

Testing the Feasibility of Tourism Resilience Indicators: Evidence from Slovakia

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Abstract: Purpose. International organisations such as the OECD have issued extensive indicator frameworks to guide the measurement of tourism resilience, yet these remain largely untested in practice and are typically conceived at the national level. Resilience, however, must be cultivated and contested at regional scales, where the effects of shocks and the capacity to respond are most tangible. To adapt indicators to local contexts and to identify both strengths and weaknesses, it is imperative to establish data structures and institutional capacities that can govern tourism development towards resilience. This study responds to that call by empirically assessing the feasibility of resilience indicators in the Slovak tourism ecosystem, emphasising the need for greater granularity in measurement and testing how far international recommendations can be operationalised at the regional scale. Methods: A survey of diverse stakeholders, including the Ministry of Tourism, regional and local destination management organisations, and university experts, evaluated forty-two resilience indicators across four criteria: relevance, data availability, interpretability, and feasibility. The analysis identified both robust and impractical measures and examined whether feasibility was determined by indicator category or by the characteristics of local data infrastructures. Results: Contrary to prevailing assumptions, feasibility did not align neatly with thematic categories. Governance and economic indicators were not consistently more feasible than ecological or social ones; rather, feasibility varied sharply at the level of individual indicators. Seasonality, accommodation capacity, visitor numbers, and disaster preparedness were widely seen as both relevant and operational, while carbon emissions, inclusiveness, and insolvency rates were judged impractical. This demonstrates that feasibility is shaped less by abstract dimensions than by the availability and quality of regional data. Conclusions: The study provides the first systematic feasibility test of resilience indicators in a Central European tourism context. It shows that global recommendations cannot be transplanted wholesale but require adaptation to local capacities and infrastructures. Conceptually, it reframes feasibility as indicator-specific rather than category-bound. Practically, it offers a diagnostic framework for destinations to prioritise what can be measured now and what requires future development.

Keywords: Feasibility, Indicators, OECD, Operationalisation, Slovakia, Tourism Resilience

1. Introduction

Tourism in Slovakia is growing but still establishing itself in the economy. It offers opportunities like boosting rural livelihoods and cultural preservation but faces risks from systemic shocks such as climate change and economic crises. Resilience is essential for sustainable development, highlighted by global polycrisis. Taking into consideration how susceptible to these externalities the tourist destinations are, the situation demands a systematic investigation of their ability to respond, adapt, and recover. Measuring and building resilience is therefore central to addressing the “wicked problems” of tourism” (Rittel & Webber, 1973; Farsari, 2021). Approaches to assessment remain conceptual and have not been implemented in regional contexts, despite several international initiatives and methodologies aimed at measuring resilience. Resilience in tourism lacks consistent measurable indicators. The OECD (2022) is one of the few institutions to propose a set of indicators directly focused on the resilience of the tourism system, combining the linking of economic, social, environmental, and institutional dimensions with policy management tools. The study therefore tries to verify the extent to which such indicators can be applied in the Slovak environment due to specific limitations and opportunities when considering data structure, competencies, and institutional links in measuring resilience.

2. Literature Review

Indicators act as operational tools, translating concepts into measurable variables for researchers, policymakers, and managers. Designing these indicators is challenging due to issues like data availability, context comparability, measuring intangible assets, and oversimplification risks. A review of tourism resilience indicators shows a mix of complex composites and simplified measures, static and dynamic metrics, and academic to policy-focused dashboards. Table 1 summarizes main contributions.

Table 1: Overview of Resilience/Sustainability Frameworks with Indicators. Authors' work.

Author (institution)	Year	Examined domains (categories, pillars, areas) of resilience	No. of indicators	Type
Cutter et al.	2010	Economic, physical, human, social capital	36	adapted
Peacock et al.	2010	Economic, physical, human, social capital	75	adapted
Lozano-Oyola et al.	2012	Social, economic, environmental dimension	85	adapted
Becken	2013	Resistance, latitude, precariousness	11	original
Powell and Holladay	2013	Social, governance, economic, ecological domain	16	adapted
European Commission	2016	Destination management, economic value, social and cultural impact, environmental impact,	43	adapted
Lew and Wu	2016	Local government budgeting, environmental knowledge, community well-being, social support systems	11	original
Cahyanto and Pennington-Gray	2017	Economic, political, natural and physical resources	32	original
Yang et al.	2021	Economic, infrastructure, social, community capital, institutional, tourism demand	35	adapted
OECD	2022	Economic, social, environmental, institutional pillar	29	original
Jiao et al.	2024	Economic, social, environmental, governance, tourism-specific	10	original
Marciš and Gajdošíková	2024	Economic, social, environmental, institutional pillar	29	adapted
Zubiaga et al.	2024	Characterisation, economic, environmental, social, resilience, cultural indicators	51	original
Lee and Pennington-Gray	2025	Demand side of tourism (markets)	1	original

The earliest resilience indicator systems pursued comprehensiveness. Cutter et al. (2010) developed a framework called Baseline Resilience Indicators for Communities (BRIC) which deployed 36 indicators. These included demographic structure, income diversity, governance arrangements, infrastructure robustness, and community capital. The strength of BRIC was breadth and comparability. It offered a replicable tool for benchmarking resilience across U.S. counties, but its comprehensive nature had downsides. Indicators were often proxies with uncertain validity, lacked tourism dependence, and ignored intangible assets like trust or knowledge. Peacock (2010) extended this logic with a framework: Community Disaster Resilience Framework (CDRF) with 75 indicators across phases. This temporal innovation added dynamism but multiplied complexity, requiring destinations to score capacities across multiple stages. CDRF was conceptually rich but practically unwieldy. A more elaborated composite design was proposed by Lozano-Oyola et al. (2012), who introduced the goal-programming synthetic indicator for cultural destinations. While focused on sustainability of cultural destinations, this research offers valuable methodology which preserves transparency and decision relevance by defining explicit aspiration levels and weights, offering a balanced compromise between the inclusiveness of broad frameworks and the operational clarity. Zubiaga et al. (2024) followed in the expansive tradition, proposing a framework of 51 indicators. The explicit addition of culture was innovative, acknowledging heritage and identity as resilience assets. However, like BRIC or CDRF, the set risks becoming unwieldy. Standardising and harmonising 51 indicators across diverse destinations is still methodologically demanding and risks producing data gaps. Expansive systems succeed at inclusivity but struggle with usability. In response to complexity, some scholars advocated simplification. Marciš and Gajdošík (2022) developed a composite sustainability indicator for Slovak tourism destinations, comprising 23 indicators. Their aim was usability. The composite is transparent and practical but sacrifices breadth. Institutional, cultural, and knowledge dimensions are omitted. Lee and Pennington-Gray's (2025) Reflective Resilience Index (REFLEX) goes further, reducing resilience to a single indicator: entropy-based diversification of tourism demand. This parsimony makes REFLEX attractive for prediction and policy, but it is profoundly reductionist. It collapsed multidimensional resilience into an economic metric, sidelining social, institutional, ecological, and cultural capacities. The REFLEX index illustrates the danger of oversimplification. In pursuit of usability, resilience risks being equated with diversification. Simplified composites therefore trade off diagnostic richness for practicality. They are useful for applied contexts but risk conceptual distortion.

Other frameworks adapted indicators specifically for tourism contexts. Becken (2013) proposed 28 surrogate indicators for tourism subsystems, covering market diversification, institutional flexibility, ecological thresholds, and adaptive capacity. These were tailored to climate-sensitive destinations but relied heavily on proxies, raising questions of validity. Jopp et al. (2013) embedded hazard-specific preparedness indicators into their Regional Tourism Adaptation Framework (RTAF). Njoroge (2014) extended this in Regional Tourism Sustainable Adaptation framework (RTSAF) with evaluation of adaptation options, inclusion of diverse stakeholders, and incorporation of sustainability criteria. Calgaro et al. (2014) operationalised the Destination Sustainability Framework (DSF) through indicators of exposure, sensitivity, adaptive capacity, and socio-political structures. Tourism-specific adaptations enhanced contextual relevance but hindered comparability. Indicators like “quality of governance” or “diversity of markets” are locally significant but hard to measure globally, emphasizing the ongoing tension between context-sensitive analysis and global generalization.

Powell and Holladay (2013) attempted to bridge conceptual and operational gaps by developing a perception-based approach. Using unique methodology, they derived indicators of resilience from resident surveys. The study demonstrated methodological rigour but revealed moderate-to-low resilience levels. Its strength was in capturing intangibles such as trust and networks, rarely included in structural indicator sets. Its weakness was contextual specificity. Findings could not easily be generalised beyond the area researched. The DKKV–Futouris guideline (2017) operationalised resilience through participatory process indicators like actor mapping, risk-chain analysis, option appraisal, barrier identification, and ownership. Hernantes et al. (2019) formalised process indicators into a resilience maturity model, staging institutional development. Luthe and Wyss (2014) applied network metrics like size, density, centrality, modularity, to assess governance resilience.

These approaches foregrounded processes and perceptions, making intangible capacities visible. However, they resisted standardization. Process indicators are difficult to quantify, perception scales are context-bound, and network analyses require specialised data.

Some models sought statistical validation. Lam et al. (2016) introduced the Resilience Inference Measurement (RIM) model, with indicators for exposure, damage, and recovery. This offered quantifiable resilience but reduced it to hazard outcomes. Dai, Xu, and Chen (2019) validated 46 survey-based indicators using bifactor SEM (structural equation modelling), providing rare construct validity. Jiao et al. (2024) reduced indicators to two indicators: resistance and recovery, which were modelled econometrical. This simplification strengthened clarity but narrowed scope. Yang et al. (2021) used specialisation and diversification indicators to test resilience effects empirically. Each study advanced empirical rigour but depended heavily on data infrastructures, limiting applicability in data-poor destinations.

The European Tourism Indicator System (ETIS) is the EU-endorsed monitoring framework for tourism sustainability, aiding local governance and participatory monitoring. Though voluntary and lacking resilience indicators, it remains key for sustainability. The OECD (2022) report, *Building Resilience in the Tourism Ecosystem*, proposed an initial set of resilience indicators. These included measures such as job security, tourism wages relative to national averages, market diversification, CO₂ emissions, disaster action plans, sustainable tourism policies, and digital infrastructure. Crucially, each indicator was explicitly linked to policy levers. The OECD stressed that these indicators are provisional and drawn from existing dashboards and resilience research in other sectors. Their function is to stimulate reflection and guide the development of monitoring systems, not to provide a definitive list. The OECD (2022) framework represents a significant advancement. In contrast to prior attempts, it establishes a direct connection between measurement, governance, and resilience as well as decision-making processes. This framework is tailored to the tourism sector (national) and holds policy relevance, thereby serving as a bridge between academic conceptualization and practical monitoring applications. However, it has yet to undergo empirical testing in real-world tourist destinations on a regional scale. By aligning a set of policy-relevant indicators with governance and institutional mechanisms, the OECD introduces the dimensions absent in other composites such as those created by Marciš and Gajdošík. These two methodologies are thus complementary. The European-rooted pragmatism exhibited by Marciš and Gajdošík illustrates feasibility at the destination level, whereas the OECD framework provides the resilience-specific scope that this dissertation aims to validate and incorporate.

The review highlights research gaps from unresolved tensions. Conceptually, unstable domain definitions confuse resilience with sustainability and overlook cultural, governance, and learning aspects. Empirically, indicator frameworks are selectively applied and unvalidated. Methodologically, there's no consensus on balancing comparability with contextual sensitivity or integrating quantitative and qualitative measures.

Practically, policy-linked frameworks like OECD (2022) promise actionability but lack proven robustness and usability in destination governance.

3. Methodology

This study uses an exploratory quantitative design to test tourism resilience indicators in Slovakia, as they haven't been operationalised regionally. It checks if global indicators fit Slovak data and governance at the NUTS 3 level, focusing on data and institutional readiness before implementation. Stakeholder elicitation informs feasibility, linking indicator design to local contexts. The approach follows the RACER framework, assessing data access and institutional viability.

The study uses 41 indicators across economic, social, environmental, and institutional domains, plus a destination-specific dimension. It incorporates 12 indicators from Zubiaga et al. (2024) and 29 from OECD (2022) and Marciš & Gajdošíková (2024). A composite indicator methodology by Lozano-Oyola et al. (2012) will be applied to calculate destination resilience scores. Data were collected via an online survey from 13 August to 12 September 2025, with a reminder on 29 August. Participants included stakeholders from Slovak tourism governance, regional and local tourism organizations, and academic experts. Purposive sampling ensured respondents knowledgeable in tourism indicators and planning, resulting in 7 responses covering national, regional, and local governance levels.

Respondents rated indicators on four criteria using 5-point Likert scales (1 = very low, 5 = very high), with "can't assess" for insufficient knowledge. Criteria: Relevance captures destination resilience; Data availability checks regional data access; Interpretability ensures clarity for decision-makers; Operational feasibility evaluates practical data handling. Descriptive statistics identified feasible and problematic indicators. Kendall's W assessed inter-rater reliability, indicating consensus essential for expert perception. Reliability focused on stable expert assessments, not internal consistency, with Kendall's W as the measure. Content validity derived from international frameworks, adapted to Slovakia, and face validity confirmed via stakeholder pilot testing for clarity and relevance.

The study has limitations: it uses a non-representative sample of informed experts, reflects feasibility perceptions rather than objective data audits, and feasibility might change with improved data systems or capacities. The findings are a snapshot of institutional readiness, not a definitive performance ranking. This design employs feasibility testing as a diagnostic tool for resilience measurement, integrating expert assessments with international frameworks. It links global indicator design to local application, assessing Slovakia's tourism governance progress in evidence-based resilience monitoring and identifying indicators needing more data or development. Future research should expand the expert base, mix perceptions with objective audits, and test feasibility across various governance levels or countries.

4. Results

Four feasibility criteria were evaluated for 41 indicators in Slovakia's data and governance context. This composite value shows each indicator's readiness and provides specific insights. Table 1 ranks indicators, with higher ranks indicating importance and data availability, and lower ranks showing areas for development. Indicator feasibility varies, with established routines aiding population, accommodation, seasonality, and disaster preparedness, while carbon emissions, inclusiveness, and insolvency struggle with data scarcity. Feasibility depends on data system maturity over conceptual clarity. The overall feasibility score of 3.44 suggests moderate readiness, with some resilience aspects measurable and others still developing.

Table 2: Indicator feasibility assessment by the stakeholder panel. Source: Author's work based on the OECD (2022) resilience indicators list.

Code	Indicator	Overall Score
A4	Number of permanently residing inhabitants	4.22
B5	Travel openness and facilitation – visa requirements and border entry conditions	4.01
D5	Number of recognised natural heritage sites and protected areas	4
A5	Seasonality – dominant tourism seasons (summer / winter / year-round)	3.91
A9	Average number of visitors in the last three years	3.91

Code	Indicator	Overall Score
E6	Digital infrastructure – internet coverage and average connection speeds	3.85
D4	Likelihood of shocks – average occurrence of significant natural disasters	3.85
A8	Number of accommodation establishments or available beds	3.84
C4	Dispersal of visitors across destinations – share of visitors in key destinations	3.81
A6	Main types of tourism attractions (nature, events, culture, history, relaxation, sport)	3.75
A12	Number of cultural facilities, museums, galleries, and exhibition venues	3.69
C1	Tourism's direct share of economic activity (GVA / GDP)	3.68
A10	Number of officially registered tourism attractions	3.67
A2	Type of tourism by visitor motivation (recreational, cultural, sport, adventure, wellness)	3.66
B1	Tourism wage compared to national average	3.63
A11	Number of sites with EU or international recognition (EDEN, Natura 2000, UNESCO, Blue Flag)	3.61
A1	Type of tourism by geographical origin (domestic, inbound, regional, international)	3.57
A3	Type of tourism by length (excursion, short-term, weekend, long-haul, etc.)	3.53
E1	Existence of a disaster-action or contingency plan	3.52
C6	Employee retention and workforce shortages in tourism	3.49
C2	Tourism's direct share of total employment	3.45
C5	Sectoral reliance on SMEs – share of tourism businesses and revenue	3.43
C3	Visitor diversification – reliance on individual markets	3.42
E2	Tourism's proportion of government spending	3.41
D3	Share of businesses with sustainable certification	3.32
D6	Share of food that is locally produced	3.32
E5	Provision of open-data sources for evidence-based decision-making	3.3
D1	Existence of sustainable tourism policies	3.28
E4	Level of trust in government	3.23
B3	Community sentiment regarding tourism and tourists	3.22
B4	Visitor satisfaction and intention to revisit	3.22
C7	Tourism business insolvency or mortality rate	3.19
E3	Existence of a tourism communication plan (government and industry)	3.16
A7	Tourism intensity – number of visitors per resident	3.00
D7	Share of total annual energy consumption derived from renewable sources	2.98
C10	Tourist yield – average expenditure per visitor	2.95
C9	Tourism transport mix – share of visitors using sustainable transport (rail, coach, etc.)	2.93
B2	Level of tourism job security – share of full-time employment in tourism	2.92
D2	Level of CO ₂ emissions from tourism activities	2.86
B6	Workforce inclusiveness – gender balance and inclusion of disadvantaged groups	2.76
C8	Availability of insurance for tourism businesses and insurance uptake rates	2.50

Table 2 ranks indicators, with scores from 4.22 (A4) to 2.50 (C8) on a five-point scale. Half of the indicators (n=19) scored above 3.5, indicating strong feasibility, including population size (A4), visa conditions (B5), protected areas (D5), seasonality (A5), and visitor numbers (A9). These rely on established data sources. Indicators scoring between 3.0 and 3.5 (n=15) indicate moderate feasibility, like tourism's GDP share (C1), digital infrastructure (E6), and employment retention (C6), hindered by inconsistent data or fragmented responsibility. Seven indicators scored below 3.0, showing limited feasibility. The lowest, such as insurance availability (C8), workforce inclusiveness (B6), CO₂ emissions (D2), and renewable-energy share (D7), suffer from unavailable or non-tourism data, revealing gaps in environmental and social monitoring.

The dispersion of scores substantiates the study’s central hypothesis. Feasibility is indicator-specific rather than domain-specific. Indicators that depend on routine reporting perform well regardless of thematic category, while those that rely on intersectoral data integration or non-statistical observation remain underdeveloped.

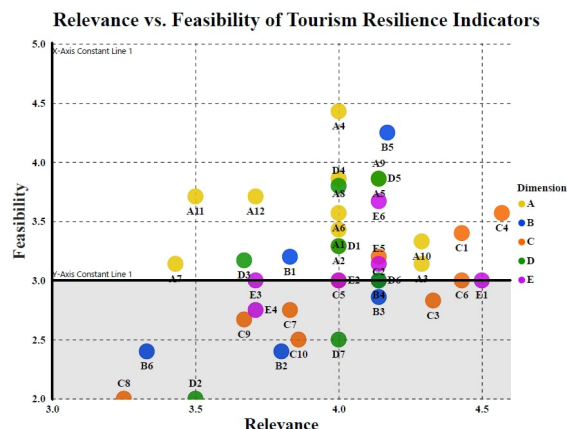


Figure 1: Feasibility of OECD Tourism Resilience Indicators in Slovakia at NUTS3 level. Source: Author's work, 2025.

The scatterplot visualises the relationship between indicator relevance (x-axis) and feasibility (y-axis) as evaluated by Slovak tourism governance stakeholders.

The visualisation of stakeholder’s assessment offers an overview of prospective tourism resilience indicators in Slovakia. Figure 1 shows varied indicator distribution. The 3.0 lines on the scatterplot are midpoints of the five-point Likert scale, indicating provisional relevance and feasibility. Scores above 3.0 are generally acceptable; those below suggest reconsideration. Results show some values cluster in high relevance and feasibility zone, others fall below acceptance. This highlights the OECD’s balanced proposal, needing adaptation for data collection and institutional capacity.

4.1 Results by Domain

Overall results suggest that feasibility of the potential indicators depends on the maturity of data systems rather than thematic category. Nevertheless, individual domains showcase specific tendencies, that uncover different challenges and opportunities for assessment of resilience of tourist destination in Slovakia. Table 2 summarises the mean feasibility values for each of the five domains (characterisation - A, social - B, economic - C, environmental - D, and institutional - E).

Table 3: Average feasibility by domain. Source: Authors’ work.

Code	Domain	Overall Score
A	Characterisation	3.70
E	Institutional	3.41
D	Environmental	3.37
B	Social	3.29
C	Economic	3.29

4.1.1 Characterisation Indicators

The characterisation domain scored highest in feasibility (3.70), indicating a solid foundation for assessing areas. Key metrics include permanent residents (A4), accommodation capacity (A8), visitors (A9), and seasonality (A5), which are standard in tourism management. Mid-range scores for tourism typology by stay length (A3), tourist attractions (A10), and cultural facilities (A12) suggest a need for clearer methods or data harmonisation. Sites with EU or international labels (A11) offer insights into destination prestige. The main challenge is the visitor motivation indicator (A2), reliant on survey data. Characterisation indicators, collected regionally by statistical offices, are stable and comparable, requiring little intervention due to their integration into existing structures.

4.1.2 Social Indicators

The Social domain scored 3.29, indicating moderate feasibility. Indicators show high theoretical value but low practicality. Resident attitudes towards tourism (B3) and visitor satisfaction and willingness to return (B4) are crucial for social acceptance and visitor experience, but lack standardized data, needing regular surveys for inclusion. B2 (tourism employment rates) and B6 (workforce diversity) scored lowest due to low feasibility and high uncertainty from insufficient reliable data, possibly requiring new indicators.

The social domain continues to experience an ongoing evidence gap because researchers do not gather attitudinal data and social tourism resilience lacks proper institutional support. Social monitoring tools need to be integrated into destination management systems and labour and social policy agencies need to improve their collaboration.

4.1.3 Economic Indicators

Economic indicators averaged 3.29 with more polarization than social ones. This reflects tourism's impact on the regional economy and vulnerabilities in employment, business stability, and market diversification. It assesses economic resilience, diversification, and sustainable tourism activity without heavy reliance on fragile market segments.

The assessment showed high relevance for resilience indicators in tourism, especially in economic contribution (C1), tourism's employment share (C2), and visitor concentration (C4), despite moderate feasibility. Indicators like visitor market diversification (C3) and employee retention (C6) also showed promise as key resilience measures. However, some indicators, such as reliance on SMEs (C5), average visitor spending (C10), and transport mode proportions (C9), need better feasibility and data for operational use. Insolvency (C7) and insurance availability (C8) indicators are currently unsuitable due to low feasibility and data issues, requiring reconsideration or replacement unless data improves.

4.1.4 Environmental Indicators

The environmental domain scored 3.37 but showed high internal variability. It assesses how well sustainability principles are integrated into tourism development, including strategic commitments and outcomes like emissions, renewable energy, and food production. Strong results were found in sustainable tourism policies (D1), protected areas (D5), and natural disasters occurrence (D4), linked directly to destination management. However, indicators such as certified businesses (D3) and renewable energy use (D7) suffer from unreliable data. CO₂ emissions (D2) remain problematic due to difficulties in attributing them directly to tourism activities regionally, despite their importance. This dimension highlights the challenges of integrating sustainability into resilience assessments.

4.1.5 Institutional Indicators

The institutional environment underpins the governance of tourism and its ability to respond to shocks. It includes indicators linked to government commitment, communication capacity, transparency, and digital infrastructure. Together, these measures assess whether destinations have the institutional readiness to manage crises and support resilience.

Having a disaster response plan (E1) is crucial for resilience due to its relevance and interpretability. Digital infrastructure (E6) and open data (E5) also enhance institutional strength through connectivity and transparency. Although tourism expenditure (E2) and a communication plan (E3) are relevant, they face feasibility issues. Trust in government (E4) scored low on feasibility despite its resilience link, as it's hard to measure regionally. Institutional resilience is best gauged with indicators balancing ambition and practicality.

4.1.6 Inter-rater Reliability

Kendall's W coefficient of concordance was calculated to verify the consistency of assessments given by the experts for individual feasibility criteria. This indicator expresses the degree of accordance among assessors in ranking the indicators. The null hypothesis (H_0) of no agreement between evaluators ($W = 0$) was tested against the alternative hypothesis (H_1) of the presence of agreement ($W > 0$). A low p-value ($p < 0.05$) means that the null hypothesis should be rejected and the agreement between experts is statistically significant to a certain degree. We adhere to Cohen's guidelines for interpretation: 0.1 to less than 0.3 indicates a small effect, 0.3 to less than 0.5 signifies a moderate effect, and values of 0.5 or higher denote a large effect. Table 3 depicts the

computation results of the W coefficient for four feasibility criteria: relevance, data availability, interpretability, and feasibility.

Table 4: The level of agreement between experts using Kendall's W. Source: Authors' work.

Criterion	W	χ^2	p-value
Relevance	0.125	23	0.46
Availability	0.366	46.9	0.00
Interpretability	0.199	28.7	0.05
Feasibility	0.246	29.5	0.01

The evaluators' agreement varied by criterion: Relevance ($W = 0.125$; $p = 0.46$) showed no significant agreement. Data availability ($W = 0.366$; $p < 0.001$) had significant agreement with a medium effect, indicating experts agreed on data availability and usage potential. Interpretability ($W = 0.199$; $p \approx 0.05$) showed borderline significant agreement with a small effect, indicating partial agreement on indicator comprehensibility. Feasibility ($W = 0.246$; $p < 0.05$) showed significant agreement with a small effect, reflecting consensus on indicator feasibility within existing structures. Results show moderate agreement on technical criteria (availability, feasibility) and weaker agreement on conceptual areas (relevance, interpretability), highlighting the state of Slovak tourism management. Experts align on data and implementation, but less on indicator importance for destination resilience.

5. Discussion

It can be confirmed that the feasibility of the resilience indicators is more dependent on the maturity of the data infrastructure than on the thematic category. Indicators with solid administrative sources—as for instance, population, seasonality, and accommodation capacity—show high accordance among evaluators, while social and environmental ones are limited by weak institutional support and the absence of a uniform methodology. The results suggest drawing links between statistical and administrative data, but also between local and regional actors. Within the European context, ETIS seems to be a practical framework for monitoring sustainability, yet its focus on sustainability alone does not provide an analytical basis for measuring resilience. The OECD framework makes up partially for these deficiencies, as it focuses on the resilience of destinations, policies, and institutional capacities. However, it is a framework in need of contextualization and indicators need refinement. To complement this set of indicators, the Lozano-Oyola et al. (2012) methodology provides a promising solution, offering the possibility of synthesizing heterogeneous indicators through the target programming technique and creating one composite index; thus, this allows the gap between conceptual design and empirical validation to be bridged.

6. Conclusion

This is the first systematic attempt to test the feasibility of tourism resilience indicators in Central European context. It confirms that international frameworks cannot be transferred mechanically but need adaptation to the data and institutional capabilities of individual regions. Feasibility seems to be a property of specific indicators rather than thematic dimensions; thus, future research should aim at the gradual integration of the most relevant indicators into regional monitoring systems. Future applications of the Lozano-Oyola methodology will enable the quantification of the resilience of destinations and comparable results between regions. In this way, linking the conceptual frameworks of the OECD and empirical synthesis can contribute to strengthening the analytical basis for tourism management in Europe and Slovakia.

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Ethics Declaration

An ethical clearance was not required for the research.

AI Declaration

AI tool Writefull was used for this paper and solely for language and grammar correction. No generative AI contributed to the development of the paper's content.

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