

Integrating local wisdom into tourism human resource behavior in sustainable tourism development



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ABSTRACT

This study investigates how indigenous local wisdom influences tourism human resource (HR) behavior and supports sustainable tourism development in culturally unique destinations. The research focuses on Samosir Regency in the Lake Toba UNESCO Global Geopark and combines the Theory of Planned Behavior (TPB) with Strategic Human Resource Management (SHRM) to develop a culturally based behavioral model. A qualitative exploratory approach was applied, and data were collected through in-depth interviews, focus group discussions, participant observation, and document analysis involving 20 tourism stakeholders. The findings show that Batak Toba local wisdom, reflected in *Dalihan Na Tolu*, *Poda Na Lima*, and oral traditions such as *umpasa* and *umpama*, serves as a moral foundation that influences attitudes, subjective norms, and perceived behavioral control among tourism workers. When these cultural values are integrated into HRM practices, they improve service consistency, community involvement, trust-based cooperation, and sustainability performance. The study contributes to theory by extending TPB through cultural perspectives and strengthening SHRM through human-centered values. It also provides a practical, evidence-based model for integrating local wisdom into tourism HR development to promote environmental, social, and economic sustainability.

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1. Introduction

The sustainability of tourism development fundamentally depends on the quality and performance of its human resources (HR). As a labor-intensive sector, tourism relies heavily on direct interaction between service personnel and visitors, making employee competence, adaptability, and cultural awareness essential for delivering professional and authentic experiences. Recent studies emphasize that HR development is a significant driver of sustainable tourism, primarily through green human resource management practices that enhance organizational reputation and environmental performance (Al-Romeedy and Alharethi, 2025; Bindawas, 2025). Beyond technical competence, the internalization of cultural values is also critical to ensure that ethical norms and

community-based identity are genuinely reflected in work behavior across tourism services (Duxbury et al., 2020; Foris et al., 2020). Indonesia's national tourism strategy aligns with this perspective. The designation of five Super Priority Tourism Destinations (DPSP)—Lake Toba, Borobudur, Mandalika, Labuan Bajo, and Likupang—reflects a policy shift toward the development of tourism regions with strong cultural and ecological foundations. Among these, Lake Toba, designated a UNESCO Global Geopark in 2020, is of strategic importance owing to its geological diversity and distinctive Batak Toba cultural heritage. Samosir Regency, located at the heart of Lake Toba and hosting five of its sixteen geosites, plays a central role in advancing sustainable tourism governance and service quality.

Despite this strategic position, Samosir continues to face persistent challenges in improving the quality of its tourism human resources. A national study involving 832 respondents across 27 provinces revealed that Lake Toba ranked lowest among the DPSP regions across five service quality dimensions—assurance, tangibles, responsiveness, reliability, and empathy. These findings highlight a

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substantial performance gap between regional expectations and the actual service behavior of tourism personnel, underscoring the urgency of capacity-building initiatives to strengthen competitiveness and ensure sustainable destination development.

Culturally, the Batak Toba community possesses rich systems of local wisdom rooted in *Dalihan Na Tolu*, *Poda Na Lima*, and oral expressions such as *umpasa* and *umpama*. These value systems emphasize sincerity (*martamue*), respectful communication, mutual regard, and social harmony (Sibarani, 2018; Sitohang et al., 2024). Although these cultural principles align closely with the ethical foundations of hospitality and service excellence, their integration into daily tourism practices remains weak. This gap represents a critical intention-action discrepancy, where cultural values are recognized but not consistently institutionalized within training, supervision, and organizational policies. Weak institutionalization limits stakeholder collaboration, particularly among government, private sector, and community actors, thereby hindering collective efforts toward sustainable tourism development.

Addressing these challenges demands a paradigm that positions local wisdom not only as cultural heritage but also as a strategic component of human resource management. This study proposes a behavioral model of tourism HR based on local wisdom by integrating the Theory of Planned Behavior (TPB) (Ajzen, 1991) with Strategic Human Resource Management (SHRM). Three research questions guide the study:

- What are the existing conditions and behavioral patterns of tourism human resources in Samosir Regency?
- How do Batak Toba cultural values influence attitudes, subjective norms, and perceived behavioral control that shape work behavior?
- How can the integration of TPB and SHRM produce a sustainable HR development model grounded in local wisdom?

By addressing these questions, the study contributes to theory building in tourism human resource management and offers practical insights for policymakers, educators, and community stakeholders. Integrating local wisdom with HR development strategies demonstrates how culturally grounded behavioral frameworks can enhance service quality, reinforce destination identity, and support long-term sustainability.

This study addresses the gap between the recognition of local wisdom as cultural heritage and its limited institutionalization within tourism HR practices. By integrating TPB and SHRM through the lens of Batak Toba cultural values, the study offers a culturally grounded behavioral framework that explains how indigenous ethics can be transformed into professional service behavior and sustainability-oriented outcomes.

2. Literature review

2.1. Tourism HR behavior and the theory of planned behavior

The Theory of Planned Behavior explains human behavior through three core determinants: attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). Although TPB has been widely applied in tourism research, particularly to examine visitor decision-making, its application to tourism workforce behavior remains relatively limited (Ulker-Demirel and Ciftci, 2020). Recent studies have extended TPB to organizational contexts, demonstrating its relevance in explaining employee commitment, ethical conduct, and sustainability-oriented behavior in tourism and hospitality settings (Prayag and Dassanayake, 2023; Hoang, 2022). Moreover, the persistent gap between behavioral intention and actual behavior—often shaped by work-related stress, emotional demands, and competing social norms—highlights the importance of psychological factors such as self-efficacy and emotional intelligence in strengthening behavioral consistency and service performance (Zhu et al., 2022; Zhang et al., 2022; Li et al., 2023). Collectively, this body of research suggests that tourism human resource behavior is influenced not only by cognitive evaluations but also by social and psychological dynamics, underscoring the need for behavioral models that integrate both individual and contextual determinants in promoting sustainability-oriented practices.

While TPB provides a robust framework for explaining how individual attitudes, subjective norms, and perceived behavioral control shape tourism human resource behavior, it offers limited guidance on how these behavioral intentions are translated into consistent organizational practices. The realization of sustainability-oriented intentions in destination settings depends not only on individual cognition but also on institutional mechanisms that reinforce, standardize, and sustain desired behaviors. Strategic Human Resource Management addresses this gap by serving as an organizational conduit through which individual behavioral determinants are embedded into recruitment, training, performance evaluation, and reward systems. Thus, SHRM extends TPB from individual intention to collective and institutionalized practice within sustainable tourism management.

2.2. SHRM and green HRM in destination management

Strategic Human Resource Management seeks to align human resource policies and practices with the broader strategic objectives of organizations and destinations. In tourism contexts, SHRM functions not merely as an administrative system but as an institutional bridge that translates individual attitudes, norms, and capabilities into collective and

sustainability-oriented practices. Through recruitment, training, performance evaluation, and reward systems, SHRM enables individual behavioral intentions to be consistently enacted within organizational routines and destination governance structures. When integrated with Green Human Resource Management (Green HRM), SHRM becomes a critical mechanism for embedding environmental values into everyday tourism operations. Green HRM emphasizes environmentally responsible practices, such as green recruitment, environmental training, and sustainability-oriented performance appraisal that institutionalize pro-environmental behavior beyond individual discretion (Al-Romeedy and Alharethi, 2025). This integration ensures that environmentally responsible behavior is not dependent solely on personal commitment but is reinforced through formal organizational systems. Beyond environmental performance, the integration of SHRM and Green HRM supports a holistic approach to destination management by incorporating cultural stewardship and social responsibility alongside economic objectives. By embedding environmental and cultural values into HR systems, destination management organizations can foster a workforce that not only meets service performance standards but also upholds local identity and contributes to the transformation of long-term sustainability (Yusoff et al., 2020). In this way, SHRM positions human resources as a strategic lever that links individual behavior to institutional practice, thereby enabling the development of competitive, responsible, and culturally grounded tourism destinations.

While SHRM and Green HRM provide an institutional framework for aligning individual behavior with sustainability objectives, they do not operate in a cultural vacuum. In destinations characterized by strong indigenous values, human resource practices are inevitably shaped by local norms, moral obligations, and communal ethics. Therefore, understanding how local wisdom functions as a moral infrastructure becomes essential for explaining why tourism actors internalize certain attitudes, norms, and behavioral controls. In this context, local wisdom does not merely complement SHRM but supplies the cultural foundation through which institutional mechanisms gain legitimacy, acceptance, and behavioral effectiveness.

2.3. Local wisdom as moral infrastructure: Tangible and intangible dimensions

Local wisdom can be conceptualized as a form of moral infrastructure, namely a culturally embedded system of values, norms, and shared meanings that guides individual judgment, regulates social behavior, and sustains collective ethical standards across generations. As a form of moral infrastructure, local wisdom does not merely function as cultural heritage. Still, it operates as an informal yet robust normative framework that

shapes how individuals perceive appropriate attitudes, social expectations, and acceptable conduct within a community. This perspective positions local wisdom as a foundational framework that underpins behavioral orientation and social order in everyday practices, including those of tourism services. Local wisdom encompasses both tangible and intangible dimensions. Tangible elements include traditional architecture, culinary practices, crafts, and other material expressions of cultural identity, whereas intangible elements comprise language, oral traditions, customary norms, social ethics, and collective value systems. Together, these dimensions function as moral reference points that influence how community members interpret responsibility, respect, and service obligations toward others, including visitors and tourists.

In the context of TPB, local wisdom as moral infrastructure directly informs key behavioral determinants. Cultural values embedded in local wisdom shape attitudes toward service behavior by defining what is considered honorable, appropriate, and meaningful work. At the same time, customary norms and shared moral expectations function as subjective norms, exerting social pressure on individuals to behave in ways that align with communal values. Furthermore, long-standing cultural practices and ethical guidance enhance perceived behavioral control by providing individuals with culturally familiar rules, skills, and moral confidence to enact expected behaviors. Within Batak Toba society, this moral infrastructure is institutionalized through customary systems such as *Dalihan Na Tolu* and *Poda Na Lima*. *Dalihan Na Tolu* embodies principles of mutual respect, reciprocity, prudence, and empathy that regulate social relations and interpersonal conduct, serving as a moral compass in communal life. These principles shape social expectations regarding politeness, responsibility, and appropriate interaction—values that are directly relevant to hospitality and tourism service encounters. Meanwhile, *Poda Na Lima* provides ethical and behavioral guidance on personal hygiene, discipline, environmental care, and moral responsibility, thereby reinforcing both self-regulation and collective accountability in daily practice.

The relevance of local wisdom as moral infrastructure to tourism human resource development has gained increasing recognition. Values such as respect, sincerity, discipline, and mutual regard align closely with the ethics of hospitality and sustainable tourism. When integrated into HR training and development, these values contribute to the internalization of service-oriented attitudes, strengthen normative commitment, and enhance behavioral consistency among tourism workers (Yusoff et al., 2020). Thus, local wisdom does not merely complement formal management systems but provides a culturally grounded moral foundation upon which sustainable tourism human resource behavior can be developed and sustained.

2.4. Integrating local wisdom into HRM practices

Integrating cultural heritage into tourism human resource management (HRM) involves two complementary strategies: the internalization of cultural values through training and the institutionalization of local ethics within HR policies. Internalization occurs when employees develop culturally grounded attitudes, interpersonal skills, and ethical orientations through structured training programs that incorporate local traditions, narratives, and value systems. Institutionalization, meanwhile, requires embedding cultural norms into recruitment criteria, performance appraisal standards, reward mechanisms, and organizational codes of conduct. Both approaches help ensure that cultural values become active behavioral drivers rather than symbolic representations within the destination. Existing research demonstrates that incorporating cultural values into HRM practices can enhance employee loyalty, empathy, and prosocial behavior traits, which are essential for high-quality service delivery in tourism settings (Lajante et al., 2023; Agyeiwaah and Bangwayo-Skeete, 2024). These behaviors not only strengthen interpersonal service encounters but also contribute to a more cohesive and ethically grounded workforce. In the Indonesian context, cultural principles such as *gotong royong* (cooperation) and politeness have long been recognized as normative systems that encourage collaboration, stakeholder participation, and social responsibility within community-based tourism initiatives (Mahrinasari et al., 2024; Sayuti, 2023). When these values are systematically integrated into HRM processes, they reinforce collective commitment to sustainability and strengthen destination-wide governance. For Samosir Regency, the integration of local wisdom rooted in *Dalihan Na Tolu* and *Poda Na Lima* provides a culturally authentic foundation for sustainable tourism HR development. These indigenous value systems offer structured ethical guidance emphasizing respect, reciprocity, self-discipline, and environmental care that can be operationalized within training curricula, service guidelines, and HR policies. By embedding local wisdom into strategic HRM practices, tourism organizations in Samosir can cultivate a service culture that aligns with both community identity and sustainability objectives, thereby enhancing long-term destination resilience. This study positions local wisdom as a mediating moral system that culturalizes TPB and humanizes SHRM, enabling sustainable tourism governance rooted in community ethics.

3. Methods

This study adopts a social-constructivist qualitative research design, which conceptualizes reality as socially constructed through interaction, shared meanings, and collective interpretation. This approach is appropriate for examining how cultural

values and local wisdom shape the behavior of tourism human resources (HR) in Samosir Regency, where social norms and customary practices are deeply embedded in everyday service interactions. A qualitative naturalistic approach was employed to capture culturally grounded meanings, behavioral orientations, and institutional practices that cannot be adequately measured through quantitative instruments. This design enables an in-depth understanding of how individual behavior, cultural norms, and organizational practices interact to support sustainable tourism development. Data analysis followed the interactive model proposed by Miles et al. (2014), allowing continuous movement between data collection, analysis, and interpretation until thematic saturation was achieved.

The research was conducted in Samosir Regency, part of Indonesia's Lake Toba Super Priority Tourism Destination and a UNESCO Global Geopark. The site was selected for three primary reasons:

- its strategic role in national tourism development policy;
- its concentration of culturally significant geosites and living traditions; and
- the relatively low performance of tourism human resources compared to other priority destinations, highlighting the need for culturally grounded HR development.

This study focused on both direct tourism actors (hotel managers, restaurant and café employees, homestay operators, tour guides, and souvenir sellers) and indirect actors (artisans, ulos weavers, handicraft producers, and raw material suppliers). Key stakeholders, including local government officers, cultural experts, traditional leaders, religious figures, and tourists, were also included to provide a comprehensive perspective.

Informants were selected using purposive sampling, based on the following criteria:

- a minimum of five years of experience in the tourism sector;
- direct involvement in Samosir's tourism ecosystem; and
- willingness to participate ethically, including consent for audio recording.

A total of 20 informants participated in the study (Table 1). Sample adequacy was assessed according to the principle of information power, emphasizing data richness and relevance rather than numerical size (Morse, 2000). Data saturation was reached when subsequent interviews yielded no new conceptual insights.

Data were collected through four complementary techniques: in-depth interviews, focus group discussions (FGDs), participant observation, and document analysis. Semi-structured interviews lasting 45-90 minutes were conducted with tourism stakeholders. Interviews were audio-recorded with informed consent and supported by field notes that

captured contextual and nonverbal cues. One FGD involving 20 participants from hotels, tour guiding services, MSMEs, destination management organizations, cultural institutions, government offices, and religious groups was conducted to explore shared understandings of HR challenges, cultural values in service delivery, and collaborative development opportunities.

Table 1: Research informant profile

Category	n	Length of experience	Code
Hotel/restaurant manager	4	7–10 years	H1–H4
Tour guide	2	6–8 years	G1–G2
MSME entrepreneur	2	5–7 years	U1–U2
Cultural expert	4	10–20 years	B1–B4
Religious leader	2	10–15 years	R1–R2
Tourist	2	> 5 visits	W1–W2
Local government officer	3	8–15 years	P1–P3
Entrepreneurial migrant	1	12 years	L1

Participant observation was conducted in hotels, cafés, homestays, and tourist villages to document the lived expressions of local values, such as hospitality, cleanliness, sincerity, and environmental care. Document analysis included tourism program reports, Pokdarwis documentation, cultural studio records, training materials, and labor department publications, which provided institutional context and triangulation for the primary data.

Data analysis was conducted using NVivo 15 and followed a three-stage coding process. First, open coding was applied to identify initial cultural expressions, behavioral patterns, and service practices. Second, axial coding was used to relate codes into broader themes aligned with the Theory of Planned Behavior (attitudes, subjective norms, and perceived behavioral control) and Strategic Human Resource Management mechanisms. Third, selective coding integrated these themes into an empirically grounded TPB–SHRM behavioral model explaining sustainability-oriented tourism HR behavior. Analytical rigor was ensured by using visual tools, such as coding matrices, cluster maps, and project diagrams, to examine relationships among themes. An audit trail systematically documented coding decisions, theme refinement, and model development, ensuring transparency and analytical dependability.

Trustworthiness was established through credibility, dependability, transferability, and confirmability. Credibility was enhanced through triangulation of sources, methods, and time across interviews, FGDs, observations, and documents. Dependability was ensured by verbatim transcription and systematic data storage using participant codes, dates, and locations.

Transferability was supported by providing rich descriptions of the research context, cultural setting, and participant characteristics. Confirmability was strengthened through reflexive journaling, in which the researcher critically reflected on positionality as a Batak scholar examining her own cultural environment, thereby minimizing interpretive bias.

All participants provided informed consent, and confidentiality was maintained through anonymized coding. The study complied with ethical standards set by the Universitas Sumatera Utara ethics committee, ensuring voluntary participation, cultural sensitivity, and transparency regarding research objectives.

4. Results

Results are organized explicitly according to the research questions and are presented as analytical narratives derived from thematic analysis. Each subsection moves from empirical evidence (data extracts) to interpretation aligned with TPB constructs, culminating in the construction of the integrated TPB–SHRM model.

4.1. Existing conditions of tourism human resources in Samosir Regency

The findings indicate that tourism human resources (HR) in Samosir Regency are unevenly prepared to support sustainable tourism. Three interrelated issues emerged: fragmented understanding of tourism HR, inconsistent service competence, and fluctuating community participation. First, tourism HR is narrowly perceived as individuals who directly interact with tourists, excluding supporting actors such as transport providers, vendors, and community leaders. As one tourism manager explained: “Tourism staff are those who face tourists directly; others are not really considered part of tourism” (H1). This perception limits coordinated service delivery and weakens collective responsibility. Second, service competence varies widely. While some actors demonstrate hospitality consistent with cultural values, others fail to meet basic service standards. A homestay owner stated: “Sometimes service depends on who is on duty; there is no standard” (H3). This inconsistency reflects weak institutional control and limited training. Third, community participation is unstable and largely event-driven. Participation increases during festivals or peak seasons but declines afterward, indicating that involvement is not yet institutionalized as a sustained behavioral norm.

Fig. 1 illustrates the thematic relationships surrounding tourism human resources, which serve as the central category. The diagram demonstrates that tourism human resources are perceived broadly, encompassing not only formal tourism workers but also local communities and government authorities, with tourism recognized as a primary source of livelihood. This comprehensive understanding shapes community participation by articulating aspirations, encouraging involvement, and fostering self-development. Conversely, Fig. 1 also reveals that low-quality tourism human resources directly lead to decreased tourist satisfaction and declining district revenue, highlighting the critical role of human resource

quality in sustaining tourism destinations economically. Overall, Fig. 1 underscores tourism human resources as a pivotal mechanism linking community participation, service quality, and sustainability outcomes. Fig. 2 depicts the thematic structure of tourism human resource constraints in Samosir Regency derived from qualitative analysis. Human resources limitations emerge as the central

issue, shaped by the interaction of individual, social, and institutional factors. Key constraints include limited formal education among tourism workers, low motivation and character development, and a strong tendency for local labor to seek employment outside the region. These conditions collectively weaken service readiness and reduce professional consistency across tourism sectors.

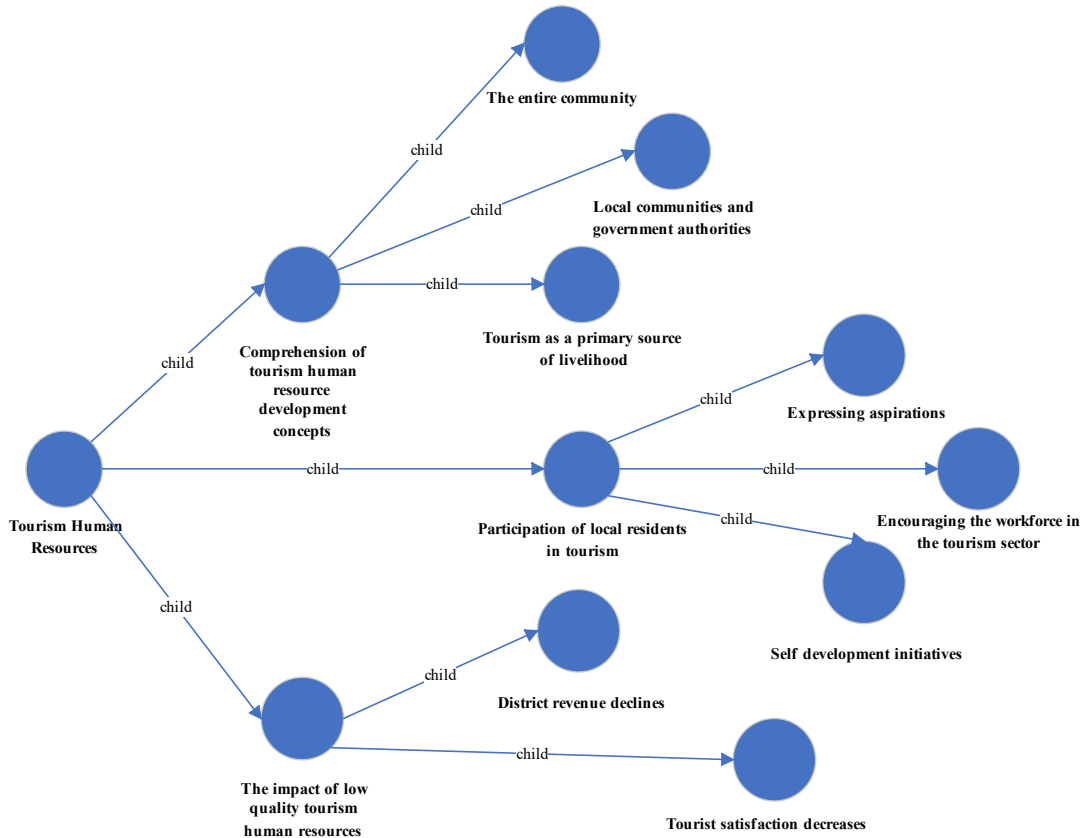


Fig. 1: Thematic map of tourism HR conditions and impacts in Samosir Regency

Institutional and governance-related factors further intensify these workforce constraints. Informants reported regulatory barriers, misaligned tourism development strategies, and ineffective training programs that do not correspond to field needs. Limited public support and occasional resistance toward tourism development also reduce social reinforcement for workforce improvement. In addition, insufficient and inconsistent government involvement constrains capacity-building efforts, resulting in fragmented and short-term human resource development initiatives.

Fig. 2 highlights the role of government as a coordinating structure through the functions of planning, organizing, actuating, and controlling. Weaknesses in these governance functions limit alignment between policies, training institutions, and tourism actors. As a result, SHRM-related interventions, such as structured training programs, tourism education curricula, collaborative networks, incentive mechanisms, and the development of tourism awareness groups, are only partially implemented and remain poorly integrated. Overall, Fig. 2 indicates that tourism human resource

challenges in Samosir Regency are not solely related to individual skills, but are closely associated with governance limitations and weak SHRM institutionalization. Fragmented coordination and inconsistent government engagement constrain the effectiveness of existing development strategies, leading to situational rather than sustained improvements in workforce quality. These conditions point to the absence of stable normative guidance, providing the contextual basis for examining local wisdom as a moral infrastructure shaping tourism HR behavior in the following subsection.

4.2. Local wisdom as moral infrastructure shaping tourism HR behavior

The analysis demonstrates that Batak Toba local wisdom operates as a form of moral infrastructure that shapes the behavior of tourism human resources. Three principal cultural value systems were identified: *Dalihan Na Tolu*, *Poda Na Lima*, and oral traditions expressed through *umpasa* and *umpama*. *Dalihan Na Tolu* influences both attitudes

and subjective norms by emphasizing values of respect (*somba*), prudence (*manat*), and empathy (*elek*), which inform tourism workers' perceptions of appropriate service conduct. As a restaurant employee stated, respectful treatment of guests is understood as an extension of familial values, reinforcing a welcoming service orientation (H6). *Poda Na Lima* strengthens perceived behavioral control by promoting self-discipline, cleanliness, and personal responsibility. These values are internalized as moral obligations rather than

imposed regulations, as reflected in informants' association of cleanliness with cultural teachings rather than formal rules (H9). In parallel, Batak Toba oral traditions convey ethical guidance through metaphors and proverbs that reinforce shared behavioral expectations. Nevertheless, several informants reported a weakening of intergenerational transmission, resulting in uneven internalization of these values, particularly among younger tourism workers.

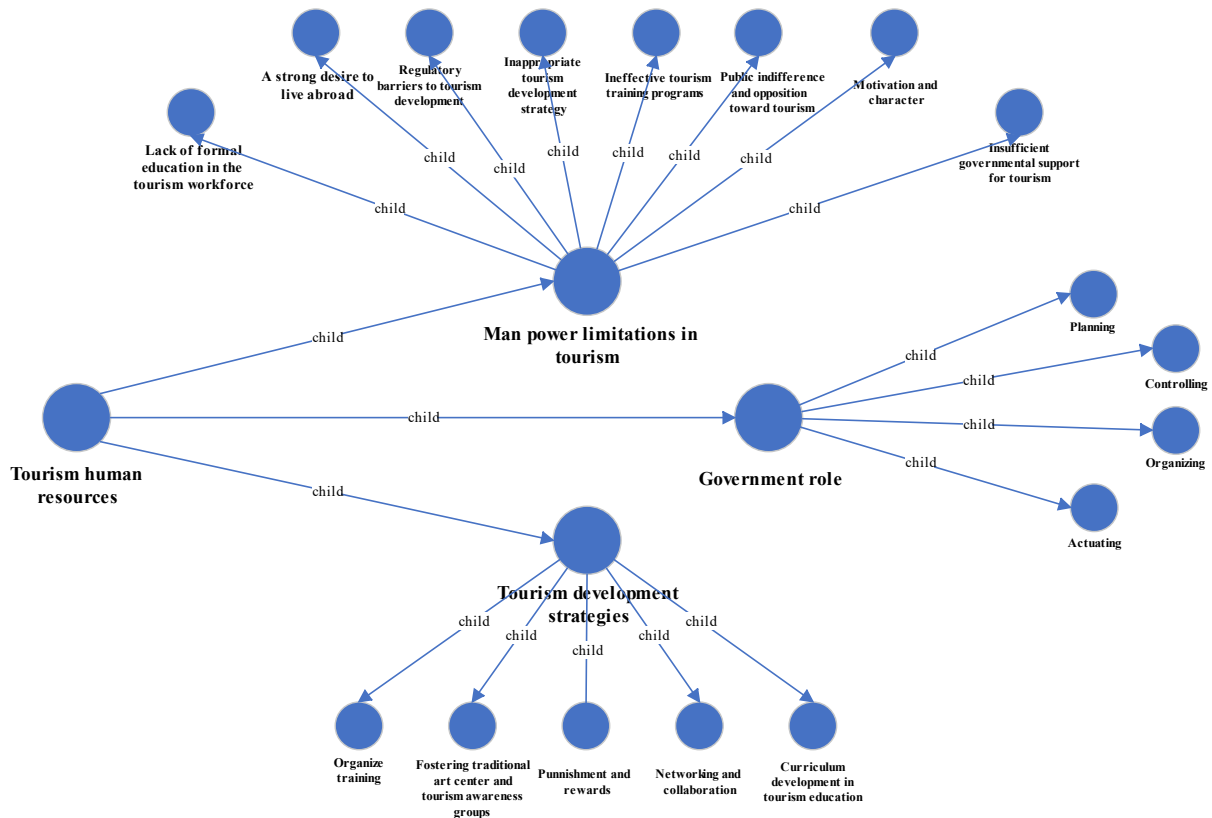


Fig. 2: Thematic map of manpower limitations and government roles in tourism human resource development in Samosir Regency

Collectively, the values embedded in *Dalihan Na Tolu*, *Poda Na Lima*, and Batak Toba oral traditions constitute a moral infrastructure that serves as an ethical framework guiding the behavior of tourism human resources. Principles such as respect (*somba marhula-hula*), caution (*manat mardongan tubu*), and empathy (*elek marboru*) operate as normative references that shape subjective norms and perceived behavioral control within the TPB. In this sense, moral infrastructure serves as a normative bridge linking inherited customary ethics with contemporary expectations of professionalism in tourism services (Tresiana and Kartika, 2024). The effectiveness of this moral infrastructure is reflected in observable behavioral indicators, including adherence to standard operating procedures (SOPs), polite and respectful interactions with customers, and cleanliness in service environments. When connected to tourist satisfaction outcomes, these indicators provide an empirical basis for assessing the degree to which tourism human resources have

internalized local cultural values. However, the findings also suggest that moral infrastructure alone is insufficient to ensure consistent professional behavior in the absence of supportive institutional arrangements. Therefore, the alignment of cultural values with formal organizational and managerial systems remains essential for sustaining behavioral consistency and advancing sustainable tourism practices in the long term.

4.3. Constructing the integrated TPB-SHRM model from empirical data

This subsection explicates how the integrated TPB-SHRM model was inductively constructed from the data. Thematic analysis indicates that local wisdom shapes behavioral intentions through TPB components, whereas SHRM serves as an institutional mechanism that embeds these values in organizational practices. Attitudes toward service quality are shaped by *Dalihan Na Tolu*, communal

expectations, and oral traditions, which reinforce subjective norms; perceived behavioral control is further strengthened by internalized discipline derived from *Poda Na Lima*. However, without institutional support, these values remain situational. Strategic Human Resource Management bridges this gap by translating cultural values into formal practices, including ethics-based training, standard operating procedures, performance evaluation, and collaborative governance. When cultural values are institutionalized, HR behavior becomes more consistent and sustainability-oriented. Table 2 presents a systematic mapping between empirical themes, TPB constructs, SHRM

practices, and sustainability outcomes. Table 2 provides the empirical foundation for Fig. 3 by mapping field-based themes to TPB components and corresponding SHRM mechanisms. This mapping demonstrates how local wisdom functions as moral infrastructure, shaping attitudes, subjective norms, perceived behavioral control, and behavioral intention among tourism human resources. Fig. 3 integrates these relationships into a TPB-SHRM model, illustrating how SHRM institutionalizes culturally grounded behavioral determinants into consistent professional practices that support sustainable tourism development in Samosir Regency.

Table 2: Mapping empirical themes to TPB, SHRM, and sustainability outcomes

Empirical theme (field data)	Local wisdom values	TPB component	SHRM mechanism	Sustainability outcomes
Respectful and polite service toward tourists	<i>Dalihan Na Tolu</i> (somba marhula-hula, manat mardongan tubu, elek marboru)	Perceived behavioral control	Ethics-based service training, hospitality SOPs	Tourist satisfaction, destination image
Personal responsibility for cleanliness and order	<i>Poda Na Lima</i>	Subjective norms	Performance standards, supervision, and evaluation	Environmental sustainability, destination cleanliness
Mutual assistance and teamwork among tourism actors	<i>Dalihan Na Tolu</i>	Perceived behavioral control	Team-based HR practices, collaborative work design	Social cohesion, service reliability
Honesty and moral accountability in service delivery	Oral traditions (umpasa, umpama)	Subjective norms	Code of conduct, integrity-based appraisal	Trust building, repeat visitation
Fluctuating community participation	Weak institutionalization of local wisdom	Perceived behavioral control (external)	Participatory governance, community engagement programs	Socio-economic sustainability
Declining intergenerational value transmission	Erosion of oral traditions	Subjective norms → behavioral intention	Mentoring, cultural education, and induction	Cultural resilience, long-term sustainability

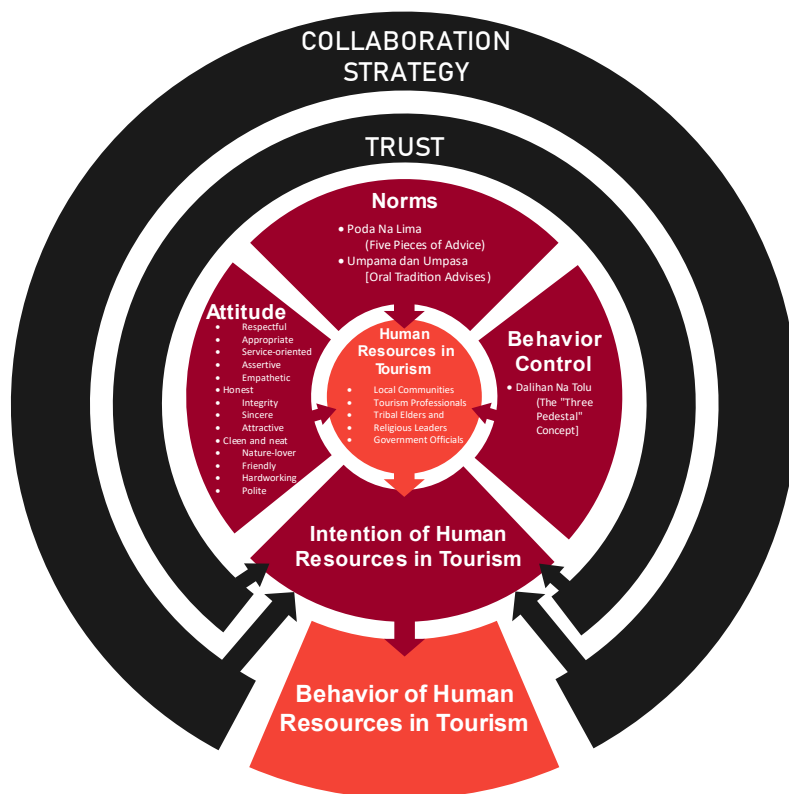


Fig. 3: Integrated TPB-SHRM model of tourism human resource behavior based on local wisdom in Samosir Regency

Fig. 3 presents a model of human resource (HR) behavior in tourism in Samosir Regency, integrating the components of the Theory of Planned Behavior (TPB)—attitudes, norms, behavioral control, intentions, and behavior—reinforced by the principles of Strategic Human Resource Management (SHRM). In this model, the local wisdom values of the Samosir community are the primary source of attitudes, norms, and behavioral control, which are then translated into actual behavior in sustainable tourism management.

Attitudes Rooted in Local Wisdom: The attitudes of Samosir's tourism HR are shaped not only by modern standards of professionalism but also by local wisdom. Values such as respect, adequacy, service, assertiveness, empathy, honesty, integrity, sincerity, attractive appearance, cleanliness and neatness, love for the environment, kinship, hard work, and politeness originate in the traditions and philosophy of the Batak Toba people, passed down from generation to generation. With an attitude rooted in local culture, tourism HR holds that services grounded in customs and ancestral values are more meaningful, ethical, and in harmony with the community's identity.

Social Norms as Behavior Reinforcers: Social norms that function as subjective norms in TPB are based on *Poda Na Lima* and *Poda*, as expressed in oral literature such as *umpasa* and *umpama*. These norms serve as collective guidelines that reinforce individual attitudes and provide social legitimacy for culture-based behavior in tourism services.

Behavior Control through *Dalihan Na Tolu*: Behavioral control is shaped by the *Dalihan Na Tolu* philosophy, which serves as a regulatory mechanism for maintaining social harmony. The values of *somba marhula-hula*, *manat mardongan tubu*, and *elek marboru* govern how tourism human resources interact with tourists and fellow tourism practitioners, providing them with ethical clarity in the provision of their services.

Trust and Collaboration Strategies: Trust serves as the social foundation for collaboration among tourism human resources, the government, the private sector, and the community. This trust minimizes fragmentation and harmful competition while strengthening synergy in the development of services grounded in local wisdom. Collaboration strategies, such as establishing *Pokdarwis*, partnering with the private sector, and implementing government policies that support cultural preservation, help ensure the sustainability of local values in the tourism sector.

Intent as a Bridge to Behavior: Attitudes, norms, behavioral control, trust, and collaboration shape the intentions of tourism human resources to implement services grounded in local wisdom. These intentions stem from the belief that services rich in cultural values not only enhance the tourist experience but also strengthen Samosir's image as a destination and preserve the culture of the Batak Toba people.

The Actual Behavior of Tourism Human Resources: Ultimately, this intention is reflected in

the actual behavior of tourism human resources that aligns with cultural values. This behavior is evident in respectful interactions with tourists, friendly and courteous service, guided narratives that highlight traditional philosophy, and the application of environmentally friendly principles. The behavior of tourism human resources distinguishes Samosir from other destinations by combining professionalism with cultural identity.

Thus, the model of tourism human resource behavior based on local wisdom in Samosir Regency shows a precise flow: local wisdom values → shaping attitudes → reinforced by norms, behavioral control, trust, and collaboration → creating intentions → giving rise to real behavior based on culture. This model also reflects the application of the TPB within the local cultural framework and demonstrates SHRM's role in institutionalizing local values through training, incentives, policies, and cross-sector collaboration. At the outcome level, the model demonstrates that the institutionalization of local wisdom through SHRM generates sustainable tourism pathways by translating culturally shaped behavior into environmental conservation through norms of cleanliness and care, economic equity through enhanced service quality and local income circulation, and social resilience through trust, reciprocity, and collective responsibility among tourism stakeholders.

5. Discussion

5.1. Culturalizing TPB in tourism HR contexts

The findings of this study confirm that tourism human resource behavior in Samosir Regency cannot be sufficiently explained through a purely individualistic application of TPB. Instead, behavioral intention and action are deeply embedded within socially constructed moral systems that operate as shared references for appropriate conduct. This supports previous tourism studies emphasizing that behavioral decision-making is mediated by social identity, emotional attachment, and cultural norms rather than rational cognition alone (Ulker-Demirel and Ciftci, 2020; Zhang et al., 2022).

The Results demonstrate that Batak Toba local wisdom functions as a moral infrastructure that structures TPB components in culturally specific ways. *Dalihan Na Tolu* primarily shapes perceived behavioral control by regulating social roles, authority relations, and behavioral boundaries through principles of respect (*somba*), prudence (*manat*), and empathy (*elek*). This relational structure enhances individuals' perceived capacity to act appropriately in service encounters, extending TPB by showing that behavioral control is not only resource-based but also socially constituted. In contrast, subjective norms are formed mainly through *Poda Na Lima* and Batak Toba oral traditions (*umpasa* and *umpama*), which establish collective expectations regarding cleanliness,

discipline, honesty, and moral accountability. The observed weakening of intergenerational transmission among younger tourism workers accounts for inconsistencies in behavioral intentions and professional conduct.

These findings resonate with community-based tourism literature, which highlights cultural values as motivational anchors sustaining pro-social and pro-environmental behavior (Yusoff et al., 2020). In this sense, the Samosir case extends TPB to a collective-intentional framework, in which behavioral legitimacy is co-produced through moral obligation and social approval rather than individual preference alone.

5.2. SHRM as an institutional bridge between moral infrastructure and sustainable behavior

While moral infrastructure provides strong normative guidance, the Results indicate that cultural values alone are insufficient to generate consistent professional behavior. Strategic Human Resource Management emerges as a critical institutional bridge that translates culturally grounded behavioral determinants into formal organizational practices. Ethics-based training, standard operating procedures, performance evaluation, and collaborative governance mechanisms stabilize cultural values into everyday service routines. This finding supports the SHRM scholarship that positions culture as a strategic human capital asset rather than a contextual background variable. Integrating ethical and ecological values into HR systems enhances service quality, environmental responsibility, and destination competitiveness (Al-Romeedy and Alharethi, 2025).

However, the Results also reveal that weak governance capacity—particularly fragmented planning, inconsistent government involvement, and limited coordination—constrains SHRM effectiveness in Samosir, resulting in short-term and symbolic interventions. Such conditions explain why training programs and HR initiatives often remain ceremonial, echoing findings that customary values require institutional reinforcement to support community resilience and sustainable tourism practices (Mahrinasari et al., 2024). Similarly, studies on empathy-based HR training and Green HRM demonstrate that ethical climates and trust-based relationships enhance employee engagement and service quality only when supported by coherent managerial systems (Agyeiwaah and Bangwayo-Skeete, 2024).

5.3. Moral infrastructure, trust, and collaborative governance for sustainability

The integration of TPB and SHRM through moral infrastructure highlights the central role of trust and collaboration in sustainable tourism governance. The Results show that without trust among government agencies, tourism businesses, and community

groups, SHRM mechanisms fail to institutionalize cultural values effectively. This reinforces participatory governance perspectives that emphasize co-creation of value, shared accountability, and cross-sectoral collaboration as foundations for sustainable destination management (Duxbury et al., 2020; Foris et al., 2020). By aligning moral infrastructure (*why people act*), institutional mechanisms (*how action is enabled*), and sustainability outcomes (*what behavior produces*), the integrated TPB-SHRM model illustrates that sustainable tourism development is fundamentally a moral-institutional process. Rather than being driven solely by technical competence or regulatory enforcement, sustainable tourism in Samosir emerges from the successful institutionalization of culturally grounded behavioral norms within governance and HR systems.

From a broader theoretical perspective, the model suggests that sustainability in tourism is not merely the outcome of technical management interventions, but the result of a culturally embedded behavioral system that is institutionally reinforced. Local wisdom, articulated through Dalihan Na Tolu, Poda Na Lima, and oral traditions, provides the ethical orientation that shapes how tourism actors interpret responsibility, reciprocity, and service professionalism. When these values are translated into SHRM practices, they generate durable behavioral patterns that extend beyond service encounters. Environmentally, norms of cleanliness and self-restraint support everyday conservation practices; economically, culturally grounded professionalism strengthens service quality and local value retention; socially, trust and collective responsibility enhance cooperation and community resilience.

In this sense, sustainability emerges as a cumulative social process, rooted in moral infrastructure and stabilized through strategic human resource governance.

5.4. Theoretical and practical implications

This study contributes theoretically by (1) culturalizing TPB through the integration of indigenous moral systems as sources of perceived behavioral control and subjective norms; (2) repositioning SHRM as a community-based governance mechanism that stabilizes culturally informed behavior; and (3) advancing moral infrastructure as a bridging construct linking behavioral theory, cultural ethics, and institutional management (Tresiana and Kartika, 2024). Practically, the findings suggest that tourism HR development should integrate local wisdom into training design, performance indicators, and collaborative governance structures. Strengthening intergenerational transmission of cultural values and reinforcing trust-based partnerships among stakeholders are essential to sustaining behavioral consistency and achieving long-term sustainable tourism outcomes

6. Conclusion

This study concludes that tourism human resource behavior in Samosir Regency is shaped by the interaction between culturally embedded moral values and institutional governance mechanisms. Batak Toba local wisdom—particularly *Dalihan Na Tolu*, *Poda Na Lima*, and oral traditions—functions as a moral infrastructure that provides normative guidance for service behavior, while SHRM institutionalizes these values into sustainable organizational practices. The integrated TPB–SHRM model demonstrates that professional and consistent tourism service behavior emerges when culturally grounded norms are supported by coherent governance and HR systems. These findings highlight the importance of aligning local wisdom with formal HR management to strengthen service quality, social cohesion, and long-term sustainable tourism development.

List of abbreviations

DPSP	Super Priority Tourism Destinations
FGD	Focus Group Discussion
HR	Human Resources
HRM	Human Resource Management
MSME	Micro, Small, and Medium Enterprise
NVivo	Qualitative Data Analysis Software
SHRM	Strategic Human Resource Management
SOP	Standard Operating Procedure
TPB	Theory of Planned Behavior

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Compliance with ethical standards

Ethical considerations

Ethical considerations were carefully observed in this study. Data were collected through guided interviews with voluntary participants. Informed consent was obtained prior to the interviews, and all participant information was kept confidential and anonymized for research purposes only.

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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