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Relation Between Perceived Tourism Impact, Quality of Life, Community Attachment, and Support for Tourism Development from Community Perspective: A Serial Mediation Analysis

Pawan Kumar Prasad*and Kanchan Datta†

Abstract

The study develops a conceptual theoretical framework based on the existing theories and examines the relationship between Positive Tourism Impact (PTI), Negative Tourism Impact (NTI), Quality of Life (QoL), Community Attachment (CA) and Support for Tourism Development (STD). A questionnaire survey was conducted among residents of two hill stations, Darjeeling and Sikkim, in India. A total of 308 responses were collected, and the Structural Equation Modelling technique using AMOS 26 software was employed for data analysis. The findings of the study revealed that CA significantly mediates the relationship between PTI and STD.Moreover, serial mediation analysis confirms that QoL and CA jointly mediate the relationship between relationship between PTI and STD. Additionally, PTI shows a significant association with residents' QoL, CA, and STD,whereas NTI has no significant link with either QoL or STD. The study empirically supports Community Attachment Theory and Social Exchange Theory and highlights its importance in community-based tourism research.The findings of the study indicate that destination managers should adopt a community-centred policy, developing community attachment and enhancing wellbeing of the resident, thereby strengthening residents' long-term engagement and commitment, which in turn result in sustainability of the destination.

Keywords: Community Attachment, Quality of Life, Support for tourism development, Tourism impact, Darjeeling, Sikkim

* Department of Economics, University of North Bengal, Raja Rammohanpur, Bagdogra, West Bengal, India; rs_pawan@nbu.ac.in, prasadpawankumar5@gmail.com

† Department of Economics, University of North Bengal, Raja Rammohanpur, Bagdogra, West Bengal, India; kanchandatta_72@nbu.ac.in

INTRODUCTION

Gursoy et al. (2002) note that the success of tourism largely depends on the cooperation and backing of local residents, which are crucial for the growth, efficient operation and long-term sustainability of a destination. When a community transforms into a tourism hotspot, the quality of life (QoL) of its residents is inevitably affected positively or negatively across the three key dimensions: economic, sociocultural, and environmental (Orgaz-Agüera et al., 2022; Su & Swanson, 2020). The overall success of a tourism destination is leveraged by several factors, including effective tourism planning, destination attractiveness, the quality of services provided by hosts and most importantly the attitudes of residents toward tourists and their support for tourism development (STD) (Chen and Chen, 2010; Gu & Wong, 2006). To have a successful tourist destination, it is important to have a residents' support, but when negative impact exceeds the positive impacts then residents are reluctant to support tourism development (Sher et al., 2015). Moreover, resident attachment towards their community is a key determinant in shaping STD in the region (Campón-Cerro et al., 2017). Enhancement of community attachment increases the residents' level of STD in the region (Choi & Murray, 2010). In other words, residents' attitudes play a crucial role in shaping tourism development (Eslami et al., 2019). Hence, the examination of residents' STD is crucial as residents' involvement in the tourism development process directly influences the success and sustainability of the tourism industry (Ramkissoon, 2023). Thus, this study has significant importance as it explores the key factors such as perceived tourism impacts, residents' overall QoL, their community attachment (CA), which shape their attitudes towards STD. By examining these dynamics, this research provides a valuable insight for local government, policymakers and tourism stakeholders to design inclusive and community-centred strategies that help in fostering long-term sustainability of tourism development that will benefit both the local community and tourism industry.

The study on community perception towards tourism development has gained its popularity among researchers (Chen and Chen, 2010; Gursoy et al., 2002; Su et al., 2018; Su & Swanson, 2020; Yayla et al., 2023). The study by McCool and Martin (1994) on CA and attitudes toward tourism development found no conclusive evidence of a relationship between how individuals perceive tourism impacts and their level of attachment towards their community. Similarly, Gursoy et al. (2002) examined the relationship between CA, perceived tourism cost and benefits and STD.The model proposed by Gursoy et al. (2002) was unable to identify any significant association between perceived tourism benefits and community attachment. Meimand et al. (2017) suggested that there is a need for further investigation on the relationship between CA and STD.

Moreover, Eslami et al. (2019); Kim et al. (2021); Meimand et al. (2017) investigated the relationships among CA, perceived tourism impacts, and STD. The cited authors used CA as an antecedent to perceived tourism impacts. In contrast, in this study we have modelled perceived tourism impacts as a predictor of CA which sounds more theoretically strong. Given this gap our research can significantly contribute by exploring how residents' perceived tourism impacts affect their emotional bonds with their community. Moreover, Ramkissoon (2023) introduced a theoretical framework wherein residents' perceptions of social impacts influence interpersonal trust, which in turn predicts place attachment. This attachment then leads to both pro-social and pro-environmental behaviours, ultimately affecting residents' support for tourism development. According to this model, support for tourism development subsequently improves residents' overall quality of life. Nonetheless, this model also presents certain limitations. Specifically, Ramkissoon's study concludes that support for tourism development predicts overall QoL. However, prior research by Bajrami et al. (2020) and Su and Swanson (2020) suggests the reverse, residents' overall QoL is a stronger predictor of their STD.

Addressing these inconsistencies, Yu and Chancellor (2018) offer a more accurate perspective, demonstrating that the perceived positive impacts of tourism influence quality of life, which in turn predicts residents' STD. Building on this, Su et al. (2018) examined the relationship between destination social responsibility, perceived tourism impact, QoL and STD. Now, our study fulfils the gap in the literature as it extends the work of Yu & Chancellor (2018) and incorporates an important construct community attachment in the model. Moreover, serial mediation analysis was conducted in this study; the novelty of this research is that it examines the relationship from PTI to STD with two mediators: QoL and CA.

Thus, the primary objective of the study is to examine the residents' attitude towards tourism development. Specifically, the study examines the relation between perceived tourism impact, quality of life, community attachment and support for tourism development. Moreover, the study aims to investigate the serial mediation model, where quality of life and community attachment jointly mediates the relationship between perceived positive tourism impact and support for tourism development.

Conceptual and Theoretical Framework

Community Attachment Theory and Social Exchange Theory

McCool & Martin (1994) defined community attachment as the degree and nature of individuals' social engagement, integration within their community, and sentiments toward their community. (Simmons, 1994) CA

is achieved from decentralized tourism planning and integrating into larger community objectives which results in a perceived more positive tourism impact and, in turn, results in shaping sustainable tourism development. (Meimand et al., 2017) identified four dimensions of community attachment namely such as Amity/local friendship, sentiment, Involvement and emotional bond. Moghavvemi et al. (2021) defined "community attachment as a combination of individual rootedness and sense of belonging along with social participation and integration into their community life". Similarly, in tourism studies social exchange theory has been extensively applied to understand how residents assess the perceived benefits and costs associated with tourism, shaping their perception toward tourism development (Su & Swanson, 2020). The core premise of this theory is that residents will support tourism initiatives in their region when their perceived benefits outweigh the associated costs (Ap, 1992). Wang and Pfister (2008) explicitly link SET to the principles of sustainable tourism, argue that perceptions of trust and fairness in tourism-related exchanges foster long-term cooperation and contribute to the development of positive host attitudes toward tourism development.

Positive tourism impact (PTI), Negative Tourism Impact (NTI), Quality of Life (QoL) and Support for tourism development (STD)

Tourism offers numerous advantages including the creation of employment opportunities, generation of foreign exchange earnings, the development of infrastructure, cultural exchange, the preservation of heritage sites and increased environmental awareness (Su & Swanson, 2020). Most importantly, it catalyzes economic growth (Ramkissoon, 2023). However, alongside these benefits tourism also comes with a wide range of challenges such as environmental degradation, overcrowding, loss of cultural identity and inflation that can significantly affect the QoL for local communities (Eslami et al., 2019; Jeon et al., 2016). These impacts both positive and negative are typically categorized into three dimensions: socio-cultural, economic and environmental (Orgaz-Agüera et al., 2022). The residents' perspective towards tourism development has been extensively studied by scholars. (Bajrami et al., 2020; Gursoy et al., 2002; Meimand et al., 2017; Su et al., 2018; Su & Swanson, 2020) Empirical studies reveal that residents who perceive the impacts of tourism as predominantly positive are more likely to support the development of tourism in their region. Moreover, these tourism impacts significantlyaffects the QoL of the hosts (Su & Swanson, 2020). (Su et al., 2018; Su & Swanson, 2020) An empirical study reveals that an increase in PTI can enhance the QoL of the residents. With this argument following hypothesis has been developed.

H1: PTI is significantly associated with STD.

H2: NTI is significantly associated with STD.

H3: PTI is significantly associated with QoL of the resident.

H4: NTI is significantly associated with the QoL of the resident.

Positive tourism impact, Community Attachment (CA) and Support for tourism development

Kim et al. (2021) defined "community attachment as residents' sense of belonging to the community". Orgaz-Agüera et al. (2022) community attachment is the individual's social participation and integration in a day-to-day life with the community which reflects an affective or emotional link between the individuals and community. Sher et al. (2015) "Community attachment is a multifaceted psychological process which shows the affective, cognitive and affective domains of a person's attitude". Primeval studies considered community attachment as a length of stay or years of living in the community (McCool & Martin, 1994). However, recent studies have a strong critique arguing that community attachment is asubjective phenomenon (Kim et al., 2021; Orgaz-Agüera et al., 2022). Nevertheless, an examination of residents' attachment to their communities and local resources can help evaluate how residents perceive the impacts of tourism, this understanding may play a critical role in fostering a meaningful association between residents and the principles of sustainable tourism development (Demirović Bajrami et al., 2020). Moghavvemi et al. (2021) put forward that "Residents who are strongly committed to their community are more involved and exposed to tourism impacts". Moreover, community attachment has a crucial role in shaping the STD and for destinations sustainability (Bajrami et al., 2020; Eslami et al., 2019; Sher et al., 2015). Having this argument following hypotheses have been proposed.

H5: PTI is significantly associated with CA.

H6: CA is significantly associated with STD.

Overall Quality of Life and Community Attachment

Previous studies used economic wealth which is an economic measurement of QoL of a resident in a community (Andereck & Jurowski, 2006). Later studies criticised this measurement indicator as economic growth driven from tourism does not always lead to improved well-being for local residents as costs of tourism such as overcrowding, noise, environmental degradation, etc degrades the QoL of the resident (Jeon et al., 2016). Subsequent research has introduced subjective and objective indicators for assessing QoL (Yayla et al., 2023). Subjective indicators encompass psychological dimensions such as happiness and overall life satisfaction, while objective indicators involve broader metrics like access to education, human rights and community-level

aspects including economic stability, leisure, environmental quality and health (Demirović Bajrami et al., 2020). However, objective measures often neglect individual experiences and do not fully reflect actual well-being (Yayla et al., 2023). As a result, subjective evaluations based on residents' perceptions and emotional responses are increasingly employed to assess the impact of tourism on quality of life (Demirović Bajrami et al., 2020). Eslami et al. (2019) QoL is an individual's wellbeing or overall individuals' satisfaction or dissatisfaction with life. (Yayla et al., 2023) empirical studies reveal that improvement in the QoL of the people will enhance resident attachment towards their community.

H7: Quality of life is significantly associated with community attachment

Positive tourism impact, Quality of life, Community Attachment and support for tourism development

It is evident that residents who perceive benefits of tourism significantly influence the STD in the region (Bajrami et al., 2020; Gursoy et al., 2002; Meimand et al., 2017; Su et al., 2018; Su & Swanson, 2020). Furthermore, the perceived positive impact of tourism has a significant influence on the quality of life of the resident, and an enhancement in the QoL leads to STD (Ramkissoon, 2023; Su & Swanson, 2020). In other words, as the tourism benefits increase will result in the residents' happiness with their overall QoL satisfaction, the more residents support tourism development (Eslami et al., 2019). Similarly, CA is influenced by perceived tourism impact, and most importantly, it influences STD (Chen and Chen, 2010; Kim et al., 2021). Thus, Quality of Life and Community attachment are the two important constructs that may play a crucial intermediary role in shaping the relationship between PTI and STD.

H8: CA has a mediation effect on the relationship between PTI and STD.

H9: QOL and CA have a serial mediation effect on the relationship between PTI and STD.

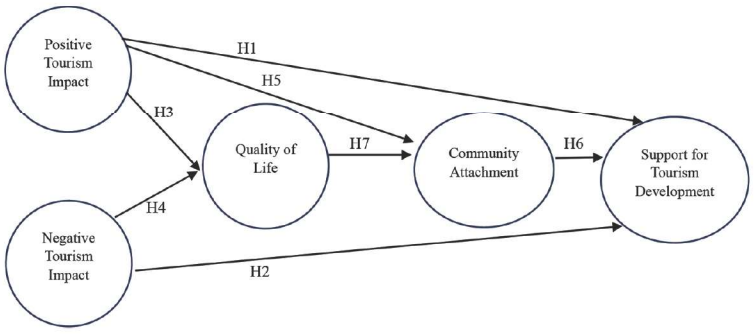

Figure 1: The Proposed model

METHODOLOGY

Study area

The study was conducted in two hill stations Darjeeling and Sikkim which are adjacent to each other, located in the Eastern Himalayas of India. Both the destinations are renowned for their scenic beauty, rich cultural heritage and growing tourism potential (Bhutia et al., 2022). Both the destination possesses similar characteristics in terms of geographical location, sociocultural background and climatic conditions (Bhutia et al., 2022). Darjeeling is situated in the northern part of West Bengal. It shares its borders with Sikkim to the north, Bhutan to the east, and Nepal to the west. It is popularly Known as the "Queen of the Hills". Darjeeling is famous for its tea plantations, colonial architecture, sunrise from Tiger hill and a breathtaking view of the Kanchenjunga range (West Bengal Tourism). Sikkim is a mountainous state in northeastern India with Mount Kanchenjunga being its highest peak and the third highest in the world. It is bounded by Nepal to the west along the international border, Tibet in the north, Bhutan in the east, and West Bengal to the south (Sikkim tourism).

Measurement of variables

For data collection, the questionnaire was structured into two sections. The first section comprised demographic questions, including age, education, gender, occupation, and length of residence/stay. The second section contained 37 items. Positive tourism impacts were assessed using 13 items. Four items related to positive economic impacts were adapted from Chen and Chen (2010) and Yayla et al. (2023), while four items measuring socio-cultural impacts and four items assessing positive environmental impacts were adopted from Chen and Chen (2010). Negative tourism impacts were also measured using 13 items. Four items assessing negative economic impacts were taken from Chen and Chen (2010) and Yu et al. (2018). Five items measuring negative socio-cultural impacts were borrowed from Chen and Chen (2010) and Choi & Murray (2010). Negative environmental impacts were evaluated using four items sourced from Chen and Chen (2010), Choi & Murray (2010), Gu & Wong (2006), and Kim et al. (2021). Community attachment was measured using four items adopted from Campón-Cerro et al. (2017) and Choi & Murray (2010). Support for tourism development was evaluated using four items borrowed from Campón-Cerro et al. (2017), Chen and Chen (2010), and Choi & Murray (2010). Finally, overall quality of life was measured using three items adapted from Campón-Cerro et al. (2017) and Yayla et al. (2023).

Sample size determination, source of data and collection of data

For Structural Equation Modelling (SEM), several rules of thumb guide sample size determination. According to the "rule of 10" proposed by Collier (2020), a minimum of 10 observations per indicator is required. In this study, 21 indicators were utilized (see Table 2), implying that a minimum sample size of 210 respondents was necessary. To meet and exceed this requirement 326 samples were collected using convenience sampling which is a non-probability sampling technique. A self-administered closed-ended questionnaire using a five-point Likert scale (ranging from 1 = strongly disagree to 5 = strongly agree) was distributed to residents of Darjeeling and Sikkim aged 20 years and above. Eighteen questionnaires were excluded during the screening process due to missing responses and low variance. Consequently, 308 valid responses were included for the data analysis (151 from Sikkim and 157 from Darjeeling). The survey was conducted during the peak tourist season, from April to July 2024. In Darjeeling, the peak seasons are March to May (spring and summer) and October to November (autumn), according to Darjeeling Tourism. For Sikkim, peak tourist seasons typically occur from March to June and from October to mid-December, according to Sikkim Tourism.

FINDINGS

Data analysis

Confirmatory Factor Analysis (CFA) was conducted using AMOS 26 to analyse the measurement model. As part of the CFA, factor loadings were evaluated for each item. The following items were deleted due to low factor loadings (below .50) and cross-loadings: PSCI1, PENV3, PENV4, PEI2, PEI3, PEI5, NEI1, NEI2, NEI4, NSCI4, NSCI5, NSCI1, NSCI2, NSCI3, and NENVI4. According to Gefen et al. (2000), the chi-square (χ^2) test should ideally be non-significant, however, since χ^2 is sensitive to large sample sizes and the power of the test, it is recommended to use the "relative chi-square test," which is the ratio of χ^2 to degrees of freedom (CMIN/df), with acceptable values ranging from 1 to 3. Additional fit indices such as GFI, CFI and TLI should be greater than 0.9 (Collier, 2020). Moreover, RMSEA should be below 0.06, and SRMR should be under 0.08 (Hu & Bentler, 1999). Furthermore, Gefen et al. (2000) suggested that an AGFI value greater than 0.80, or approaching 0.90 indicates a good model fit.In this study, a five-factor model negative tourism impact (NTI), positive tourism impact (PTI), quality of life (QoL), community attachment (CA) and support for tourism development (STD) yielded a good fit P=.000, X^2/df=1.918, GFI=.903, AGFI=.874, TLI=.937, CFI=.947, RMSEA=0.055, SRMR=0.0527.

Construct reliability was evaluated using Cronbach's Alpha and Composite Reliability. The Cronbach's Alpha values for each construct

exceeded the recommended threshold of 0.70 (Anderson & Gerbing, 1988). Similarly, Composite Reliability scores ranged from 0.75 to 0.90, also surpassing the accepted benchmark of 0.70 (Anderson & Gerbing, 1988). Therefore, the reliability of each construct in this study was established. Convergent validity of the scale items was assessed using Average Variance Extracted (AVE) where the required threshold of AVE is greater than 0.50 (Collier, 2020) (see Table 2). The discriminant validity of the scale was evaluated using a Fornell and Larcker Criterion, where discriminant validity is established when the square root of the AVE for each construct is higher than its correlations with other constructs in the model (Anderson & Gerbing, 1988). Thus, convergent and discriminant validity is established for the study (see table 3).

Table 1: Characteristics of the respondents

Frequency	**Percentage**		
Gender	Male	171	55.5
	Female	137	44.5
Age	Below 30	198	64.3
	31-40	59	19.2
	41-50	33	10.7
	51-60	12	3.9
	Above 60	6	1.9
Education	10	56	18.2
	12	52	16.9
	Graduation	114	37.0
	Masters	74	24.0
	Others	12	3.9
Job	Private Job	93	30.2
	Government Job	24	7.8
	Self Employed	52	16.9
	Student	96	31.2
	Retired	8	2.6
	Others	35	11.4
Years of resident	Below 10 years	46	14.9
	11-20	77	25.0
	21-30	96	31.2
	More than 30	89	28.8

Table 2: Result of measurement model.

Constructs	Items	Factor Loadings	Mean	Standard Deviation	Cronbach Alpha	Composite Reliability	Average Variance Extracted (AVE)
Positive Tourism Impact	PEI1	0.73	3.69	.894	.876	0.876	0.503
	PEI4	0.709	3.82	.940			
	PENV1	0.731	3.46	.966			
	PENV2	0.699	3.53	.911			
	PSCI2	0.693	3.40	.827			
	PSCI3	0.715	3.71	.837			
	PSCI4	0.69	3.72	.869			
Negative Tourism Impact	NENV1	0.646	4.24	.949	.829	0.835	0.632
	NENV2	0.873	3.94	1.087			
	NENV3	0.848	3.90	1.007			
Quality of Life	QOL1	0.712	3.41	.914	.755	0.755	0.507
	QOL2	0.742	3.15	1.030			
	QOL3	0.683	3.71	1.001			
Community Attachment	CA1	0.741	4.09	.848	.878	0.878	0.644
	CA2	0.824	3.92	.951			
	CA3	0.837	3.93	.947			
	CA4	0.805	3.87	.960			
Support for tourism development	STD1	0.861	3.83	.999	.899	0.900	0.694
	STD2	0.908	3.83	.967			
	STD3	0.798	3.81	.941			
	STD4	0.758	3.78	1.023			

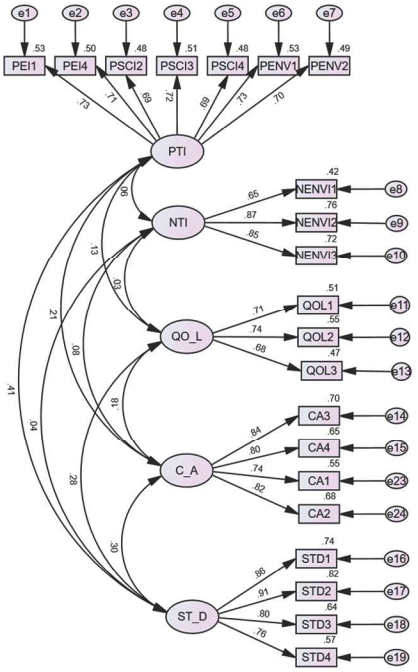

Figure 2: Result of Confirmatory factor analysis originated from AMOS.

Table 3: Result of discriminant validity analysis.

	PTI	NTI	QOL	CA	STD
PTI	**0.709**	**0.795**			
NTI	-0.056				
QOL	0.13	0.034	**0.712**		
CA	0.212	0.08	0.175	**0.802**	
STD	0.041	0.037	0.28	0.296	**0.833**

DISCUSSION

Structural model assessment

The structural equation model technique was employed to test the hypothesized relationships using AMOS 26 software. The model fit indices were examined to assess the overall goodness of fit of the structural model. The fit measures, CMIN/df (between 1 and 3), CFI (> 0.90), TLI (> 0.90), RMSEA (< 0.06), and SRMR (< 0.08) all fell within their commonly accepted thresholds (Anderson & Gerbing, 1988; Collier, 2020). According to Gefen et al. (2000) an AGFI value of ≥ 0.80 or approaching 0.90 indicates a good model fit. Where, P=.000, X^2/df= 1.962 GFI=.901, AGFI= .873, TLI=.935, CFI= .944, RMSEA= 0.056, SRMR=0.06 (see Table 4). Thus, these values indicates that the structural model demonstrates a good fit.

In this study, nine hypotheses were tested, seven hypotheses were supported, and two hypotheses were rejected. The result of this proposed model is in line with the outcome of the previous studies.

The impact of PTI on STD, i.e., (H1), was found to be positive and significant (b=.372, t=5.804, p=000). The finding of this result supports the findings of (Bajrami et al., 2020; Campón-Cerro et al., 2017; Gursoy et al., 2002; Meimand et al., 2017; Su et al., 2018; Su & Swanson, 2020) that improvement in the PTI will lead to an increase in the STD in the region. The hypothesis (H2), the association of NTI on STD was insignificant (b=.043, t=.736, p=.462). This result contradicts the findings of (Chen and Chen, 2010; Gursoy et al., 2002; Meimand et al., 2017; Su et al., 2018). The hypothesis (H3) that perceived PTI is directly related to residents' QOL was found to be positively significant (b=.143, t=2.029, p=0.042). The result of this study supports the results of the previous studies (Su et al., 2018; Su & Swanson, 2020; Yayla et al., 2023). The hypothesis (H4) that the perceived NTI is negatively associated with residents' QOL was insignificant (b=.044, t=.631, p=.528). This result contradicts the findings of (Su et al., 2018).

The hypothesis (H5) association of PTI on CA was found to be positive and significant (b=.189, t=2.899, p=.004), resulting in supporting the hypothesis. This study confirmed the findings of the (Kim et al., 2021; Meimand et al.,

2017) indicating that more the positive tourism impact more the people are attached to their community. The hypothesis (H6) the association of CA on STD was significant (b=.218, t=3.617, p=000. This finding aligns with the findings of (Bajrami et al., 2020; Campón-Cerro et al., 2017; Kim et al., 2021; Sher et al., 2015; Yayla et al., 2023). The hypothesis (H7) the association of QOL on CA was found to be positive and significant (b=.153, t=2.179, p=.029) the finding of this study is lined with the result of (Yayla et al., 2023) resulting that as there is an increase in the overall QOL of the people will in turn result in more CA.

Table 4: Result of structural model.

Relationship	Standardized estimate	t-value	p-value	Decision
PTI->STD (H1)	.372	5.804	***	Supported
NTI->STD (H2)	.043	.736	.462	Not supported
PTI->QOL (H3)	.143	2.029	.042	Supported
NTI->QOL (H4)	.044	.631	.528	Not supported
PTI->CA (H5)	.189	2.899	.004	Supported
CA->STD (H6)	.218	3.617	***	Supported
QOL->CA (H7)	.153	2.179	.029	Supported
Path analysis model fit: P=.000 X2df= 1.962 GFI=.901, AGFI= .873, TLI=.935, CFI= .944, RMSEA= 0.056, SRMR=0.06				

Note: result generated employing 5000 bootstrap samples with 95% confidence interval.

Mediation analysis

The mediating analysis was conducted using a bootstrapping method in AMOS 26 with 95% confidence interval and the number of bootstrap samples as 5000 (Alfons et al., 2022; Collier, 2020). First, the study assessed the mediating role of CA on the relationship between PTI on STD. The result reveals a significant and positive indirect effect of CA on a relationship between PTI on STD (b=.006 and p=.036), supporting (H8). Furthermore, the direct effect PTI on STD on presence of mediator CA was found significant (b=.143, p=.042). Since both the direct effect and indirect effect is significant, we could conclude that CA partially mediates the relationship between PTI and STD. Mediation analysis summary is present in the table 5.

Secondly, using the same methodology the study assessed the serial mediating role of QOL and CA on the relationship between PTI and STD. The result revealed a significant indirect effect of PTI on STD through QOL and CA (b=.054, p=.005). Furthermore, the indirect effect of PTI and STD in presence of mediators was found significant (b=.143, p=.042). Hence, QOL and CA partially mediated the relationship between PTI and STD, supporting (H9). Mediation analysis summary is present in the (table 5).

Table 5: Result on mediation analysis.

Relationship	Standardized Estimate	Direct Effect	Indirect effect	CI-LB	CI-UP	P-Value	Conclus-ion
PTI->QOL->CA->STD (H8)	.006	.143	.006	.000	.025	.036	Partial mediation
PTI->CA->STD (H9)	.054		.054	.013	.129	.005	Partial mediation
Squared Multiple Correlation(R2)							
QOL	.022						
CA	.067						
STD	.220						
Path analysis model fit: P=.000 X2df= 1.962 GFI=.901, AGFI= .873, TLI=.935, CFI= .944, RMSEA= 0.056, SRMR=0.06							

Note: result generated employing 5000 bootstrap samples with 95% confidence interval.

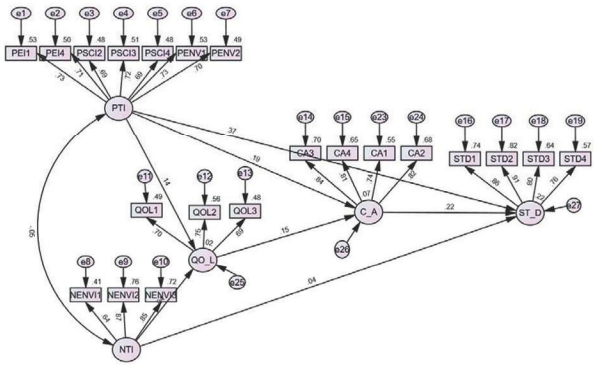

Figure 3: Result of path model generated from AMOS.

CONCLUSION

This study develops a conceptual theoretical framework grounded in Community Attachment Theory and Social Exchange Theory. The findings empirically validate and reinforce both the theories, demonstrating that greater community attachment among residents leads to stronger support for tourism development (Moghavvemi et al., 2021). This support in turn contributes to the long-term sustainability of the destination(Bajrami et al., 2020; Campón-Cerro et al., 2017; Gursoy et al., 2002). Similarly, residents are more likely to encourage tourism initiatives when they perceive that the benefits from tourism particularly makes improvements in their quality of life outweigh the associated costs (Su & Swanson, 2020). In essence a positive attitude towards tourism development emerges when the perceived personal

and communal gains from tourism are significant (Su et al., 2018). The study further reveals that PTI are significantly associated with residents' QoL, CA, and STD. This findings lines with the study of (Bajrami et al., 2020; Campón-Cerro et al., 2017; Gursoy et al., 2002; Meimand et al., 2017; Su et al., 2018; Su & Swanson, 2020). In contrast, NTI does not exhibit a significant relationship with either QoL or STD. These findings underscore the importance for destination managers and policymakers to prioritize policies that amplify positive tourism outcomes while effectively managing or mitigating negative impacts. Moreover, the study reveals that improvements in residents' QoL significantly enhance community attachment, which in turn significantly boosts support for tourism development.

Furthermore, two mediation analyses were conducted. The first indicates that CA significantly mediates the relationship between PTI and STD. Secondly, a serial mediation analysis demonstrates that both QoL and CA jointly mediate the relationship between PTI and STD. Therefore, it is recommended that policymakers should design initiatives and programs that foster community involvement in tourism entrepreneurship, planning, and decision-making. Such inclusive strategies are likely to enhance residents' quality of life, strengthen their attachment to the community, shape positive attitudes towards tourism development and ultimately promote the sustainability of the destination.

Moreover, prior studies had investigated the relationships among CA, perceived tourism impacts & STD, and have used CA as an antecedent to perceived tourism impacts (Eslami et al., 2019; Kim et al., 2021; Meimand et al., 2017). In contrast, this study modelled perceived tourism impacts as a predictor of CA which sounds more theoretically strong. Thus, this research significantly contributes to the literature by exploring how residents perceived tourism impacts affects their emotional bonds with their community.

Theoretical and managerial implications

The study has its implication in two folds, theoretical implications and practical or managerial implications. Mostly, community studies in tourism are solely based on Social Exchange Theory but this study is based on Community Attachment Theory (CAT) as well as social exchange theory. Thus, this study identifies the importance of CAT which was ignored by the previous researchers. Furthermore, it will help future scholars in formulating models based on CAT. Moreover, this study empirically supports both the theories and highlights its importance in community-based tourism research.

The findings of this study highlight the importance of enhancing the PTI which can play a pivotal role in strategic approach towards promoting sustainable tourism development STD. Since, PTI significantly

influences residents' quality of life QOL, CA and STD, tourism planners and policymakers should focus on such initiatives that generate visible social, cultural, and economic benefits for the local communities. These may include promoting local employment or promoting local entrepreneurships like homestays and handicrafts; cultural preservation through promoting local culture through festivals where community can directly be engaged and showcase their traditions; infrastructure development and promoting inclusive tourism practices (Bhutia et al., 2022; Eslami et al., 2019). Moreover, locally owned and managed businesses help the community in dual ways, one by generating income and employment for locals and helps in minimizing the leakage of income to sources outside the destination (Kim et al., 2021).

The presence of partial mediation through QOL and CA for the relationship between PTI and STD indicates that by developing community attachment and enhancing wellbeing of the resident can enhance the support for sustainability in tourism, thereby strengthening residents' long-term engagement and commitment will in turn result in sustainability of the destination. Thus, local government and policymakers should focus on community engagement, capacity building programme, involvement of the community in the decision-making process and more focusing on awareness programme to enhance local skills and marketing of it. Involvement of the community in the decision-making process and or providing ownership in tourism industry will foster the policies in an efficient way and it will allow the community to evaluate those impacts that are favourable for the community or not (Moghavvemi et al., 2021). As the QOL mediates the relationship between PTI and STD policy makers and destination managers should focus on enhancing the QOL of the residents. This can be done by distribution of revenue collected from tourism in public services such as healthcare, education, infrastructures, security etc. Kim et al. (2021) Community attachment is something which cannot be imposed rather it is naturally constructed through positive feeling and a healthy interaction; thus, efforts should be made in such that resident can built a good relationship with the community members and create a positive memory. Thus, for gathering community spaces or parks should be constructed, and some recreational actives should be organised in regular basis. The other notion of idea is that every resident in the community is bearing the impact of tourism thus all should be included in the income distribution and which in turn results in strengthening the community attachment of the resident (Kim et al., 2021).

Government bodies should regularly detect the need and perception of residents as it may play a crucial role in the sustainability of the destination. Now as in the study PTI is significantly affecting QOL and STD in the region but NTI did not significantly affect QOL and STD which indicates that government should focus more on increasing the positive tourism impact however, efforts should be made to manage the NTI such as the issues

like overcrowding, waste management, and cultural dilution. Moreover, destination administrators should communicate the advantages of tourism to local residents, including employment generated through tourism and potential employment opportunities, increased income resulting from tourist spending and possibilities for residents to invest in or participate in the development and maintenance of tourism infrastructure within the community (Su & Swanson, 2020). Doing so can gain the community trust, enhances the community attachment of the resident, gaining more economic dependency and in turn result in sustainability of the destination (Ramkissoon, 2023).

Tourism being a dynamic in nature, perceived tourism impact, resident level of community attachment and quality of life of the resident can change over time (Haraldsson & Ólafsdóttir, 2018). Thus, longitudinal study is highly recommended. Furthermore, this study was conducted in hill stations of India, future researchers can test and validate the relationship in other tourism settings. Su & Swanson, (2020) empirical study reveals that community satisfaction plays a crucial role in shaping support for tourism development. Thus, future scholars can add a community satisfaction as another construct in the model. Moreover, Orgaz-Agüera et al. (2022) environmental attitude of a resident is associated with community attachment and support for tourism development. Thus, further the model can be extended with an additional construct Environmental responsible behavior.

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