

BRIDGING GENDER GAPS IN TOURISM: EXPLORING WOMEN'S EMPOWERMENT AND ITS IMPACT ON SUSTAINABLE TOURISM DEVELOPMENT

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Abstract: Tourism plays a vital role in driving economic growth and community development. The active participation of diverse social groups is essential to achieving sustainable tourism. However, the persistence of patriarchal norms continues to hinder effective management and inclusivity within the tourism sector, especially in Indonesia. This study examines the relationships among women's empowerment, women's entrepreneurship, and perceptions of women's work toward sustainable tourism development, with tourism involvement as a mediating variable. Using an online survey of 327 respondents, data were analyzed through Structural Equation Modeling–Partial Least Squares (SEM-PLS). The results show that while women's empowerment, women's entrepreneurship, and tourism involvement are indirectly related to sustainable tourism development, perceptions of women's work do not have a significant direct impact, and tourism involvement does not mediate the relationship between women's empowerment or entrepreneurship and sustainable tourism. These results suggest that gender disparities remain a barrier to achieving sustainable tourism development. While tourism stakeholders acknowledge women's potential contribution to the industry, societal perceptions still confine women's roles primarily to domestic responsibilities. This study contributes to the understanding of how gender dynamics indirectly influence sustainable tourism development in Indonesia, highlighting the persistence of patriarchal norms as a barrier to inclusivity and effective tourism management.

Keywords: women empowerment, women entrepreneurship, perceptions of women work, tourism involvement, sustainable tourism development

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INTRODUCTION

In many countries around the world, tourism has become one of the most significant parts of the economy. The industry has a big role in the growth of the national economy. For instance, Rahman & Emroz (2023) found that tourism is good for Bangladesh's economic growth. Tourism not only has economic benefits, but it also gives women chances to start their own businesses and gain authority (Bagheri et al., 2022). Meanwhile, women are very important to the growth of tourism in the United Arab Emirates (Abou-Shouk et al., 2021). Tourism may create a lot of jobs and business opportunities, especially if more women work in the field (Dossou et al., 2023; Mitra et al., 2023). However, in the tourism industry, women frequently only have supporting jobs, particularly in less developed country, including working in restaurants or at hotel front desks (Ojediran & Anderson, 2020). This suggests that women are not yet acknowledged as principal participants in tourism, but rather as supplementary contributors who are infrequently engaged in policymaking or decision-making processes (Junker et al., 2022). This kind of gender disparity in tourism hurts women's mental health as well as their job prospects. As Bagheri et al. (2022) stress, all stakeholders, including women, need to be involved in sustainable tourism. Despite this, tourism authorities frequently refrain from appointing women to leadership roles due to entrenched cultural views around women's household responsibilities. In many situations, women are still seen as the main caretakers of children and the home (Mitra et al., 2023), which supports the local idea that women shouldn't be directly involved in tourism (Gannon et al., 2021). So, giving women more authority is an important way to get them more involved in and helpful to the growth of sustainable tourism.

Sustainable tourism development plays a central role in ensuring economic growth that does not harm the environment and can be enjoyed by future generations. For example, nature-based tourism and ecotourism are increasingly seen as alternatives to environmentally damaging mass tourism (Esparza-Huamanchumo et al., 2024). Sustainable tourism development requires the active participation of all social groups, including women, who have significant potential to support economic and social sustainability in tourism destinations. Empowering women through entrepreneurship in this sector, whether in the form of small businesses or large businesses, serves as a driver for more equitable economic

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development and social empowerment (Rashwan et al., 2024; Durrah et al., 2025). In many cases, the community-based tourism sector demonstrates that women, when economically empowered, can optimize the potential of local natural and cultural resources to support sustainable development (Minikhanova et al., 2024).

However, despite increasing recognition of women's contributions to tourism, they still face significant barriers to achieving leadership positions. Research shows that although women play a significant role in tourism and cultural heritage management, they are often trapped by traditional stereotypes that limit their access to strategic positions, particularly in developing countries (Naguib et al., 2025). This challenge is exacerbated by the dominance of social norms that consider women more suited to domestic work or support positions in the tourism industry (Gonda, 2024). Therefore, to achieve inclusive, sustainable tourism, it is crucial to address gender inequality through policies that support women's empowerment and provide more opportunities for them to take a leading role in tourism policy and decision-making (Fonseca et al., 2025; Gonda, 2024; Vujko et al., 2024). Women's empowerment is a key factor in long-term social and economic growth. It allows women to get more education, health care, and job chances (Reshi & Sudha, 2022; Triaditama et al., 2022). Abou-Shouk et al. (2021) assert that women's empowerment is significantly correlated with tourist development in multiple nations. Training programs in entrepreneurship, tourist management, hospitality, and other fields can help people feel more powerful. Women can make a big difference in the tourism industry as business owners, workers, and local craftspeople when they are given the power to do so. Also, empowerment makes women feel more valuable and included, even if they aren't directly involved. Women actively participating in tourism not only enhances their well-being but also fosters local economic development. As more and more people throughout the world become conscious of gender equality, women's empowerment and involvement in the tourist industry are becoming more and more important for sustainable development. Giving women more influence improves their lives and makes decision-making more inclusive (Pal et al., 2022). Also, empowerment makes sustainable tourism better by encouraging new ideas, diversity, and fairness in society. In practice, women's empowerment can mean starting businesses in the community, such as making handicrafts or food, running guesthouses, or organizing modest tourism projects that help the local economy and culture.

Women entrepreneurs are very important for the growth of sustainable tourism. It creates new jobs and encourages new ideas and variety in the tourism business (Matricano, 2022). Samad & Alharthi (2022) found that women entrepreneurs in tourism help the industry stay strong. Women-led businesses help keep local culture alive, make unique tourism products, and improve the link between tourism and local communities (Filimonau et al., 2022; Suryani et al., 2022). Ojediran & Anderson (2020) assert that women's entrepreneurship exerts a slow yet empowering influence on local communities. Bachri et al. (2022) also indicate that a primary obstacle to the advancement of women's entrepreneurship is the absence of governmental financial assistance. Furthermore, social attitudes on women's work persist in hindering their involvement and leadership in tourism-related endeavors, hence perpetuating gender-specific constraints within the industry.

Perceptions of women's work (PWW) show how society used to think about gender roles and equality. Women are often seen as homemakers who are responsible for household chores. These kinds of thoughts make it harder for women to be empowered and less likely to work in the tourism industry. Stereotypes and biases regarding suitable employment for women persist in shaping their career decisions and prospects (Junker et al., 2022), while community attitudes can profoundly impact women's participation in tourism (Aghazamani et al., 2020). Consequently, altering these beliefs is crucial for cultivating an inclusive and equitable atmosphere that enables women to realize their potential free from gender-based constraints (Al-Qahtani et al., 2022). Even though many women are aware of and want to get involved in tourism, they often need permission from tourist managers or community leaders to do so. This shows that women are still expected to stay in domestic duties. Women innately possess inventiveness, a robust learning spirit, and decisiveness—attributes that, when supported and acknowledged, can significantly enhance sustainable tourism development (Said & Enslin, 2020).

Tourism involvement (TINV) in some segments of tourism has been shown to have a positive impact on tourism development (Raihan et al., 2022). Broader community participation in tourism encourages local innovation and fosters confidence in developing sustainable destinations. Inclusive involvement of all societal groups is essential to ensure fairness, equity, and shared benefits within the community. Moreover, participation in tourism activities contributes positively to individuals' psychological well-being and strengthens commitment to sustainable tourism development (Elshaer et al., 2021). Importantly, women's participation must be recognized as a vital component of this process.

Martini et al. (2020) emphasize that women possess unique skills, intelligence, and the capacity to build collaborative relationships among tourism stakeholders. However, persistent gender inequality within the tourism sector continues to create disparities in roles and responsibilities between men and women, limiting women's access to leadership and decision-making positions (Silva & Couto, 2023). Elshaer et al. (2021) conducted research that shows how important it is for women to be involved in the tourism industry for sustainable tourism development. Women offer a variety of viewpoints, improve the quality of service, and make the link between tourism and local communities stronger (Su et al., 2023). Likewise, Rahman & Emroz (2023) discovered that women's involvement in tourism activities favorably impacts economic growth in Bangladesh. Mulyani et al. (2021) also underscore that the active participation of local populations positively influences the management and development of tourism-based economies. These findings indicate that the involvement of women, in conjunction with the participation of all socioeconomic groups, can collectively bolster the economic viability of the tourist sector. Additionally, Samad & Alharthi (2022) discovered that perceptions of women's work positively influence sustainable tourism development, while Abou-Shouk et al. (2021) demonstrated that women's empowerment is crucial in enhancing women's contributions to the tourism industry. In line with this, Martini et al. (2020) pinpointed women's entrepreneurship as a pivotal element propelling sustainable tourism development. This study is novel in its comprehensive analysis of women's empowerment, entrepreneurship, and perceptions of women's work in the context

of sustainable tourism development, while incorporating tourism involvement as a mediating variable—an analytical framework that has been insufficiently explored in prior tourism and gender research. In contrast to previous studies that examined women’s empowerment or entrepreneurship in isolation, this research offers a comprehensive structural model utilizing SEM-PLS to empirically evaluate the interrelationships among these constructs within the socio-cultural context of Bali, Indonesia, where patriarchal norms continue to influence women’s economic participation. This study aimed to investigate the relationship among women’s empowerment, women’s entrepreneurship, perception of women’s work, and sustainable tourism development. It also examines the tourism involvement as a mediation for those relationships.

The study’s findings enhance the literature by demonstrating that while women’s empowerment and entrepreneurship favorably impact sustainable tourism, enduring traditional gender stereotypes impede their complete participation. Furthermore, the mediating effect of tourism involvement reveals intricate mechanisms by which community participation can either fortify or undermine these linkages. This work theoretically enhances the discourse on gender equality and sustainability in tourism by amalgamating empowerment theory with participatory development views. In practice, it provides useful information for policymakers, tourist managers, and local governments to create tourism initiatives that include women, break down gender barriers, and make tourism development more sustainable in places with a lot of different cultures.

LITERATURE REVIEW AND HYPOTHESIS

Women empowerment (WE), tourism involvement (TINV), and sustainable tourism development (STD)

Empowering women has been seen as an important part of fighting prejudice, injustice, and poverty that women face in many different civilizations (Narayan, 2005; Moghadam, 2008; Aghazamani et al., 2020). It signifies a process of social transformation that empowers women to assert control over economic and social resources, encompassing their involvement in entrepreneurship and tourism-related endeavors. However, this process of empowerment often hits structural roadblocks, like not being able to get an education, not getting professional training, and social norms that make it hard for women to get involved in some fields, especially tourism (Bonewit & Santis, 2016; Ojediran & Anderson, 2020; Freund & Hernandez-Maskivker, 2021). These issues illustrate persistent gender inequality, which continues to be a significant barrier to social and economic progress (Berkovitch, 2022). Sustainable Development Goal (SDG) 5 stresses gender equality and the empowerment of all women and girls. As a result, women’s empowerment is becoming more and more important for sustainable development. For instance, the Saudi Arabian government has put in place policies that support women’s empowerment as part of its national plan for gender equality and long-term growth (Hurdawaty et al., 2020). In the realm of tourism, the empowerment of women facilitates enhanced job prospects and engagement in economic activities, especially within service-oriented industries (Raihan et al., 2022). Additionally, gender equality serves as a catalyst for sustainable tourism by promoting inclusive engagement, creativity, and innovation in destination development (Alarcón & Cole, 2019; Elshaer et al., 2021). Tourism has become one of the most dynamic sectors driving global economic growth, relying largely on human capital and community participation (Vu et al., 2020; Dong & Khan, 2023). For tourism to grow in a way that is good for the environment, everyone in society needs to be involved. This includes women, whose ability to do several things at once and their social intelligence may help the community and the local economy. As women become more powerful through education, community service, and starting their own businesses, their involvement in tourism can help the economy and society in the long run (Triaditama et al., 2022; Langoday & Man, 2024).

Women’s empowerment (WE) boosts people’s skills, confidence, and ability to make decisions, all of which make them more likely to take part in tourism activities. Women who have power are more likely to plan tourism, start their own businesses, and manage them, which strengthens community-based tourism structures (Abou-Shouk et al., 2021; Elshaer et al., 2021). Empowerment not only motivates women to participate directly but also alters social views on gender roles, fostering inclusivity and collaboration within the tourism sector. When women have better access to education, leadership, and money, they are more likely to get involved in and help with tourist development. This adds more depth to the social and cultural parts of sustainability. Based on the above theoretical and empirical foundations, this study proposes that:

H1: WE has a positive and significant relationship with STD

H4: WE has a positive and significant relationship with TINV

Women entrepreneurship (WENT), tourism involvement (TINV), and sustainable tourism development (STD)

Women entrepreneurs have been acknowledged as significant drivers of economic growth, especially in the tourism industry, despite ongoing obstacles related to gender inequality (Nassani et al., 2019; Abou-Shouk et al., 2021). Women entrepreneurs are important for bringing tourism back to life through micro, small, and medium enterprises (MSMEs), which are important for community-based economic development (Ruja et al., 2023). Furthermore, Caamaño-Franco et al. (2021) indicated that businesses run by women not only inspire new ideas but also urge people to work together in local tourism ecosystems, which leads to growth that includes everyone and lasts. Training in entrepreneurship and the creation of women’s business organizations make them even better at running tourism-related businesses (Ali, 2022).

This kind of empowerment through business helps speed up the growth of sustainable tourism by getting more people involved and making communities stronger (Alene, 2020). However, the actualization of women’s entrepreneurial potential is obstructed by institutional and cultural impediments, such as patriarchal attitudes, restrictive customary laws, and insufficient business experience (Rasanjali et al., 2021; Fasone & Pedrini, 2023). Despite these hurdles, women’s participation in entrepreneurship has continued to grow over the past twenty years, showing that more people are interested in businesses that sell goods and services (Raman et al., 2022; Tripathi, 2023). Furthermore, conducive institutional factors—such as access to financial services, startup capital, and distribution infrastructure—are crucial to enhance the

socio-economic effect of women entrepreneurs in the tourism sector (Girinatha, 2023). Women's entrepreneurship (WENT) functions as a means of empowerment and a stimulus for tourism engagement. Women who start or run local tourism businesses are often active participants in the industry (Samad & Alharthi, 2022; Filimonau et al., 2022).

Their involvement in business operations encourages teamwork, new ideas in the area, and job development, all of which make people more interested in tourism (Ruja et al., 2023). Women who start their own businesses not only help the economy, but they also become more visible and powerful in tourism networks, which encourages more people in the community to get involved. As a result, women business owners are agents of inclusion, encouraging others, especially other women, to get involved in tourism-related businesses. By including the gender aspect in business, tourism development can be more open, participatory, and long-lasting. Women business owners not only create jobs and make money, but they also work to improve society by connecting tourism, community welfare, and cultural preservation. Based on these theoretical and empirical discoveries, the following hypothesis is proposed:

H2: WENT has a positive and significant relationship with STD

H5: WENT has a positive and significant relationship with TINV.

Perceptions of women work (PWW), tourism involvement (TI), and sustainable tourism development (STD)

Perceptions of women's work (PWW) show how society thinks about women's roles and talents in the workplace and in public life. Cultural stereotypes, especially in traditional or rural settings, frequently depict women as less competent in leadership or economic involvement. However, evidence indicates that women who participate in work and entrepreneurship significantly influence social transformation and community development (Sarina & Ahmad, 2021). These ideas are closely linked to the bigger idea of gender equality, which affects how many chances women have to gain power, make decisions, and move forward in society (Altinova et al., 2019). Women may take part in more areas of society, including tourism, when people have positive views of their profession. In tourism, women can help preserve culture, get involved in local communities, and improve service quality. Still, unfavorable or traditional views make it hard for women to get involved in the tourism business. Patriarchal cultural norms, low self-efficacy, and a lack of public trust make it hard for women to take part in and lead tourism-related activities. As tourism development becomes more in line with sustainability principles, both environmental and social factors, like community support and attitudes, are very important for making tourists happy and getting long-term results (Ravikumar et al., 2022). To achieve fair and open tourist development, all members of the community, especially women, must be actively involved. For example, women in Oetune Beach, South Central Timor, are very important in bringing cultural heritage to life through traditional dancing, managing facilities, and leading tourism projects (Prasetya et al., 2021). In Indonesia, women's engagement has also been institutionalized in both the public and community-based sectors, which shows how important they are for social and economic success (Indarti, 2019).

Perceptions of women's work (PWW) influence the social environment that permits or promotes women's participation in tourism. Positive perceptions—those that acknowledge women's competence and leadership potential—encourage greater participation in tourism activities, whereas negative preconceptions impede involvement (Aghazamani et al., 2020; Junker et al., 2022). Communities that recognize women's contributions to tourism generally offer more support, trust, and involvement possibilities. Such inclusive views not only bolster women's confidence but also promote social acceptance, so facilitating both formal and informal participation in tourist planning and operations (Ravikumar et al., 2022). On the other hand, patriarchal views that keep women in the home limit their participation and lower the total potential for sustainable tourism. Based on these theoretical and empirical observations, it's clear that having a favorable view of women's work can encourage them to get involved in and contribute to sustainable tourism projects. When cultures honor and recognize women's work, it makes everyone feel included, which enhances the social underpinnings of sustainable tourist development. Based on these theoretical and empirical discoveries, the following hypothesis is proposed:

H3: PWW has a positive and significant relationship with STD.

H6: PWW has a positive and significant relationship with TINV.

Tourism involvement (TINV) and sustainable tourism development (STD)

Tourism involvement (TINV) is the level of participation of people or communities in planning, managing, and developing tourism activities. A lot of research shows that this kind of involvement is very important for the long-term success of tourism, as it encourages stakeholders to take ownership, work together, and make long-term commitments (Gannon et al., 2021; Gautam & Bhalla, 2024). Meanwhile, Kartimin et al. (2023) mentioned that substantive involvement from all stakeholders—comprising local governments, community leaders, and business entities—is crucial during the planning, execution, and assessment phases of tourist efforts. This participatory method makes ensuring that development plans meet local demands, encourage empowerment, and keep socio-economic benefits going. In the same way, Bekana (2023) noted that getting stakeholders involved in tourism makes it more powerful by making advertising stronger, service delivery better, and making sure that benefits are shared fairly.

Elshaer et al. (2021) emphasized that getting everyone in the community involved, especially women, is very important for long-term tourist growth. Women's involvement, even in micro and small tourism businesses, helps families make money and keeps the local economy strong (Nassani et al., 2019; Abou-Shouk et al., 2021). Alarcón & Cole (2019) Involving women in tourism is a way to connect economic empowerment with social sustainability. This is because women's participation boosts creativity, hospitality, and cultural preservation, which are all important parts of sustainable tourism. In this case, gender equality is a supporting pillar that makes community-based tourism projects stronger.

H7: TNIV has a positive and significant relationship with STD

H8: PWW has a positive and significant relationship with STD through TINV.
H9: WE has a positive and significant relationship with STD through TINV
H10: WENT has a positive and significant relationship with STD through TINV
 The conceptual framework and hypothesis development are as follows:

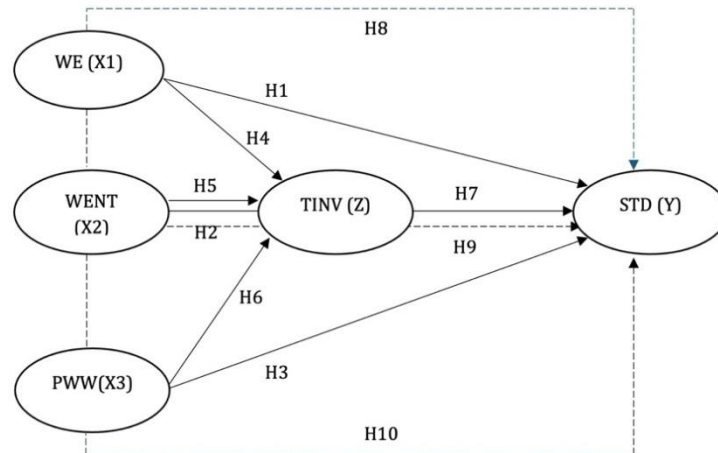


Figure 1. The conceptual framework (Note: **WE:** Women’s empowerment; **WENT:** Women entrepreneurship; **PWW:** Perceptions of women’s work; **TINV:** Tourism involvement; **STD:** Sustainable tourism development)

MATERIALS AND METHODS

This study used a quantitative, cross-sectional survey design to test the relationships among women’s empowerment, women’s entrepreneurship, and perceptions of women’s work on sustainable tourism development, and to assess the mediating effect of tourism involvement.

Samples and procedures

This study employed a non-probability convenience sampling approach. Respondents were recruited based on ease of access through two modes: (i) offline intercepts at high-traffic public venues associated with tourism activity (e.g., attractions, markets, campuses, community halls) across multiple regencies/cities in Bali, and (ii) online distribution of a survey link/QR code via social media and local community groups. Inclusion criteria were residency in Bali, age ≥18 years, and provision of informed consent. Exclusion criteria included incomplete responses (e.g., >20% missing items), duplicate submissions (screened by basic digital fingerprints and response patterns), and inattentive or patterned answering (e.g., uniform “straight-lining”). Bali is theoretically relevant to this research due to its prominent role as a major global tourism destination, where the intersection of tourism, local culture, and gender dynamics provides a unique context for examining how women’s empowerment and entrepreneurship influence sustainable tourism development. As a region with significant tourism activity, Bali offers an ideal setting to investigate the impact of social and cultural norms on women’s participation in the tourism sector, making it a valuable case study for understanding the broader implications of gender equality in sustainable tourism practices. To enhance coverage while maintaining the nature of convenience sampling, the time windows was diversified (weekdays/weekends; morning–evening) and locations, and applied informal balancing targets for gender and age without enforcing strict quotas. Because of the inherent limits to external validity with convenience samples; therefore, a selection bias by mixing online/offline modes, varying time–place recruitment, and implementing rigorous data-quality screening were employed in the process. Data collection took place in July–August 2022. Surveys were administered in both online and offline formats between July and August 2022, using intercept distribution in public locations and digital dissemination to respondents. Completed questionnaires were screened against inclusion criteria (Tourist who visit at least two times and aged ≥18 years); only fully or near-fully complete responses were retained for analysis. Finally, there were 327 respondents who completed the questionnaires.

Variables and measurements

All latent constructs were measured using multi-item Likert-type scales adapted from prior studies. Women’s Empowerment (WE; X1) comprised 12 items spanning three indicators—psychological, social, and political empowerment (four items per indicator)—adapted from Elshaer et al. (2021). Women’s Entrepreneurship (WENT; X2) was captured with three items adapted from Abou-Shouk et al. (2021). Perceptions of Women’s Work (PMW; X3) used three items adapted from Samad & Alharthi (2022). Sustainable Tourism Development (STD; Y) was operationalized with six items adapted from Suhartanto et al. (2018). Tourism Involvement (TNIV; Z, mediator) was measured with five items adapted from Elshaer et al. (2021). Items were translated and culturally adapted for the Bali context, with minor wording refinements following pretesting to ensure clarity and content relevance.

Data analysis

This study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the hypothesized relationships because it is variance-oriented, distribution-free (does not assume multivariate normality), works well with

small–moderate samples and complex models, and supports both theory confirmation and theory development (Hair et al., 2019; Hair et al., 2022). Estimation followed the standard PLS algorithm based on a series of ordinary-least-squares (OLS) regressions, with significance assessed via bootstrapping (5,000 resamples) to obtain standard errors, confidence intervals, and p-values (Hair et al., 2019; Hair et al., 2021).

Measurement (outer) model

We first assessed the reflective outer models for indicator reliability, internal consistency, and validity. Indicators were retained when standardized loadings ≥ 0.70 (loadings between 0.40–0.70 were considered for removal if their exclusion increased construct reliability/validity); internal consistency was evaluated using composite reliability ($CR \geq 0.70$) (with Cronbach’s alpha reported for completeness); convergent validity was established when $AVE \geq 0.50$. Discriminant validity was examined using HTMT (values < 0.85 conservative, < 0.90 liberal) and Fornell–Larcker (square root of AVE greater than inter-construct correlations). Collinearity among indicators and predictors was checked via VIF (target < 3.3 , acceptable < 5) (Hair et al., 2019; Hair et al., 2022).

Measurement (inner) model

After validation of the measurement models, we evaluated the inner model by inspecting path coefficients and their bootstrapped significance, coefficients of determination (R^2 ; ≈ 0.75 substantial, 0.50 moderate, 0.25 weak), effect sizes (f^2 ; ≈ 0.35 large, 0.15 medium, 0.02 small), and predictive relevance ($Q^2 > 0$) using blindfolding and PLSpredict out-of-sample checks when appropriate. We also examined collinearity among latent predictors (VIF) and reported global model fit via SRMR (< 0.08) as a descriptive index (Hair et al., 2019; Hair et al., 2021; Hair et al., 2022). For mediation (tourism involvement), we estimated the indirect effect as the product of the constituent paths ($a \times b$) and tested its significance using bias-corrected bootstrap confidence intervals (5,000 resamples). We reported specific indirect effects, total effects, and the variance accounted for ($VAF = \text{indirect}/\text{total effect}$) to characterize mediation type (e.g., complementary, competitive, partial, or full). Where relevant, we compared models with and without the mediator to corroborate the mediation mechanism and inspected changes in direct paths and R^2/Q^2 (Hair et al., 2019; Hair et al., 2022).

RESULTS

Respondent overview

The demographic breakdown of the survey participants is provided in Table 1. By gender, 40% were male respondents (132), and 60% were females (195). The age brackets indicated that most of the respondents were within the age brackets of 17 and 34 years: 43% falling within the age bracket of 17-24 years and 46% within the 25-34 years age bracket. Only 10% were between 35 and 50 years of age, while a negligible 1% were over 50 years old. With respect to the level of education, 6% had junior high school, 45% had senior high school, and 49% had undergraduate or postgraduate degrees. With regard to work status, 41% were students, 46% self-employed, 6% were private employees, 1% were civil servants, 2% were housewives, and 5% belonged to other categories of employment.

Table 1. Respondents overview

Category	Description	n	Percentage
Gender	Male	132	40%
	Female	195	60%
Age	17-24	141	43%
	25-34	149	46%
	35-50	34	10%
	>50	3	1%
Education	Junior high school	19	6%
	Senior high school	148	45%
	Undergraduate and postgraduate	160	49%
Work	Student	133	41%
	Private	19	6%
	Civil servant	2	1%
	Self-employed	150	46%
	Housewife	6	2%
	Other	17	5%

Measurement model estimation

We evaluated the measurement model for this study following the guidelines proposed by Hair et al. (2021), focusing on the reliability and validity of the constructs. As shown in Table 2, all indicator loadings for each construct were above the minimum threshold of 0.70, demonstrating strong indicator reliability and confirming that each item appropriately represented its underlying construct. The internal consistency reliability—assessed through composite reliability, Cronbach’s alpha, and the reliability coefficient—also met the recommended value of 0.70, indicating consistent measurement across items. The composite reliability ranged between 0.862 and 0.992, while Cronbach’s alpha (α) values were between 0.680 and 0.990, signifying that all latent variables, including Women Empowerment (WE), Women’s Entrepreneurship (WENT), Perceptions of Women’s Work (PWW), Tourism Involvement (TINV), and Sustainable Tourism Development (STD), had excellent internal consistency and reliability (Hair et al., 2021). Regarding the validity assessment, Table 2 also presents the convergent validity results using the Average Variance Extracted (AVE) criterion. All

AVE values exceeded the minimum threshold of 0.50, confirming that the latent constructs explain a substantial proportion of the variance in their indicators. Specifically, the AVE values for WE (0.675), WENT (0.777), PWW (0.868), TINV (0.757), and STD (0.961) indicate strong convergent validity, with the Sustainable Tourism Development construct showing the highest level of explained variance. These results collectively affirm that the measurement model demonstrates sound psychometric properties, ensuring its suitability for further analysis in the structural model. In Table 3, discriminant validity was assessed using the Heterotrait–Monotrait ratio (HTMT) and the Fornell–Larcker criterion to determine whether the constructs were distinct from one another. The HTMT ratios were all below the conservative threshold of 0.90 (Henseler et al., 2015), indicating that the constructs are empirically distinct and not excessively correlated. Additionally, the Fornell–Larcker criterion revealed that the square roots of the AVE values (diagonal elements) were higher than the correlations among constructs, reinforcing adequate discriminant validity (Hair et al., 2019). Together, the HTMT and Fornell–Larcker results confirm that the model possesses strong discriminant validity, ensuring that each construct captures a unique dimension of the research framework and minimizing potential multicollinearity concerns.

Table 2. Validity and reliability tests

Variable & scale items		Loading	CR (rho c)	CR (rho a)	AVE	CA (alpha)
Women empowerment (WE)						
WE1	Tourism in Bali makes me proud to be a Balinese	0.782	0.954	0.948	0.675	0.946
WE2	Tourism in Bali makes me feel special because people travel to see the uniqueness of my area	0.811				
WE3	Traveling in Bali made me want to tell others about what we have to offer in Bali	0.786				
WE4	Tourism in Bali reminds me that I have a unique culture to share with visitors	0.823				
WE5	Tourism in Bali makes me feel more connected to my community	0.806				
WE6	Tourism in Bali has fostered a sense of 'community spirit' in me	0.803				
WE7	I feel compelled to be involved in tourism development decisions in Bali	0.804				
WE8	Tourism provides employment opportunities for women	0.867				
WE9	Tourism ensures a reasonable income for women	0.850				
WE10	Empowering women in the tourism sector supports me in becoming economically independent	0.878				
Women's entrepreneurship (WENT)						
			0.913	0.863	0.777	0.856
WENT1	My community encourages women's entrepreneurship in the tourism sector	0.899				
WENT2	Women entrepreneurs in my community support women's empowerment in the tourism sector	0.922				
WENT3	Women entrepreneurs in my community provide women the opportunity to access the tourism market	0.821				
Perceptions of women's work (PWW)						
			0.952	0.925	0.868	0.922
PWW1	Women's work in tourism is acceptable in society	0.867				
PWW2	Women's work in tourism does not violate cultural norms and social traditions	0.961				
PWW3	Women's work in the public tourism sector (government) is more accepted by society than in tourism in the private sector	0.963				
Tourism involvement (TINV)						
			0.862	0.681	0.757	0.680
TINV1	I enjoy being involved in tourism activities	0.878				
TINV2	I think tourism activities are important	0.862				
Sustainable tourism development (STD)						
			0.992	0.990	0.961	0.990
STD1	I support the development of community-based sustainable tourism initiatives	0.982				
STD2	I enjoy to participate in the planning and development of sustainable tourism	0.990				
STD3	I adopted environmental standards Regulations to reduce the negative impacts of tourism	0.982				
STD4	I participate in cultural exchanges between local residents and visitors	0.977				
STD5	I work closely with tourism planning and development initiatives	0.970				

Table 3. HTMT and Fornell-lacker test (Note: WE: women empowerment; WENT: Women entrepreneurship; PWW: Perception of women work; TINV: Tourism involvement; STD: Sustainable development)

Variable	HTMT					Fornell-lacker				
	PWW	STD	TINV	WE	WENT	PWW	STD	TINV	WE	WENT
PWW						0.931				
STD	0.307					0.294	0.980			
TINV	0.758	0.546				0.600	0.451	0.870		
WE	0.622	0.163	0.600			0.583	0.161	0.481	0.822	
WENT	0.434	0.393	0.486	0.545		0.386	0.366	0.366	0.486	0.882

Structural model estimation

The structural model evaluation tests the hypothesized relationships among research variables through three key stages. First, multicollinearity between predictor variables is assessed using the Variance Inflation Factor (VIF), where inner VIF values below 5 indicate that no serious multicollinearity exists among constructs (Hair et al., 2021). Second, hypothesis testing is conducted by examining the t-statistics and p-values derived from the bootstrapping procedure; relationships are considered significant when the t-value exceeds 1.96 or the p-value is less than 0.05. In addition, the estimated path coefficients should be reported together with their 95% confidence intervals to ensure the precision and reliability of the results. Finally, the strength of the influence between variables at the structural level is evaluated using the f² effect size, with values of 0.02, 0.15, and 0.35 representing small, medium, and large effects, respectively (Hair et al., 2021). This comprehensive approach ensures that the structural model is statistically sound and that the hypothesized relationships are both meaningful and reliable.

Table 4 presents the results of the structural model analysis used to test the hypothesized relationships among women empowerment (WE), women's entrepreneurship (WENT), perceptions of women's work (PWW), tourism involvement

(TINV), and sustainable tourism development (STD). The model shows that several relationships are statistically significant at the 5 percent level, while others are not. The direct path from WE → STD (H1) is significant ($\beta = -0.216$, $t = 2.244$, $p = 0.025$), indicating that women empowerment has a negative yet significant effect on sustainable tourism development, though the effect size is small ($f^2 = 0.036$). Conversely, WENT → STD (H2) demonstrates a positive and significant effect ($\beta = 0.298$, $t = 3.369$, $p = 0.001$), suggesting that women’s entrepreneurship plays an important role in promoting sustainable tourism, with a moderate effect ($f^2 = 0.091$). In contrast, PWW → STD (H3) is not significant ($\beta = 0.058$, $t = 0.592$, $p = 0.554$), implying that perceptions of women’s work alone do not directly influence sustainable tourism outcomes.

Table 4. The result of structural model (Notes: WE: women empowerment; WENT: women entrepreneurship; PWW: perception of women work; TINV: tourism involvement; STD: sustainable tourism development)

Hypothesis	Path coefficient (β)	PCI		P-value	t-statistic	f^2	VIF	Supported
		2.5%	97.5%					
H1- WE (X1) → STD (Y)	-0.216	-0.389	-0.019	0.025	2.244	0.036	1.764	Yes
H2- WENT (X2) → STD (Y)	0.298	0.122	0.453	0.001	3.369	0.091	1.357	Yes
H3- PWW (X3) → STD (Y)	0.058	-0.136	0.226	0.554	0.592	0.002	1.907	No
H4- WE (X1) → TINV (Z)	0.156	-0.040	0.363	0.134	1.500	0.023	1.724	No
H5- WENT (X2) → TINV (Z)	0.110	-0.062	0.249	0.184	1.330	0.015	1.337	No
H6- PWW (X3) → TINV (Z)	0.466	0.294	0.612	0.000	5.629	0.232	1.547	Yes
H7- TINV (Z) → STD (Y)	0.411	0.235	0.574	0.000	4.556	0.141	1.653	Yes
H8- WE (X1) → TINV (Z) → STD (Y)	0.064	-0.016	0.154	0.157	1.418			No
H9- WENT (X2) → TINV (Z) → STD (Y)	0.045	-0.018	0.115	0.201	1.282			No
H10- PWW (X3) → TINV (Z) → STD (Y)	0.191	0.091	0.309	0.001	3.378			Yes
	R ²							
STD	0.277							
TINV	0.395							

The mediating variable, tourism involvement (TINV), reveals further insights. The relationship WE → TINV (H4) is not significant ($\beta = 0.156$, $t = 1.500$, $p = 0.134$), indicating that empowerment alone does not strongly encourage active participation in tourism. Similarly, WENT → TINV (H5) is non-significant ($\beta = 0.110$, $t = 1.330$, $p = 0.184$). However, PWW → TINV (H6) is strongly significant ($\beta = 0.466$, $t = 5.629$, $p = 0.000$), with a high effect size ($f^2 = 0.232$), demonstrating that positive societal perceptions of women’s work substantially enhance their involvement in tourism activities. Furthermore, TINV → STD (H7) is also significant ($\beta = 0.411$, $t = 4.556$, $p = 0.000$), indicating that tourism involvement has a meaningful impact on sustainable tourism development, supported by a moderate effect size ($f^2 = 0.141$).

In terms of mediation analysis, only one indirect relationship was significant. The path PWW → TINV → STD (H10) shows a positive and significant indirect effect ($\beta = 0.191$, $t = 3.378$, $p = 0.001$), confirming the mediating role of tourism involvement in translating perceptions of women’s work into sustainable tourism outcomes. In contrast, WE → TINV → STD (H8) and WENT → TINV → STD (H9) are not supported due to insignificant t-values (1.418 and 1.282, respectively). The inner model’s predictive accuracy is indicated by R² values of 0.277 for sustainable tourism development and 0.395 for tourism involvement, reflecting moderate explanatory power. All VIF values are below 5, confirming the absence of multicollinearity among constructs. Overall, the structural model demonstrates that women’s entrepreneurship directly enhances sustainable tourism development, while perceptions of women’s work exert an indirect influence through tourism involvement. In contrast, empowerment initiatives alone, without corresponding increases in participation or entrepreneurship, do not significantly contribute to sustainability outcomes. These findings underscore the importance of fostering active engagement and supportive social perceptions to achieve inclusive and sustainable tourism growth. Figure 2 illustrates the structural path coefficients linking each indicator to its respective construct in this study

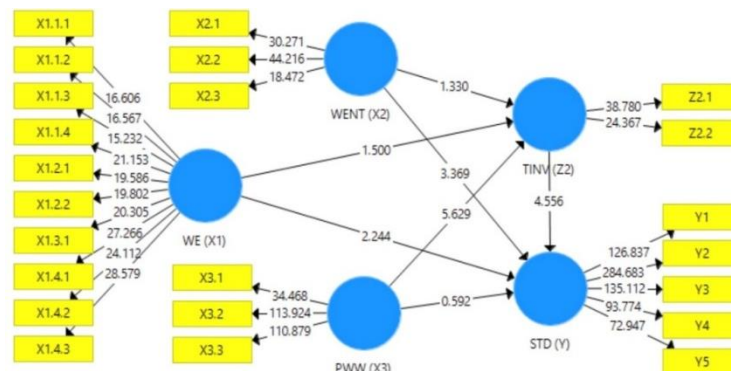


Figure 2. The result of path coefficient

The goodness fit model

The structural model’s predictive power was evaluated using the coefficient of determination (R²), which indicates the proportion of variance in the endogenous variables explained by the exogenous constructs. As suggested by Chin (1998), R² values of 0.19, 0.33, and 0.66 represent low, moderate, and high explanatory power, respectively. Based on Table 4, the

R^2 value for sustainable tourism development (STD) is 0.277, indicating that approximately 27.7% of the variance in STD is explained by women empowerment, women's entrepreneurship, perceptions of women's work, and tourism involvement. This level falls within the moderate range of influence, suggesting that while these predictors contribute meaningfully to sustainable tourism outcomes, other unobserved factors likely account for the remaining variance. Meanwhile, the R^2 value for tourism involvement (TINV) is 0.395, demonstrating a moderate explanatory strength, meaning that nearly 39.5% of the variation in women's participation in tourism activities is predicted by women empowerment, women's entrepreneurship, and perceptions of women's work. In addition to the R^2 evaluation, the model's predictive accuracy and overall fit were further assessed using the Stone–Geisser's Q^2 and the standardized root mean square residual (SRMR).

A Q^2 value greater than zero indicates that the exogenous constructs possess predictive relevance for the endogenous variables (Hair et al., 2019). The Q^2 results for both sustainable tourism development (STD) and tourism involvement (TINV) are positive, confirming that the model has adequate predictive capability and is able to forecast variations in these dependent constructs effectively. Furthermore, the SRMR value obtained is 0.088, which falls below the recommended upper limit of 0.10, indicating a satisfactory model fit between the empirical data and the proposed structural model. This suggests that the estimated relationships closely approximate the observed data structure, demonstrating that the overall model meets acceptable standards for goodness of fit. Collectively, the R^2 , Q^2 , and SRMR statistics indicate that the model exhibits good explanatory power, predictive accuracy, and structural soundness in capturing the relationships among women's empowerment, women's entrepreneurship, perceptions of women's work, tourism involvement, and sustainable tourism development.

DISCUSSION

Women empowerment, tourism involvement, and sustainable tourism development

By increasing women's access to education, training, entrepreneurship, and job possibilities in the tourism industry, women's empowerment plays a critical role as a catalyst for the advancement of sustainable tourism. These kinds of involvement support equitable distribution of the advantages of tourism, inclusive economic growth, and enhanced local welfare. By making investments in local infrastructures, health care, and education, empowered women can strengthen the social aspect of sustainability and promote community resilience. Additionally, women's active participation in tourist development encourages more inclusive participation in community decision-making and lessens gender inequities.

This is consistent with the findings of Irawan & Nara (2020), who highlighted the economic, sociocultural, and environmental contributions made by women, which are crucial to sustainable tourism. Similarly, by encouraging equitable access to employment opportunities and entrepreneurship, women's involvement in tourism can help reduce gender inequality, according to Elshaer et al. (2021). Su et al. (2023) further supported the idea that inclusion is essential to sustainable development by confirming that women's empowerment in the tourism industry significantly boosts economic growth in rural communities. Despite these advantages, the correlation between women's empowerment and tourism involvement is not consistently harmonious due to enduring gender barriers and systemic imbalances.

Social conventions and cultural prejudices typically prevent women from taking on decision-making responsibilities in tourism, limiting them to subordinate or service-oriented professions such as receptionists, servers, and support personnel (Kusumadewi et al., 2023; Silva & Couto, 2023). These gendered attitudes, along with worries about safety and cultural expectations about home duties, make it hard for women to fully participate in the field (Hosseini et al., 2022). Mitra et al. (2023) noted that in numerous developing nations, women employed in tourism obtain fewer rewards and face restricted opportunities for professional progress relative to their male counterparts. So, even while women work hard to make tourism happen, they are still not well represented in leadership and policy-making positions.

Community involvement, conversely, has had a significant positive impact on the advancement of sustainable tourism. When communities, especially women, are actively involved in managing tourism resources, they provide economic rewards, strengthen social bonds, and encourage environmental stewardship (Kartimin et al., 2023). Communities can boost their revenue and create jobs by starting local businesses like homestays, restaurants, and travel services (Rahman & Emroz, 2023). Additionally, Sharma & Kumar (2022) discovered that cooperation among community stakeholders enhances the enduring sustainability of tourism efforts. The present findings demonstrate that tourism involvement does not serve as a mediator in the relationship between women's empowerment and sustainable tourist development. This may be due to long-standing gendered beliefs that see women as secondary actors rather than decision-makers in tourism activities (Latjuba, 2024). Singh et al. (2023) pointed out that gender inequality is still a major barrier to women's active engagement. Wardhani & Susilowati (2021) also pointed out that family rules and cultural norms often make it hard for women to work in tourism. Candra et al. (2023) contended that patriarchal frameworks and assumptions regarding women's responsibilities further impede their empowerment. As a result, even when community involvement helps tourism grow as a whole, structural gender prejudices still keep women from reaching their full potential as agents of sustainable change in the industry.

Women entrepreneurship, tourism involvement, and sustainable tourism development

Statistical investigation indicated that women's entrepreneurship has a favorable and significant impact on sustainable tourist development. This finding shows how important women are to the growth of tourism through new ideas, using local resources, and making jobs. Women help diversify the economy and keep tourism-related jobs going by running businesses in the tourism industry, such as hotels, restaurants, and travel agencies. These findings align with Filimonau et al. (2022), who observed that female entrepreneurs foster tourist growth by investigating untapped local resources and presenting innovative business concepts. In the same way, Martini et al. (2020) said that women who run their own businesses are important for sustainable tourism since their experience and creativity lead to new ideas and make businesses stronger. Nonetheless, this

hopeful perspective is not universally held. Tripathi (2023) warned that women's entrepreneurship could hurt sustainable development if gender inequality continues to limit women's access to money, training, and decision-making chances. In these situations, systemic unfairness could make it harder for women-led businesses to help achieve growth that is both fair and long-lasting. Women's entrepreneurship has a favorable direct effect on sustainable tourism, but it has a negative effect on tourism involvement. This indicates that women entrepreneurs frequently occupy peripheral or service-oriented positions, such as culinary providers, retailers, and hospitality personnel, rather than being completely included into strategic tourist management. Shantika et al. (2021) discovered that women in Bali mostly participate in the culinary sector and seldom engage in essential tourism operations, indicating constrained empowerment and inequitable benefit distribution. Structural restrictions, such as insufficient financial assistance, restricted market access, and inadequate entrepreneurial training, hinder women's active involvement in tourism development (Diaz & Kien, 2019; Girinatha, 2023). So, even while women's companies help the economy, they don't always lead to further involvement or leadership in the tourism industry.

Additionally, the statistical findings demonstrate that tourism involvement does not serve as a mediator in the relationship between women's entrepreneurship and sustainable tourism development. This means that even if women business owners help the local economy, they are not really involved in the bigger picture of planning and carrying out sustainable tourism. Junker et al. (2022) underscored that cultural norms and gender inequity persist in obstructing women's direct involvement in tourist decision-making. Consequently, women's contributions frequently remain indirect, confined to operational or support jobs rather than strategic leadership positions. Dashper (2023) and Poulaki et al. (2023) similarly noted that women's involvement in tourism is often marked by occupational segregation, with roles such as receptionists, shop attendants, or restaurant workers, indicating unequal power dynamics and limited mobility within the industry. Overall, women's entrepreneurship does help the economy flourish, but gender-based constraints that don't go away stop it from being a powerful tool for attaining completely inclusive and sustainable tourist development.

Perceptions of women work, tourism involvement, and sustainable tourism development

The perception of women's work negatively impacted sustainable tourism development, highlighting the ongoing gender discrimination within the tourism industry. Many people in Bali still think that women aren't as good at managing or making decisions in the tourism industry. This view comes from long-held social ideas that link women's labor to being passive and not being forceful. Freund & Hernandez-Maskivker (2021) say that these kinds of social conceptions limit women's freedom and make it harder for tourism to be sustainable by keeping women out of certain activities. Furthermore, the characteristics of tourist employment—such as nocturnal shifts in hotels and entertainment establishments—perpetuate adverse perceptions that hinder women's engagement (Partanen et al., 2023). Martin (2023) also noted that tourism managers don't trust women because they think they don't have the abilities or confidence to do the job, which makes it harder for women to get involved directly. Cultural norms and patriarchal customs (Dashper, 2023; Eşitti, 2023; Poulaki et al., 2023) continue to serve as significant obstacles to gender equality and inclusive development within the tourism sector.

However, changing the perception of women's work might make gender equality better and more women can get involved in tourism-related businesses. Women are more likely to start successful tourism businesses when they have enough social, moral, and material support, as well as fair access to education, funding, and markets. When people have more positive views of what women can do, it makes it easier for them to contribute to tourism and sustainability. Singh et al. (2023) observed that acknowledging the equivalent value of women's work indicates advancement towards gender parity in the tourism industry. Abou-Shouk et al. (2021) also pointed out that when women are actively involved in tourism, it helps the local economy expand and gives them more influence in their communities. So, how people see women's labor is very important in determining how much they participate in tourism and the larger effects of sustainable development.

Moreover, the findings of this study demonstrate that tourism involvement serves as a mediator in the relationship between perceptions of women's work and sustainable tourism development. This indicates that if people change the way they think about women's roles, more people will be able to participate in tourism, which will improve sustainable outcomes. But gender bias and traditional ideas about women still make it hard for them to be directly involved in tourism management and ownership. As Martin (2023) and Freund & Hernandez-Maskivker (2021) noted, societal distrust and bias regarding women's professional capabilities lead to unequal participation, with women frequently assuming operational roles—such as hotel receptionists, restaurant servers, or ticket attendants—rather than leadership positions (Kusumadewi et al., 2023; Mitra et al., 2023). The persistent social perception of women's labor as secondary or supportive hinders fair benefit sharing and limits community-wide participation in tourism efforts. So, it is still important to break down these cultural and structural hurdles in order to achieve gender-inclusive and sustainable tourism development.

CONCLUSION

This study found that women's empowerment, women's entrepreneurship, perceptions of women's work, tourism involvement, and sustainable tourism development are closely interrelated. Women's entrepreneurship significantly enhances sustainable tourism by driving innovation, creating employment, and strengthening local economies when supported by access to capital, training, and decision-making power. However, persistent gender inequality and limited resources continue to constrain women's leadership roles and participation in strategic tourism management. Negative social perceptions that portray women as passive or confined to service roles further restrict their involvement, undermining inclusivity and sectoral growth. Improving perceptions of women's capabilities and ensuring equal access to education, markets, and financial support can strengthen their contribution to tourism and sustainability outcomes. The study also confirms that tourism involvement mediates the relationship between perceptions of women's work and

sustainable tourism development, emphasizing that inclusive participation is vital for long-term success. Theoretically, these findings advance understanding of gender and sustainability in tourism, while empirically they highlight the need for policies that empower women, dismantle social barriers, and promote equal participation. Ultimately, empowering women in tourism is both a developmental and economic imperative for achieving a more equitable and sustainable industry. Future studies might investigate the long-run outcomes of targeted policy interventions to address gender inequality in the tourism sector, such as leadership positions, financial support, and decision-making opportunities for women.

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REFERENCES

- Abou-Shouk, M. A., Mannaa, M. T., & Elbaz, A. M. (2021). Women's empowerment and tourism development: A cross-country study. *Tourism Management Perspectives*, 37(100782), 1-11. <https://doi.org/10.1016/j.tmp.2020.100782>
- Aghazamani, Y., Kerstetter, D., & Allison, P. (2020). Women's perceptions of empowerment in Ramsar, a tourism destination in northern Iran. *Women's Studies International Forum*, 79(102340), 1-10. <https://doi.org/10.1016/j.wsif.2020.102340>
- Alarcón, D. M., & Cole, S. (2019). No sustainability for tourism without gender equality. *Journal of Sustainable Tourism*, 27(7), 903-919. <https://doi.org/10.1080/09669582.2019.1588283>
- Alene, E. T. (2020). Determinants that influence the performance of women entrepreneurs in micro and small enterprises in Ethiopia. *Journal of Innovation and Entrepreneurship*, 9(1), 903-919. <https://doi.org/10.1186/s13731-020-00132-6>
- Ali, M. N. (2022). Partisipasi Masyarakat Dalam Mengembangkan Kepariwisata Desa Kersik Menuju Desa Wisata Di Kecamatan Marang Kayu [Community Participation in Developing Tourism in Kersik Village Towards a Tourist Village in Marang Kayu District]. *Jurnal Administrasi Bisnis*, 10(3), 246-255. <https://doi.org/10.54144/jadbis.v10i3.8682>
- Al-Qahtani, M., Zguir, M. F., Al-Fagih, L., & Koç, M. (2022). Women Entrepreneurship for Sustainability: Investigations on Status, Challenges, Drivers, and Potentials in Qatar. *Sustainability*, 14(7), 1-27. <https://doi.org/10.3390/su14074091>
- Altınova, H. H., Duyan, V., & Megahead, H. A. (2019). The Impact of the Human Rights Education Program for Women on Gender Perceptions of Social Work Students. *Research on Social Work Practice*, 29(1), 113-121. <https://doi.org/10.1177/1049731516679889>
- Bachri, N., Wardhiah, W., Roni, M., & Muhammad Nur, M. (2022). Women's entrepreneurship in supporting halal tourism in Lhokseumawe city. *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration*, 2(1), 49-56. <https://doi.org/10.54443/ijeabas.v2i1.156>
- Bagheri, F., Ghaderi, Z., Abdi, N., & Hall, C. M. (2022). Female entrepreneurship, creating shared value, and empowerment in tourism; the neutralizing effect of gender-based discrimination. *Current Issues in Tourism*, 26(21), 3465-3482. <https://doi.org/10.1080/13683500.2022.2126749>
- Bekana, K. H. (2023). Stakeholders' Involvement in Tourism Development for Poverty Alleviation: The Case of Suba Forest, Ethiopia. *International Journal of Science and Qualitative Analysis*, 9(1), 12-22. <https://doi.org/10.11648/j.ij.sqa.20230901.12>
- Berkovitch, N. (2022). *The Emergence and Transformation of the International Women's Movement*. In Constructing World Culture, 100-134. De Gruyter Brill. <https://doi.org/10.1515/9781503617681-008>
- Bonewit, A., & Santis, E. De. (2016). *The various aspects of violence against women*. In The Issue of Violence Against Women in the European Union, 1-24, European Parliament. [https://www.europarl.europa.eu/RegData/etudes/STUD/2016/556931/IPOL_STU\(2016\)556931_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2016/556931/IPOL_STU(2016)556931_EN.pdf)
- Caamaño-Franco, I., Pérez-García, A., & Andrade-Suárez, M. (2021). *Female Entrepreneurship and Marine Tourism*. In *Innovation and Entrepreneurial Opportunities in Community Tourism*, 172-190. <https://doi.org/10.4018/978-1-7998-4855-4.ch010>
- Candra, P. H., Maulida, F. H., & Zamahsari, G. K. (2023). *Women in Sustainable Tourism Development (Case Study at Komodo and Labuan Bajo Tourism Destination)*. *E3S Web of Conferences*, 388, 04011. <https://doi.org/10.1051/e3sconf/202338804011>
- Chin, W. W. (1998). *The partial least squares approach to structural equation modeling*. In G. A. Marcoulides (Ed.), *Modern methods for business research*, 295-336, New Jersey: Lawrence Erlbaum Associates.
- Dashper, K. (2023). *Gender and rural tourism*. In *Handbook on Tourism and Rural Community Development*. 140-152, Edward Elgar Publishing, Cheltenham, United Kingdom. <https://doi.org/10.4337/9781800370067.00019>
- Diaz, J. F., & Kien, D. T. (2019). Tourism Finance: Investing and Financing in Sustainable Tourism. *Jurnal Ekonomi Dan Bisnis Jagaditha*, 6(2) 72-77. <https://doi.org/10.22225/jj.6.2.1254.72-77>
- Dong, H., & Khan, M. S. (2023). Exploring the Role of Female Empowerment in Sustainable Rural Tourism Development: an Exploratory Sequential Mixed-Method Study. *International Journal of Professional Business Review*, 8(4), e01651, 1-28. <https://doi.org/10.26668/businessreview/2023.v8i4.1651>

- Dossou, T. A. M., Ndomandji Kambaye, E., Bekun, F. V., & Eoulam, A. O. (2023). Exploring the linkage between tourism, governance quality, and poverty reduction in Latin America. *Tourism Economics*, 29(1), 210–234. <https://doi.org/10.1177/13548166211043974>
- Durrah, O., Elbaz, A.M., El-Maghraby, L., & Irfan, M. (2025). Women's sense of belonging: Moderating economic, sociocultural, and environmental impacts on community-based tourism development. *Geojournal of Tourism and Geosites*, 60(2spl), 1221–1230. <https://doi.org/10.30892/gtg.602spl19-1495>
- Elshaer, I., Moustafa, M., Sobaih, A. E., Aliedan, M., & Azazz, A. M. S. (2021). The impact of women's empowerment on sustainable tourism development: Mediating role of tourism involvement. *Tourism Management Perspectives*, 38(100815), 1-12. <https://doi.org/10.1016/j.tmp.2021.100815>
- Eşitti, B. B. (2023). Women in tourism employment. In *Inclusion in Tourism*, 47–61. Routledge, Abingdon, United Kingdom. <https://doi.org/10.4324/9781003255413-5>
- Esparza-Huamanchumo, R.M., Botezan, I., Sánchez-Jiménez, R., & Villalba-Condori, K.O. (2024). Ecotourism, sustainable tourism and nature-based tourism: An analysis of emerging fields in tourism scientific literature. *Geojournal of Tourism and Geosites*, 54(2spl), 953–966. <https://doi.org/10.30892/gtg.542spl19-1270>
- Fasone, V., & Pedrini, G. (2023). Industry-specific upskilling of seasonal tourism workers: Does occupational gender inequality matter? *Tourism Economics*, 29(7), 1915–1936. <https://doi.org/10.1177/13548166221146850>
- Filimonau, V., Matyakubov, U., Matniyozov, M., Shaken, A., & Mika, M. (2022). Women entrepreneurs in tourism in a time of a life event crisis. *Journal of Sustainable Tourism*, 32(3), 457–479. <https://doi.org/10.1080/09669582.2022.2091142>
- Fonseca, I., Galeano, C., & Roa, L. (2025). Perception of key stakeholders on sustainable tourism practices: The case of Villa de Leyva, Colombia. *Geojournal of Tourism and Geosites*, 60(2spl), 1057–1066. <https://doi.org/10.30892/gtg.602spl03-1479>
- Freund, D., & Hernandez-Maskivker, G. (2021). Women managers in tourism: Associations for building a sustainable world. *Tourism Management Perspectives*, 38(100820), 1-12. <https://doi.org/10.1016/j.tmp.2021.100820>
- Gannon, M., Rasoolimanesh, S. M., & Taheri, B. (2021). Assessing the Mediating Role of Residents' Perceptions toward Tourism Development. *Journal of Travel Research*, 60(1), 1-23. <https://doi.org/10.1177/0047287519890926>
- Gautam, V., & Bhalla, S. (2024). Exploring the relationships among tourism involvement, residents' empowerment, quality of life and their support for sustainable tourism development. *Journal of Cleaner Production*, 434(139770). <https://doi.org/10.1016/j.jclepro.2023.139770>
- Girinatha, D. G. W. (2023). *Empowerment of Micro, Small, and Medium Enterprises (MSMEs) on Access to Capital Related to Ecotourism Development*. In Proceedings of the 3rd International Conference on Business Law and Local Wisdom in Tourism (ICBLT 2022). https://doi.org/10.2991/978-2-494069-93-0_25
- Gonda, T. (2024). Women as thoughtful and responsible consumers of tourism: Gender differences in tourism consumption patterns and attitudes towards tourism. *Geojournal of Tourism and Geosites*, 54(2spl), 794–801. <https://doi.org/10.30892/gtg.542spl03-1254>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). SAGE Publications, Thousand Oaks, CA, USA.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*. Springer, Cham, Switzerland. <https://doi.org/10.1007/978-3-030-80519-7>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 1–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hosseini, S., Macias, R. C., & Garcia, F. A. (2022). The exploration of Iranian solo female travellers' experiences. *International Journal of Tourism Research*, 24(2), 256–269. <https://doi.org/10.1002/jtr.2498>
- Hurdawaty, R., Elsa, V. M., & Kusumaningrum, D. A. (2020). Local Community Participation in Tourism in Siau Island, Sitaro District, North Sulawesi, Indonesia. *South Asian Journal of Social Studies and Economics*, 8(3), 1-12. <https://doi.org/10.9734/sajsse/2020/v8i330210>
- Indarti, S. H. (2019). Peran perempuan dalam pembangunan masyarakat. *The Indonesian Journal of Public Administration*, 5(1). <https://doi.org/10.52447/ijpa.v5i1.1650>
- Irawan, N., & Nara, V. (2020). Managing women empowerment through participation in sustainable tourism development in Kampong Phluk, Siem Reap, Cambodia. *International Journal of Economics, Business and Accounting Research*, 4(02). <https://doi.org/10.29040/ijebur.v4i02.1053>
- Junker, N. M., Hernandez Bark, A. S., Kark, R., Morgenroth, T., Peus, C., & van Dick, R. (2022). Editorial to Part II: Revisioning, Rethinking, Restructuring Gender at Work: Contributors to Gender-Role Stereotyping. *Journal of Applied Social Psychology*, 52(8), 704–709. <https://doi.org/10.1111/jasp.12899>
- Kartimin, I. W., Arini, N. N., & Aditya, I. W. P. (2023). Stakeholders Involvement In The Development Of Munggu Tourism Village As A Sustainable Tourism Attraction. *Journey: Journal of Tourismpreneurship, Culinary, Hospitality, Convention and Event Management*, 6(1), 67–86. <https://doi.org/10.46837/journey.v6i1.146>
- Kusumadewi, Y., Solikhathun, E., Sari, L. K., Sulaiman, A. I., Wuryaningsih, T., & Prastyanti, S. (2023). Women's Participation in Tourist Village Empowerment. *Journal of Digital Marketing and Communication*, 3(1), 1-12. <https://doi.org/10.53623/jdmc.v3i1.261>
- Langoday, T. O., & Man, S. (2024). The Role Of Population Growth, Education Level, Labor Force Participation Rate On Poverty Level In Indonesia. *Journal of Law and Sustainable Development*, 12(2), e3011. P.1-13. <https://doi.org/10.55908/sdgs.v12i2.3011>
- Latjuba, A. Y. (2024). Women In Sustainable Tourism Development: A Case Study Of The Empowerment Of Women Workers In Bulukumba Tourism Destinations. *Journal of Law and Sustainable Development*, 12(4), e3623, 1-21. <https://doi.org/10.55908/sdgs.v12i4.3623>
- Martin, C. (2023). Skill-Building or Unskilled Labour for Female Youth: a Bauchi Case. In *Female and Male in West Africa*, 1-13, Taylor and Francis, Abingdon, United Kingdom. <https://doi.org/10.4324/9781003402749-21>
- Martini, U., Malacarne, K., Pederzoli Giovanazzi, S., & Buffa, F. (2020). Sustainable tourism development in rural and marginal areas and opportunities for female entrepreneurship: lessons from an exploratory study. *Worldwide Hospitality and Tourism Themes*, 12(4), 421-440. <https://doi.org/10.1108/WHATT-05-2020-0023>
- Matricano, D. (2022). The influence of gender on technology transfer processes managed in Italian Young Innovative Companies: A stochastic frontier analysis. *Technovation*, 111(102383). <https://doi.org/10.1016/j.technovation.2021.102383>
- Minikhanova, S., Imangulova, T., Abdikarimova, M., Gubarenko, A., & Aldybayev, B. (2024). Assessment of policy frameworks in promoting sustainable ecological tourism. *Geojournal of Tourism and Geosites*, 56(4), 1718–1731. <https://doi.org/10.30892/gtg.56427-1341>
- Mitra, S. K., Chattopadhyay, M., & Chatterjee, T. K. (2023). Can Tourism Development Reduce Gender Inequality? *Journal of Travel Research*, 62(3), 563-577. <https://doi.org/10.1177/00472875211073975>
- Moghadam, V. (2008). From patriarchy to empowerment: women's participation, movement, and rights in the Middle East, North Africa, and South Asia. *Choice Reviews Online*, 45(7), 38-61. <https://doi.org/10.5860/choice.45-3861>
- Mulyani, S., Ahsani, R. D. P., & Wijaya, D. N. (2021). Collaborative Governance on Ecotourism: Towards Sustainable Tourism Development. *Journal Borneo Administrator*, 17(3), 319-334. <https://doi.org/10.24258/jba.v17i3.958>

- Naguib, S. M., Sobaih, A. E. E., & Edrees, H. N. E. (2025). Empowering voices: Confronting the glass ceiling for Egyptian women in the tourism and heritage sector. *GeoJournal of Tourism and Geosites*, 62(4), 2076–2085. <https://doi.org/10.30892/gtg.62407-1573>
- Narayan, D. (2005). Measuring empowerment: cross-disciplinary perspectives. *Choice Reviews Online*, 43(03), 16-91. <https://doi.org/10.5860/choice.43-1691>
- Nassani, A. A., Aldakhil, A. M., Abro, M. M. Q., Islam, T., & Zaman, K. (2019). The impact of tourism and finance on women empowerment. *Journal of Policy Modeling*, 41(2), 234-254. <https://doi.org/10.1016/j.jpolmod.2018.12.001>
- Ojediran, F. O., & Anderson, A. (2020). Women's entrepreneurship in the global south: Empowering and emancipating? *Administrative Sciences*, 10(4), 1-22. <https://doi.org/10.3390/admsci10040087>
- Pal, M., Gupta, H., & Joshi, Y. C. (2022). Social and economic empowerment of women through financial inclusion: empirical evidence from India. *Equality, Diversity and Inclusion*, 41(2), 294-305. <https://doi.org/10.1108/EDI-04-2021-0113>
- Partanen, M., Kettunen, M., & Saarinen, J. (2023). Community inclusion in tourism development: young people's social innovation propositions for advancing sustainable tourism. *Tourism Recreation Research*, 50(1), 58-73. <https://doi.org/10.1080/02508281.2023.2226040>
- Poulaki, I., Karioti, V., & Tsoulogianni, C. (2023). *Women in Tourism Industry: From Glass Ceiling Effect to #MeToo Movement*. 307–318, Springer Nature, Cham, Switzerland. https://doi.org/10.1007/978-3-031-29426-6_20
- Prasetya, A., Rahardjo, K., Mawardi, M. K., Rustam Hidayat, R., & Prakasa, Y. (2021). The mediation role of financial literacy in ensuring MSMEs sustainability: An organizational characteristics perspective. *Jurnal Ilmiah Bidang Akuntansi Dan Manajemen*, 18(1), 61-79. <https://doi.org/10.31106/jema.v18i1.10356>
- Rahman, M. A., & Emroz, F. (2023). The Impact of Women's Empowerment on Sustainable Tourism Development in Bangladesh; Mediating Role of Tourism Involvement. *International Journal of Tourism and Hospitality*, 3(2), 34-48. <https://doi.org/10.2139/ssrn.4406747>
- Raihan, A., Voumik, L. C., Nafi, S. Md., & Kuri, B. C. (2022). How Tourism Affects Women's Employment in Asian Countries: An Application of GMM and Quantile Regression. *Journal of Social Sciences and Management Studies*, 1(4), 57–72. <https://doi.org/10.56556/jssms.v1i4.335>
- Raman, R., Subramaniam, N., Nair, V. K., Shivdas, A., Achuthan, K., & Nedungadi, P. (2022). Women Entrepreneurship and Sustainable Development: Bibliometric Analysis and Emerging Research Trends. *Sustainability*, 14(15), 9160. <https://doi.org/10.3390/su14159160>
- Rasanjali, C., Sivashankar, P., & Mahaliyanaarachchi, R. P. (2021). Women Participation in Rural Tourism: A Case of Ella, Sri Lanka. *Journal of Agribusiness and Rural Development Research*, 7(2), 256–269. <https://doi.org/10.18196/agraris.v7i2.11294>
- Rashwan, K.A., Mathew, V., Akef, R., & Elbaz, A.M. (2024). Bridging empowerment and entrepreneurship: How NGOs foster women's success in Egypt's tourism industry. *Geojournal of Tourism and Geosites*, 57(4spl), 1991–1998. <https://doi.org/10.30892/gtg.574spl13-1366>
- Ravikumar, A., Al Subhi, S., & Meesala, K. M. (2022). Community Perception and Attitude towards Sustainable Tourism and Environmental Protection Measures: An Exploratory Study in Muscat, Oman. *Economies*, 10(2), 1-13. <https://doi.org/10.3390/economies10020029>
- Reshi, I. A., & Sudha, D. T. (2022). Women Empowerment: A Literature Review. *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration*, 2(6), 1353–1359. <https://doi.org/10.54443/ijebas.v2i6.753>
- Ruja, I. N., Idris, I., & Kurniawan, N. C. (2023). The role of local economic development in reducing poverty alleviation: Tourism development activity. *Humanities and Social Sciences Letters*, 11(4), 440–450. <https://doi.org/10.18488/73.v11i4.3564>
- Said, I., & Enslin, C. (2020). Lived Experiences of Females With Entrepreneurship in Sudan: Networking, Social Expectations, and Family Support. *SAGE Open*, 10(4), 215824402096313. <https://doi.org/10.1177/2158244020963131>
- Samad, S., & Alharthi, A. (2022). Untangling Factors Influencing Women Entrepreneurs' Involvement in Tourism and Its Impact on Sustainable Tourism Development. *Administrative Sciences*, 12(2), 1-19. <https://doi.org/10.3390/admsci12020052>
- Sarina, O., & Ahmad, M. R. S. (2021). Diskriminasi gender terhadap perempuan pekerja di kawasan industri Makassar [Gender discrimination against female workers in the Makassar industrial area]. *Pinisi Journal Of Sociology Education Review*, 1(2), 64-71. <https://doi.org/10.26858/pjser.v1i2.21166>
- Shantika, B., Ernawati, N. M., & Sarja, N. L. A. K. Y. (2021). Balinese Women's Role and Gender Gap in the Sustainable Tourism Development. *International Journal of Green Tourism Research and Applications*, 3(2), 49–57. <https://doi.org/10.31940/ijogtra.v3i2.49-57>
- Sharma, K., & Kumar, L. (2022). Linking ecotourism and biodiversity conservation. In *Conservation through Sustainable Use*, 142–164, Routledge India, New Delhi, India. <https://doi.org/10.4324/9781003343493-16>
- Silva, S., & Couto, M. J. (2023). Gender Bias in the Hospitality Sector: Female and Male Jobs. *International Conference on Tourism Research*, 6(1), 292–297. <https://doi.org/10.34190/ictr.6.1.1095>
- Singh, A., Anantharajah, S., & Francis, R. S. (2023). *Women's Empowerment and Tourism Development*. In *Women's Empowerment Within the Tourism Industry*. 20–31, IGI Global Publishing, Hershey, PA, USA. <https://doi.org/10.4018/978-1-6684-8417-3.ch002>
- Su, M. M., Wall, G., Ma, J., Notarianni, M., & Wang, S. (2023). Empowerment of women through cultural tourism: perspectives of Hui minority embroiderers in Ningxia, China. *Journal of Sustainable Tourism*, 31(2), 307–328. <https://doi.org/10.1080/09669582.2020.1841217>
- Suhartanto, D., Dean, D., Nansuri, R., & Triyuni, N. N. (2018). The link between tourism involvement and service performance: Evidence from frontline retail employees. *Journal of Business Research*, 83, 130-137. <https://doi.org/10.1016/j.jbusres.2017.10.039>
- Suryani, M., Sakti Rusidiawan, R., & Rosadi, R. (2022). Development of Historical Learning Media Based on Virtual Reality of The National Awakening Museum. *Jurnal Ilmiah Bidang Teknologi Informasi Dan Komunikasi*, 7(2), 125–131. <https://doi.org/10.25139/inform.v7i2.4709>
- Triaditama, S., Nurkhamah, Z., Ningsih, M. A., Kurniawan, N. C., & Idris, I. (2022). Analysis of the quality of education on poverty alleviation through the perspective of students of the social education study program in Malang City. In *Exploring New Horizons and Challenges for Social Studies in a New Normal* (pp. 60–66). Routledge. <https://doi.org/10.1201/9781003290865-12>
- Triaditama, S., Nurkhamah, Z., Ningsih, M. A., Kurniawan, N. C., & Idris, I. (2022). *Analysis of the quality of education on poverty alleviation through the perspective of students of the social education study program in Malang City*. In I. Idris, A. Purnomo, M. A. H. Sismat, Z. Isma'il, & L. Sringernyung (Eds.), *Exploring new horizons and challenges for social studies in a new normal: Proceedings of the International Conference on Social Studies and Educational Issues (ICOSSEI 2021)*, Malang City, Indonesia, 7 July 2021 (pp. 60–66). Routledge, Abingdon, United Kingdom. <https://doi.org/10.1201/9781003290865-12>
- Tripathi, S. (2023). Do cities favor female entrepreneurs? Evidence from India. *Cities*, 139(104404). <https://doi.org/10.1016/j.cities.2023.104404>
- Vu, D. Van, Tram, G. N., Nguyen, H. T. T., & Nguyen, C. Van. (2020). Factors Affecting Sustainable Tourism Development in Ba Ria-Vung Tau, Vietnam. *The Journal of Asian Finance, Economics and Business*, 7(9), 561–572. <https://doi.org/10.13106/jafeb.2020.vol7.no9.561>
- Vujko, A., Bojović, R., Nedeljković, D., Jović, M.D., & Todorović, M.J. (2024). Can organic farming contribute on sustainable women entrepreneurship in rural tourism? An national park evidence. *Geojournal of Tourism and Geosites*, 57(4spl), 2143–2151. <https://doi.org/10.30892/gtg.574spl28-1381>
- Wardhani, A. A., & Susilowati, I. (2021). Four Dimensions of Women's Empowerment in Tourism: Case Study of Indrayanti Beach, Yogyakarta, Indonesia. *Jurnal Ekonomi & Studi Pembangunan*, 22(2), 170-184. <https://doi.org/10.18196/jesp.v22i2.10745>