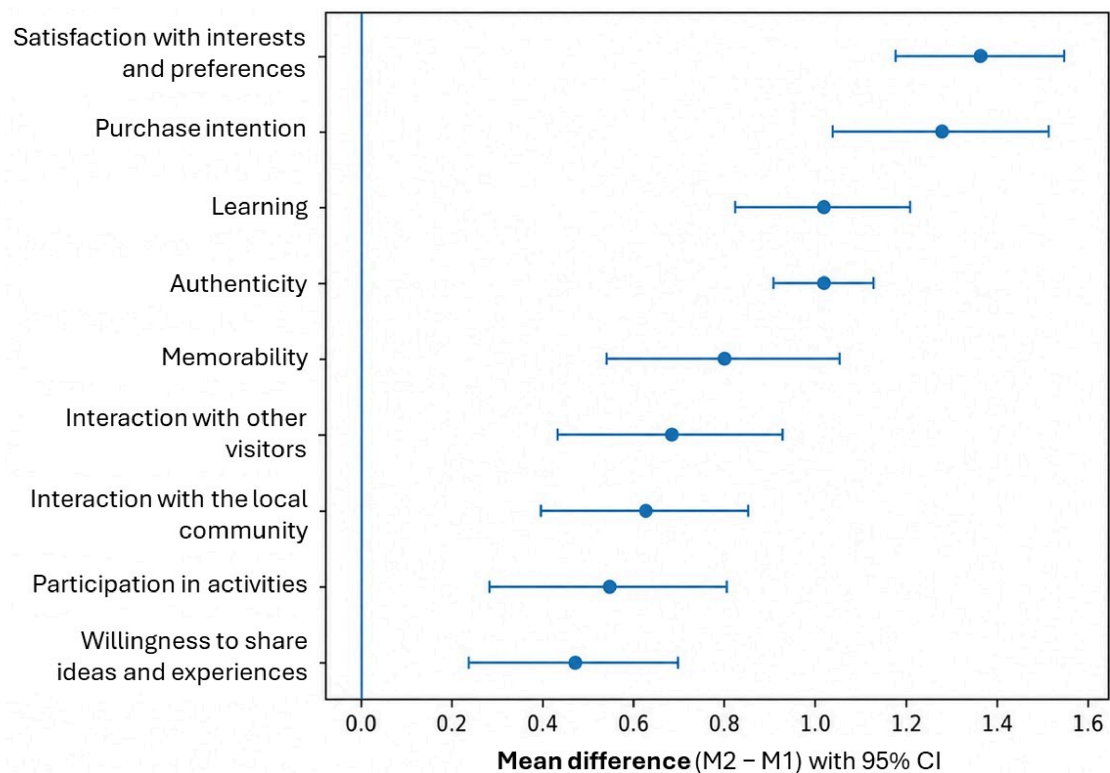


Figure 2. Mean differences ($\Delta = M2 - M1$) by evaluation dimension with 95% confidence intervals.

Table 7. Summary of pre–post results by evaluation dimension.

Evaluation Dimension	n Pairs	M1 Mean	M1 SD	M2 Mean	M2 SD	Δ M2 – M1	t	p t-Test	dz	p Wilcoxon
Learning	28	3.25	0.52	4.32	0.55	1.07	15.00	<0.001	2.83	<0.001
Authenticity	28	3.25	0.59	4.21	0.63	0.96	27.00	<0.001	5.10	<0.001
Participation in activities	23	3.70	0.56	4.25	0.59	0.55	4.90	<0.001	1.02	<0.001
Interaction with the local community	28	3.68	0.55	4.32	0.48	0.64	6.97	<0.001	1.32	<0.001
Interaction with other clients	28	3.43	0.63	4.11	0.31	0.68	5.87	<0.001	1.11	<0.001
Memorability	28	2.96	0.64	3.79	0.42	0.82	7.10	<0.001	1.34	<0.001
Satisfaction with interests and preferences	28	3.11	0.69	4.43	0.50	1.32	14.70	<0.001	2.78	<0.001
Purchase intention	28	3.14	0.71	4.36	0.56	1.21	7.01	<0.001	1.32	<0.001
Willingness to share ideas and experiences	27	4.00	0.55	4.50	0.64	0.50	4.91	<0.001	0.95	<0.001

Note. M1 = pretest; M2 = posttest; SD = standard deviation; Δ = mean difference. The Wilcoxon signed-rank test is reported as the main inferential procedure because the normality assumption for paired differences was not met. The Bonferroni-adjusted significance threshold was $p < 0.00556$.

Some standardized paired effect sizes were very large, particularly for dimensions in which the paired differences were highly consistent across participants. These values should not be interpreted as population-level effect estimates. Rather, they indicate that, within this purposive evaluation panel, most participants evaluated the redesigned product more favorably than the initial version and that the dispersion of the paired differences was limited. Given the small sample size, the bounded five-point response scale, and the non-blinded pre–post design, the substantive interpretation should prioritize the direction, consistency, and practical meaning of the changes rather than the absolute magnitude of the standardized effect sizes.

Taken together, the results show a consistent and statistically significant pattern of perceived improvement following the structured co-creation procedure. All evaluation dimensions increased from M1 to M2, and all changes remained significant after the Bonferroni correction. The largest gains were observed in satisfaction with interests and preferences, purchase intention, learning, and authenticity, while the remaining experiential, relational, and communicative dimensions also increased significantly. These findings are consistent with the proposed hypotheses and provide empirical grounds for discussing the potential role of structured co-creation in strengthening perceived preference fit, anticipated experiential quality, and perceived market attractiveness in rural tourism products. However, given the one-group pretest–posttest design and the absence of a control group, these results should be interpreted as evidence of perceived improvements associated with the redesign rather than as definitive causal effects of the co-creation procedure.

5. Discussion

5.1. Perceived Improvements After the Co-Created Redesign

The findings provide consistent pre–post evidence of perceived improvement after the structured co-creation procedure. All evaluated dimensions increased from M1 to M2, and all changes remained statistically significant after the Bonferroni correction. The strongest increases were observed in satisfaction with interests and preferences, purchase intention, learning, and authenticity, while relational and communicative dimensions—such as interaction with the local community, interaction with other clients, memorability, and willingness to share experiences—also showed significant gains. These results suggest that the redesigned product was evaluated more favorably across experiential, relational, perceptual, communicative, and market-related indicators. However, they should be

interpreted as perceived improvements observed after the redesign rather than as definitive causal effects of the co-creation procedure.

From a theoretical perspective, these findings help specify the role of co-creation in rural tourism product design. Prior research has established that co-creation is associated with perceived value, satisfaction, authenticity, participation, and behavioral intentions. The present study extends this discussion by treating these dimensions as design-sensitive indicators that can be evaluated before and after the redesign of the same rural tourism product. Thus, the contribution of the study lies less in proposing a new theoretical construct and more in operationalizing co-creation as an applied experiential design process through which local resources, stakeholder knowledge, and potential users' expectations can be translated into a more coherent tourism value proposition.

The comparison between the initial and redesigned versions helps interpret the observed pattern of results. As shown in Table 3, the redesign reorganized the product around a clearer experiential sequence, made learning opportunities more explicit, strengthened the role of local actors, and translated generic destination attributes into more concrete visitor activities. These changes may have made the product easier to understand, more distinctive, and more closely aligned with what potential users expected from an authentic rural tourism experience.

The strongest improvement was observed in satisfaction with interests and preferences, suggesting that the redesign was particularly effective at strengthening perceived preference fit. This result is theoretically relevant because preference fit reflects the extent to which a tourism product is perceived as aligned with what potential users consider valuable, meaningful, and attractive. From a value co-creation perspective, this pattern is consistent with the idea that tourism value emerges through interaction, resource integration, and the combination of stakeholder knowledge and user expectations rather than through the unilateral delivery of a predefined offer (Font et al., 2021). It also aligns with systematic evidence linking co-creation in tourism and hospitality with perceived value, satisfaction, experience quality, and behavioral intentions (Ribeiro et al., 2023; John & Supramaniam, 2024). In this study, the strong increase in preference fit suggests that the redesign helped transform the initial product into a more recognizable and user-relevant tourism proposal.

The increases in learning and authenticity can be interpreted in light of the situated nature of rural and agritourism experiences. Salinas de Guaranda offers productive, cultural, gastronomic, and community-based resources that can become sources of experiential value when organized as opportunities for interpretation, participation, and knowledge acquisition. The co-created redesign appears to have made this potential more visible by connecting local productive activities, community knowledge, and visitor participation into a clearer experiential script. This interpretation is consistent with research identifying learning, authenticity, interaction, and location as central components of experiential agritourism (Martinus et al., 2024), as well as with recent work on co-created tourism experiences, where education, authenticity, immersion, and interaction are treated as key components of experiential value (Deng et al., 2024). It also aligns with heritage and village tourism studies showing that authenticity can activate dimensions of the experience economy and contribute to satisfaction and positive evaluations (Zhu et al., 2025; Zhao et al., 2024). In this study, the improvement in authenticity suggests that the redesigned product strengthened the perceived connection between the tourism offer and the local context of Salinas de Guaranda, making the experience appear more credible, meaningful, and culturally embedded.

Purchase intention also showed one of the largest increases. Rather than being interpreted as an isolated behavioral outcome, this result can be understood as a market-related

response to improved experiential value. When a tourism product appears better aligned with users' interests, more authentic, more educational, and easier to understand as an experience, potential visitors may perceive greater value and lower uncertainty, making them more willing to choose or purchase it. This interpretation is consistent with studies linking tourism co-creation with behavioral intentions, revisit intention, and destination brand-related outcomes (Monteiro et al., 2023; Zhou & Chen, 2023). Nevertheless, this result should be understood as perceived purchase intention based on product evaluation, not as evidence of actual booking or purchasing behavior.

The more moderate improvements in relational indicators also deserve attention. Interaction with the local community and interaction with other clients are central to rural tourism because value is partly produced through encounters with hosts, guides, service providers, residents, and other visitors. In service-dominant logic, value is created in use through reciprocal interactions among actors (Font et al., 2021). However, relational value is also emergent and depends on the quality of actual encounters during consumption. Therefore, while a product presentation can communicate opportunities for interaction, it cannot fully reproduce the interpersonal, emotional, and situational dynamics of an in-person visit. The more moderate increases in relational dimensions may therefore reflect that social interaction is harder to evaluate in advance than more tangible design elements such as itinerary structure, learning opportunities, or preference fit.

Memorability and willingness to share experiences also increased, suggesting that the redesigned product may have strengthened its communicative and reputational potential. These outcomes are relevant because tourism experiences often generate value beyond the moment of consumption through recall, storytelling, recommendations, and digital sharing. Prior research shows that memorable tourism experiences can connect authenticity, engagement, destination image, revisit intention, and electronic word-of-mouth (Rasoolimanesh et al., 2021), while broader reviews emphasize that memorable experiences tend to be meaningful, emotionally engaging, authentic, and socially embedded (Hosany et al., 2022). In this sense, the redesigned product was perceived not only as more attractive for potential purchase, but also as more likely to generate experiences that participants would remember and share.

The characteristics of Salinas de Guaranda may also have influenced the pattern of results. The destination's productive, cultural, gastronomic, and community-based resources are well suited to experiential interpretation and participatory design. This may help explain why learning, authenticity, and preference fit improved strongly after the redesign: these dimensions were directly connected to resources already present in the destination but made more visible and better organized through the co-creation process. At the same time, the context-specific nature of these resources means that the results should not be mechanically generalized to other rural destinations. Co-creation may operate differently in places with weaker community organization, less distinctive productive systems, lower tourism infrastructure, or different visitor expectations.

Overall, the findings contribute to a more nuanced and context-sensitive understanding of co-creation in rural tourism product design. The positive results should not be interpreted as evidence that participation is automatically beneficial. Prior research suggests that poorly managed or excessive tourist participation may yield diminishing returns or even value co-destruction (Zhang, 2023), while agritourism development may create tensions for host families and communities when it increases workloads or weakens local interactions (Grillini et al., 2025). Therefore, the relevance of the present findings lies not simply in showing "more participation," but in illustrating how structured participation may help organize local authenticity, experiential attributes, stakeholder roles, and mar-

ket attractiveness into a more coherent tourism product. This positions co-creation as a managed experiential design process rather than as an informal consultation exercise.

5.2. Managerial Implications

The findings offer several practical implications for tourism managers, rural operators, local governments, and community actors involved in rural tourism product design. First, co-creation should be managed as a structured experiential design process rather than as an isolated consultation activity. The results suggest that the redesigned product was evaluated more favorably when local resources, stakeholder knowledge, and potential users' expectations were translated into a clearer value proposition. Therefore, managers should organize co-creation through short cycles of co-design, prototyping, evaluation, and refinement, focusing on attributes that strengthen perceived fit with preferences, authenticity, learning opportunities, and market attractiveness.

In practical terms, this process can be implemented through a staged sequence. Managers should first map the actors who influence or deliver the experience, including community representatives, guides, food providers, transport providers, local authorities, tour operators, safety personnel, technology support actors, and potential users. They should then conduct a brief diagnosis to identify which local resources have the greatest experiential potential and which visitor expectations are insufficiently addressed by the current product. Based on this diagnosis, focused co-design workshops can be used to define the experience narrative, visitor activities, learning moments, interaction points, service sequence, and operational responsibilities. The redesigned product should then be converted into a low-cost prototype, such as a pilot itinerary, mock booking description, visual route map, or guided trial visit. Before formal launch, feedback should be collected from both local actors and potential users. After implementation, managers should monitor visitor comments, operational issues, community workload, and perceived authenticity in order to adjust the product over time.

Second, rural tourism products should be designed around concrete experiential components rather than generic destination attributes. The improvements observed in learning, participation, authenticity, and interaction suggest that potential visitors value experiences that help them understand local practices, participate in meaningful activities, and engage with the host context. For this reason, operators should transform local resources—such as productive practices, gastronomy, cultural traditions, landscapes, and community knowledge—into structured activities that combine situated learning, active participation, and authentic social contact.

Third, interaction should be deliberately designed and managed. In rural tourism, contact with the local community, guides, service providers, and other visitors is not merely a complementary element; it is part of the value proposition itself. Managers should therefore define spaces, moments, scripts, and facilitation mechanisms that encourage meaningful interaction without overburdening local actors or making the experience appear artificial. This is particularly important because poorly managed participation may generate tensions for host communities or reduce the perceived authenticity of the experience.

Fourth, the redesigned product should be communicated through narratives that accurately reflect the expected experience. Digital communication, social media content, booking descriptions, and promotional materials should clearly explain what visitors may learn, how they may interact with the local context, what activities they may perform, and why the experience is locally grounded. This alignment between pre-visit expectations and the actual experience can improve perceived preference fit and reduce the risk of disappointment. Smart tourism technologies may also support co-creation and reinforce perceived destination authenticity, although their effects depend on cultural and contextual

conditions (Inmor et al., 2025; Sabiote-Ortiz et al., 2025). Therefore, digital tools should support, rather than replace, the local and relational character of rural tourism experiences.

At the same time, implementing co-creation in rural destinations involves important practical limitations. It requires time, facilitation skills, stakeholder availability, and resources for meetings, prototyping, communication, and follow-up. These requirements may be difficult for rural operators and community organizations with limited budgets, seasonal demand, small teams, and dependence on voluntary participation. Coordination can also become complex when actors have different expectations, levels of influence, commercial interests, or capacities to participate. Co-creation may also generate participation fatigue if local actors are repeatedly consulted without seeing concrete results, or if the benefits of the redesigned product are not distributed fairly.

For these reasons, managers should implement co-creation as a staged and scalable process. This means beginning with clearly defined objectives, limited design cycles, transparent roles, feasible prototypes, and realistic expectations about available resources. Long-term sustainability also requires mechanisms for monitoring the product after implementation, updating the experience according to visitor feedback, and ensuring that community participation does not increase workload without adequate compensation or recognition. Co-creation should therefore be understood not as a one-time workshop, but as a practical governance and learning process that requires continuity, coordination, and local commitment.

Finally, the increases in memorability and willingness to share experiences suggest that co-created rural tourism products may generate reputational benefits beyond the immediate purchase decision. Managers should encourage visitors to share stories, images, testimonials, and recommendations, while ensuring that such content aligns with the destination's identity and is respectful of the local community. In this sense, structured co-creation may support not only product redesign but also organic promotion, destination positioning, and long-term community-based value creation.

5.3. Limitations and Future Research

The findings should be interpreted in light of several limitations. First, the study used an applied one-group pretest–posttest design. Although this design was appropriate for evaluating perceived changes in the same tourism product before and after the co-created redesign, it does not allow for strong causal identification. Without a control group, it is not possible to fully rule out alternative explanations such as expectancy effects, familiarity with the evaluation instrument, social desirability, the Hawthorne effect, or changes in participants' perceptions unrelated to the intervention. Consequently, the observed improvements should be interpreted as perceived changes associated with the redesigned product rather than as definitive causal effects of the co-creation procedure. Future studies should incorporate control groups, randomized exposure to traditional and co-created product versions, blinded or masked product presentations, independent evaluators, delayed posttests, and field experiments to isolate more precisely the net effect of co-creation on experiential and behavioral outcomes.

Second, the study relied on a small purposive evaluation panel rather than a probabilistic sample of actual tourists consuming the product under real-market conditions. This decision was consistent with the applied and intervention-oriented nature of the research, since the objective was to obtain informed assessments of a specific product redesign rather than to estimate population-level tourist demand. Nevertheless, the panel may not fully capture the heterogeneity of potential visitors in terms of travel motivation, cultural background, purchasing power, prior experience with rural tourism, familiarity with Ecuadorian destinations, or expectations regarding authenticity, learning, participation, and

community interaction. In addition, the small sample size may have contributed to the very large standardized paired effect sizes observed in some dimensions, because such estimates are sensitive to low variability in paired differences and highly consistent response patterns. Therefore, the effect sizes should be interpreted as indicators of the magnitude and consistency of perceived change within this specific panel, not as population-level estimates. Future research should validate the redesigned product using larger, independent tourist samples, field implementation, post-visit measurements, and behavioral indicators such as reservations, expenditure, willingness to pay, online reviews, social media engagement, and recommendations.

Third, the design and evaluation functions were not fully independent. Sixteen of the 28 evaluators participated directly in the co-creation process and were therefore involved in developing the redesigned product. This overlap may have generated expectancy, involvement, or allegiance effects, resulting in more favorable posttest evaluations. Moreover, participants knew which version represented the co-created product because evaluator blinding was not implemented. Consequently, the observed improvements cannot be attributed exclusively to the product redesign. Future studies should separate co-design participants from evaluators, randomly assign participants to product versions, and use standardized masked presentations that do not reveal which version resulted from the co-creation process.

Fourth, participants evaluated structured representations of the two product versions rather than consuming both products as ordinary tourists. Consequently, the experiential and relational indicators captured anticipated attributes and perceived interaction opportunities embedded in the product design, not interactions, learning, emotions, memories, or satisfaction directly observed during an actual visit. Product descriptions may not fully reproduce the emergent, affective, and interpersonal qualities of tourism consumption. Future research should therefore implement the redesigned product in the field and collect post-visit data from actual tourists, including observed participation, host–guest interaction, learning outcomes, memorability, satisfaction, and subsequent purchasing or recommendation behavior.

Fifth, the study was conducted in a single destination: Salinas de Guaranda, Ecuador. The local characteristics of this context—its tourism infrastructure, institutional environment, technological development, community networks, cultural heritage, productive systems, and market conditions—may differ from those of other rural or agritourism destinations. Therefore, the results should not be assumed to transfer automatically to other settings. Future studies should apply the procedure in different rural, coastal, heritage, and agritourism contexts to identify whether co-created redesign produces similar improvements across territories and to determine which contextual factors strengthen or weaken its effectiveness.

Overall, future research should move toward more robust and comparative designs capable of testing not only whether co-creation improves tourism product evaluations, but also under what conditions, for whom, and through which mechanisms. Such studies would help clarify the role of co-creation as an experiential design strategy for rural tourism while strengthening the evidence base for its practical application in diverse destination contexts.

6. Conclusions

This study evaluated pre–post changes resulting from the application of a structured co-creation procedure for the redesign of a rural tourism product in Salinas de Guaranda, Ecuador. The findings provide applied evidence that the redesigned product was evaluated more favorably after the co-creation procedure, not only in terms of behavioral intentions,

but also in relation to the experiential and relational dimensions that may help explain them. After the redesign, participants reported statistically significant and consistent perceived improvements in key indicators, including satisfaction with interests and preferences, purchase intention, learning, authenticity, participation in activities, interaction with the local community, interaction with other clients, memorability, and willingness to share experiences. These results should be interpreted as perceived improvements associated with the redesign rather than as definitive causal evidence that co-creation alone produced the observed changes.

The results suggest that structured co-creation can enhance tourism product design by improving the perceived fit between the product and users' expectations and strengthening the experiential content of the offer. In particular, the improvements observed in learning, participation, authenticity, and social interaction indicate that co-creation may help transform local resources into more meaningful, engaging, and marketable rural tourism experiences. The increase in memorability and willingness to share experiences further suggests that co-created products may generate value beyond the immediate evaluation of the product, supporting organic diffusion and reputational benefits for the destination.

However, these findings should be interpreted within the specific context in which the intervention was conducted. Salinas de Guaranda, a rural community-based tourism destination in Bolívar, Ecuador, presents particular characteristics in terms of community organization, local productive systems, tourism infrastructure, institutional conditions, cultural heritage, and experiential resources. These contextual factors may influence how co-creation operates and how participants evaluate redesigned tourism products. Therefore, the procedure should not be transferred mechanically to other settings, but adapted to the social, cultural, operational, and market conditions of each destination.

Overall, the study reinforces the value of structured co-creation as a practical approach for rural tourism product development. Its main contribution lies in showing how a participatory redesign process may be associated with improvements in perceived preference fit, anticipated experiential quality, relational value, and perceived market attractiveness. Future applications should continue refining this approach through broader samples, comparative designs, independent evaluators, behavioral indicators, and implementation in diverse rural and agritourism contexts.

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Institutional Review Board Statement: Ethical review and approval were waived for this study in accordance with Ecuadorian regulations (Ministerial Agreement No. 4889 and No. 00005-2022), which exempt anonymous, non-sensitive, non-interventional social research involving adult participants at minimal risk from formal CEISH approval.

Informed Consent Statement: Informed consent was obtained from all participants involved in the study. All participants were informed about the purpose of the research, the voluntary nature of their participation, the anonymous treatment of responses, and their right to withdraw at any time.

Data Availability Statement: The data supporting the findings of this study are available from the corresponding author upon reasonable request. The dataset is not publicly available because the study was conducted in a localized tourism context with a small purposive evaluation panel,

and public release could compromise contextual confidentiality despite the anonymization of individual responses.

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Conflicts of Interest: The authors declare no conflicts of interest.

Appendix A. Measurement Instrument

Participants evaluated each statement using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Before completing the questionnaire, participants reviewed a standardized presentation of the corresponding version of the tourism product. The same items were used to evaluate both the initial and redesigned products.

Learning:

1. Based on the presentation, this tourism product would allow visitors to learn about the local culture and way of life.
2. Based on the presentation, this tourism product would provide opportunities to learn about local productive activities.
3. Based on the presentation, this tourism product would help visitors acquire new knowledge about the destination.

Authenticity:

4. Based on the presentation, this tourism product appears to reflect the identity and characteristics of the local community.
5. Based on the presentation, this tourism product appears to offer an authentic representation of the destination.
6. Based on the presentation, this tourism product appears to be coherent with local traditions, practices, and resources.

Participation in Activities:

7. Based on the presentation, this tourism product would allow visitors to participate actively in the proposed activities.
8. Based on the presentation, this tourism product would include activities that encourage visitor involvement.
9. Based on the presentation, this tourism product would offer opportunities for visitors to take part in local or experiential activities.

Interaction with the Local Community:

10. Based on the presentation, this tourism product would facilitate interaction between visitors and members of the local community.
11. Based on the presentation, this tourism product would create opportunities for visitors to communicate with local actors.
12. Based on the presentation, this tourism product would encourage direct contact with local people.
13. Based on the presentation, this tourism product would promote meaningful exchange between visitors and the host community.

Interaction with other Clients:

14. Based on the presentation, this tourism product would facilitate interaction among visitors.

15. Based on the presentation, this tourism product would create opportunities for visitors to share the experience with other clients.

Memorability:

16. Based on the presentation, this tourism product would be likely to generate a memorable experience.
17. Based on the presentation, this tourism product would include elements that visitors could remember after the visit.
18. Based on the presentation, this tourism product would be likely to leave a positive and lasting impression.

Satisfaction with Interests and Preferences:

19. Based on the presentation, this tourism product appears to respond to visitors' interests.
20. Based on the presentation, this tourism product appears to be aligned with visitors' preferences.
21. Based on the presentation, this tourism product appears to offer an experience that matches what visitors are looking for.

Willingness to Share Ideas and Experiences:

22. Based on the presentation, this tourism product would encourage visitors to share their ideas or opinions about the experience.
23. Based on the presentation, this tourism product would motivate visitors to share their experience with other people.

Purchase Intention:

24. Based on the presentation, I would be willing to purchase this tourism product.
25. Based on the presentation, I would consider choosing this tourism product if I visited the destination.

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