Research Article

Resident Attitude Towards Sustainable Community Tourism: A Moderating Role of Economic Dependence

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Abstract

The study develops a conceptual theoretical framework based on Social Exchange Theory (SET) and Community Based Tourism (CBT). Moreover, the study examines the relationships between perceived positive impact of tourism, negative impact of tourism, Quality of Life (QOL), Economic Dependence (ED), Community Attachment (CA) and Support for Tourism Development (STD). Data was collected from two different hill stations of India, Darjeeling and Sikkim; A two-step Structural Equation Modelling was used for data analysis in SPSS AMOS 20 software. Firstly, Confirmatory Factor Analysis was conducted where construct reliability was assessed using Cronbach's Alpha and Composite Reliability. Convergent Validity of scale items was estimated using Average Variance Extracted. Discriminant Validity was assessed using Fornell and Larcker Criterion. After having an appropriate model fit the hypothesis testing was conducted. Furthermore, moderation analysis was conducted where the result indicated that ED moderates the relationship between (CA and STD) and (QOL and STD) respectively at different levels of moderators. The empirical results indicate that different programme and government initiatives should be initiated keeping the resident as a focal point to increase the economic dependence on tourism and for the sustainability of the destination.

Keywords:
Structural Equation Modelling, Resident attitude, Community tourism, Quality of Life, Economic Dependence.

1 Introduction

Residents plays a crucial role in the tourism development process (Campón-Cerro et al., 2017; Carneiro et al., 2018) since, they are directly impacted by it (Choi & Sirakaya, 2005). A positive attitude from Residents' toward sustainable tourism significantly shapes tourism development policies (Meimand et al., 2017; Yu et al., 2011). The success of tourism largely depends on the cooperation and goodwill of the local residents as their support is essential for the stability and smooth functioning of the destination (Chen & Chen, 2010; Carneiro & Caldeira, 2018). Tourism not only benefits the local economy but it comes with the fair share of problems (Darda & Bhuiyan, 2022; Meimand et al., 2017), which positively and adversely impact the local's quality of life respectively (Carneiro & Caldeira, 2018; Kim et al., 2013). In tourist destinations not every individual/ household income depends on tourism (Campón-Cerro et al., 2017; Chen and Chen, 2010). They may have different perception towards tourism development in their region further it may also depend on the level of community attachment of the locals (McCool & Martin, 1994; Yayla et al., 2023). Hence, investigation into the residents' attitude becomes vital for the destination administrators, policy makers and for the sustainability of tourism destinations (Gu & Wong, 2006; Trakolis, 2001; Yu et al., 2018).

In past many studies had investigated the relationships between the perceived consequences of tourism, residents' quality of life (QOL), and their support for tourism. However, additional studies are required to determine whether these relationships change over time (Yayla et al., 2023). (Carneiro & Caldeira, 2018; Campón-Cerro et al., 2017; Yayla et al., 2023) only analyzed the positive tourism impact on support for tourism development. Thus, this study incorporates the impact of negative factors as well on quality of life in the conceptual framework. Further, this study combines all the important variables such as community attachment, economic dependence and support for tourism development. Furthermore, this study also investigated the moderating role of economic dependence on (quality of life and support for tourism development) and (community attachment and support for tourism development) which bridge the gap between the literature. This study incorporates all these important variables which are meaningful in the present scenario into one theoretical framework and analysed the relation and interaction among them.

2 Literature Review

2.1 Conceptual theoretical framework

The conceptual theoretical framework is framed based on the two prominent theories of the literature Social Exchange Theory (SET) and Sustainable Community Tourism/ Community Based Tourism (CBT).

2.1.1 Social Exchange Theory (SET)

SET provides an analytical framework for reciprocity which has been widely used to examine successful interactions between two parties (host and tourist) (Tu and Ma, 2022). According to SET, residents will only develop positive attitudes towards tourism developments if they believe that they gain from increased living standards and that the benefits outweigh the costs (Chen & Chen, 2010; Choi & Murray 2010; Meimand et al., 2017; Yayla et al., 2023).

2.1.2 Sustainable Community Tourism/ Community Based Tourism (CBT)

Sustainable tourism as a developing model seems to enhance the current theoretical models of tourism planning and development by centering residents as the focus (Choi & Sirakaya, 2005). (Choi & Sirakaya, 2005) defines Sustainable tourism as an alternative form of tourism that improves "the quality of life of the host community, provides a high quality of experience for the visitors and maintains the quality of the environment on which both the host community and the visitor depends". Cheng et al. (2019) put forward that tourism development should be grounded in sustainable practices, and community participation plays a vital role in sustainable tourism development (Towner, 2016).

2.2 Positive impact of tourism, negative impact of tourism and support for tourism development

Perceptions of tourism impacts can be divided into three sub-sections, the economic impact, social/cultural impact and the environmental impact (Campón-Cerro et al., 2017; Chen and Chen, 2010; Gu & Wong, 2006; Shukor et al., 2014). Darda & Bhuiyan (2022) suggests that eco-tourism can have both beneficial and adverse effects on the livelihoods of local communities in socio economic and environment dimensions.

(Carneiro et al., 2018; Chen and Chen, 2010; Postma & Schmuecker, 2017) pointed out various economic benefits of tourism, argue that tourism generates employment, improving the standard of living of local communities, increase in household income, brings infrastructural improvements, economy diversity and helps in regional development, and further has a multiplier effect in the economy.

Resident play a key role in promoting culture, (Kim et al., 2013). Campón-Cerro et al. (2017) argue that residents' support is vital for tourism products grounded in local culture to succeed, as residents are both part of the tourism experience and convey their own customs and traditions. (Chen and Chen, 2010; Meimand et al., 2017) tourism fosters intercultural communication and understanding, (Kim et al., 2013) emphasize that it helps preserve cultural identity and traditions, passing them to future generations. The environmental impacts include benefits like the preservation of parks and wildlife (Chen and Chen, 2010).

On the other hand, McCool & Martin (1994) argue that tourism can bring negative changes to communities, such as a general disruption of residents' lives owing to increased population during the tourist season. Polarization of tourism activities in certain places increases the price of land (Kim et al., 2013), tax burdens, inflation and property taxes increase (Chen and Chen, 2010). (Postma & Schmuecker, 2017; Yu et al., 2011) mass tourism, rapid unplanned development, increases in crime, conflict in values, deterioration of cultural and historical sites (Darda & Bhuiyan, 2022; Kim et al., 2013; Li et al., 2019) excessive use of natural resources, wildlife destruction, air and water pollution, noise pollution, which creates difficulties for people from outside of tourism activity (Chen and Chen, 2010).

Residents' support for tourism would depend on the positive impacts they perceive of tourism development (Campón-Cerro et al., 2017; Chen and Chen, 2010; Choi & Murray 2010; Gannon et al., 2021; Kim et al., 2021; Meimand et al., 2017). Furthermore, perceived negative tourism impact is negatively associated to residents' Support for tourism (Chen and Chen, 2010; Choi & Murray 2010; Kim et al., 2021; Meimand et al., 2017).

Hypothesis 1: the perceived positive tourism impact is directly associated to residents' Support for Tourism development.

Hypothesis 2: the perceived negative tourism impact is negatively associated to residents' Support for Tourism development.

2.3 Perceived tourism impact and quality of life

Kim et al. (2013) suggests that once a community turns into a popular spot for tourist, the lives of residents in that community are impacted by tourism activities. Yayla et al. (2023) highlighted that QOL can be evaluated using both objective and subjective indicators. The objective indicator includes large-scale indices, such as education opportunities and human rights, and communal factors, such as economic wellbeing, leisure well-being, environmental well-being, and health well-being. QOL is frequently used interchangeably with "wellbeing," and ''happiness'' (Carneiro et al., 2018; Usher & Kerstetter., 2014). Subjective indicators include psychological measures of happiness, and overall satisfaction with life and job (Yayla et al., 2023). Furthermore, (Carneiro et al., 2018) QOL is a "subjective experience dependent on an individual's perceptions and feelings", Usher & Kerstetter (2014) defines QOL, as how well one is doing. Since objective indicators overlook personal experiences and fail to fully capture actual wellbeing so, subjective assessment based on residents' perceptions and feelings are increasingly used to measure tourism's impacts on QOL (Yayla et al., 2023). Moreover, perceived positive tourism impact improves the residents' QOL (Campón-Cerro et al., 2017; Yayla et al., 2023; Yu et al., 2018).

Hypothesis 3: the positive impact of tourism is directly related to residents' quality of life.

Hypothesis 4: the negative tourism impact is negatively related to residents' quality of life.

2.4 Economic dependence, Quality of Life, Community Attachment and Support for Tourism Development

Community attachment refers to the degree and manner of social involvement and integration within the community as well as the feelings or emotions directed towards it (McCool & Martin, 1994). Moreover, Chen and Chen (2010) put forward that community attachment covers three dimensions: community attitudes and sentiments, networks and the level of the resident's participation in the community. Amin & Ibrahim (2015) argue that Community involvement is crucial in fostering sustainable tourism and adopting a collaborative approach.

Yayla et al. (2023) argue that tourism can improve QOL as tourists' desire for authenticity drives residents to safeguard their cultural identity and artistic traditions, deepening their appreciation of the need to preserve historical assets. Carneiro et al. (2018) argue that tourism may enhance several domains of resident's QOL, by tourism products developed in a tourism destination (e.g., events, food & beverage facilities, entertainment centers, recreational parks, festivals, and cultural attractions, outdoor recreation facilities etc) may be enjoyed by residents and create a more positive perception of tourism's impacts on QOL.

Campón-Cerro et al. (2017) argue that residents with a strong connection to their community are more aware of tourisms advantages. Highly attached residents and high community participation are more likely to support future tourism (Choi & Murray 2010; McCool & Martin, 1994; Meimand et al., 2017). QOL enhances residents' support for tourism and increases community attachment (Campón-Cerro et al., 2017; Yayla et al., 2023).

Hypothesis 5: Residents' perceived quality of life positively affects resident community attachment.

Hypothesis 6: residents' perceived quality of life positively affects their support of tourism development in their region.

Hypothesis 7: residents' community attachment to their region positively affects their intention to support tourism development in their region.

Chen and Chen (2010) define economic dependence as residents' and/or their family household income is dependent on tourism-related business activities. Locals depends on various natural resources for their QOL (Usher & Kerstetter., 2014). Perspective of the individual differs towards the tourism development based on their level of economic dependence tourism (Towner, 2016; Li et al., 2019).

The residents who are more economically dependent on tourism activities will have more positive perception towards tourism (likely to support tourism development) than to those who are not dependent on tourism economically (Amin & Ibrahim, 2015; Campón-Cerro et al., 2017; Chen and Chen, 2010). In other words, residents who benefit more from economic gains and sociocultural advancement are more likely to support tourism development (Choi & Murray 2010; Li et al., 2019).

Hypothesis 8: The residents' economic dependence on tourism positively impacts the QOL of the resident.

Hypothesis 9: The residents' economic dependence on tourism has positively impact on the support for tourism development.

Hypothesis 10: The residents' level of economic dependence on tourism positive moderates the relationship between community attachment and support for tourism development.

Hypothesis 11: The residents' level of economic dependence on tourism positive moderates the relationship between residents QOL and support for tourism development.

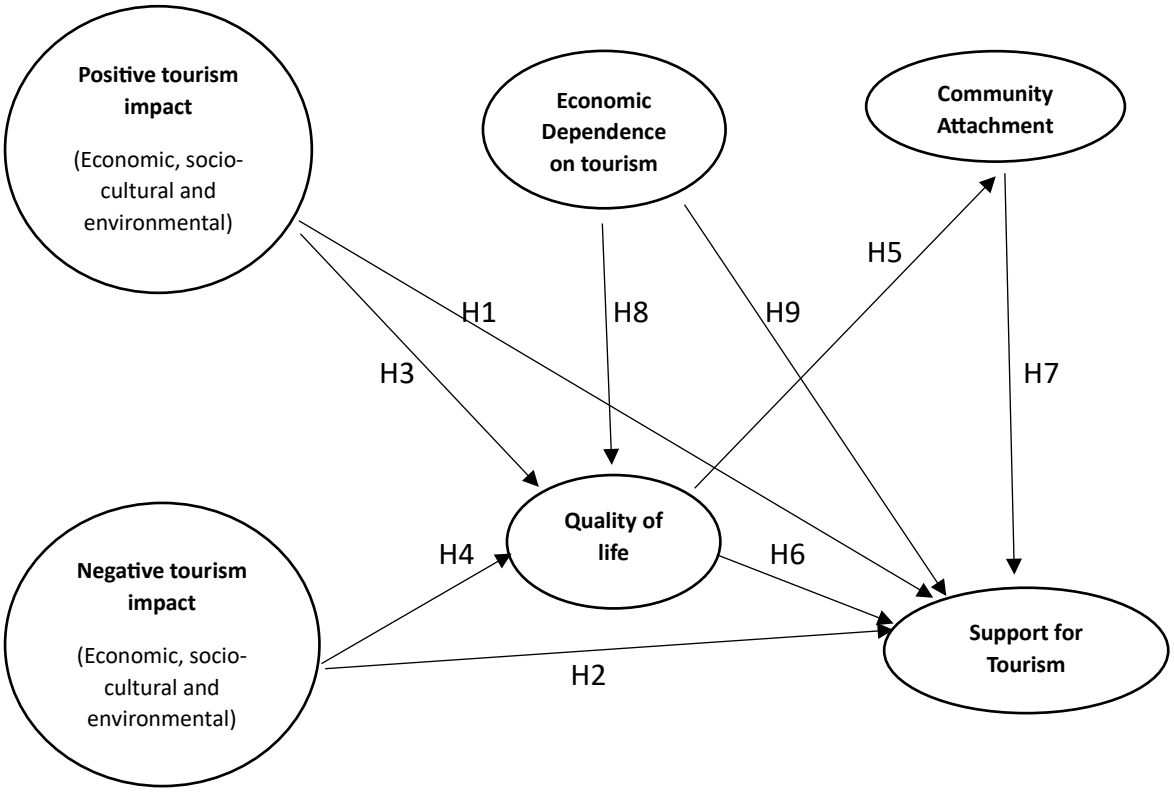

Figure 1: Proposed Research Model

Source: Authors own creation

3 Methodology

3.1 Study area

The study had been conducted in the two hill stations in India, Darjeeling and Sikkim. Darjeeling is situated in the northern part of West Bengal. Darjeeling is also known as the 'Queen of Hill Station' of India (Saha, 2006). Sikkim is a state in North East India, it borders Tibet in the North and northeast, Bhutan in the east, Nepal in the West and West Bengal in the South. Both the destinations possess similarities in terms of geographical locations, climatic conditions and even cultural background (Saha, 2006).

3.2 Measurement of variables

For data collection the questionnaire was divided into two sections. The first section includes demographic questions such as age, education, gender, occupation, and years of residence/length of stay. The second section of the questionnaire had 41 items. Positive tourism impacts were measured with 13 items. Four items of positive economic impacts were borrowed from (Chen and Chen, 2010; Yayla et al., 2023), four items of socio-cultural impacts and four items of positive environmental impacts were adopted from (Chen and Chen, 2010). Further, negative tourism impact was also measured with 13 items. Four items adopted to measure negative economic impact from (Chen and Chen, 2010; Yu et al., 2018). Five items

were borrowed for negative socio-cultural impact from (Chen and Chen, 2010; Choi & Murray, 2010). Negative environmental impacts were measured using four items from (Chen and Chen, 2010; Choi & Murray 2010; Gu & Wong, 2006; Kim et al., 2021). While community attachment was measured with four items adopted from (Campón-Cerro et al., 2017; Choi & Murray 2010). Economic dependence on tourism was measured using four items adopted from (Chen and Chen, 2010; Kim et al., 2021). While, support for tourism development was measured using four items borrowed from (Campón-Cerro et al., 2017; Chen and Chen, 2010; Choi & Murray 2010). Finally overall QOL was measured using three items adapted from (Campón-Cerro et al., 2017; Yayla et al., 2023).

3.3 Sample size determination, source of data and collection of data

For Structural Equation Modelling (SEM) analysis, there are several rules of thumbs. Collier (2020) proposed rule of 10 which states that we should have 10 observations for each indicator. In this study 23 indicators had been used see (table 2). Therefore, according to Collier (2020) we should have minimum of 230 samples. However, we conduct our analysis with 308 samples (157 for Darjeeling and 151 from Sikkim).

The survey was conducted from April 2024 to July 2024 which is the peak season in Darjeeling and Sikkim. For Darjeeling March – May (Spring & Summer) and October – November (Autumn) is the two-tourist peak season (Source: Darjeeling tourism). For Sikkim March to June or from October to mid-December are the two peak tourist seasons (Sikkim Tourism). Non-probability sampling method i.e., convenience sampling method for data collection was used. The self-administered closed ended questionnaire with Likert scale ranging from 1 to 5 (strongly disagree to strongly agree) was provided to the resident of Darjeeling and Sikkim with and above age twenty. Eighteen questionnaire was rejected in the screening process due to missing values and low variance in it. Therefore, 308 questionnaire was found to be valid and was used for the further analysis.

4 Findings

4.1 Data Analysis

For the analysis of conceptual theoretical framework (figure 1) SEM was used, SEM is a statistical method that examines the relationship among numerous variables simultaneously (Collier, 2020). This confirmatory approach provides a comprehensive means of analysing and modifying theoretical frameworks or models, moreover it offers a researcher for further theoretical development of the existing models (Anderson & Gerbing, 1988). Furthermore, Gefen et al. (2000) highlighted SEM is most prominent tool in validating instrument and testing the linkages between the constructs. SEM is a two-step approach i.e., the measurement model which provides a confirmatory assessment of convergent validity and discriminant validity and the path analysis or hypothesis testing (Anderson & Gerbing 1988). SEM was performed using SPSS AMOS version 20 software, AMOS helps us to analyze the theoretical framework in a graphical interface (Collier, 2020).

Table 1: Socio-Demographic Characteristics of the Respondents (N=308)

Variable	Category	Distribution (Valid Percentage)	
Gender	Female	137	44.5
	Male	171	55.5
Age	31-40	59	19.2
	41-50	33	10.7
	51-60	12	3.9
	Above 60	6	1.9
	Below 30	198	64.3
Education	10	56	18.2
	12	52	16.9
	Graduation	114	37.0
	Masters	74	24.0
	Others	12	3.9
Occupation	Government Job	24	7.8
	Private Job	93	30.2
	Retired	8	2.6
	Self Employed	52	16.9
	Student	96	31.2
	Others	35	11.4
Years of Resident	11-20 years	77	25.0
	21-30 years	96	31.2
	31-30	1	.3
	Below 10 Years	46	14.9
	More than 30	88	28.6

Table 2: Results of Confirmatory Factor Analysis (CFA)

Constructs/Study Variables	Items	Mean	Standard Deviation	Indicator loadings	Cronbach Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Positive Tourism Impact (PTI)	PEI1	3.69	0.894	0.731	0.876	0.876	0.503
	PEI4	3.82	0.94	0.708			
	PSCI2	3.4	0.872	0.693			
	PSCI3	3.71	0.837	0.716			
	PSCI4	3.72	0.869	0.69			
	PENV1	3.46	0.966	0.731			
	PENV2	3.53	0.911	0.699			
Negative Tourism Impact (NTI)	NENVI 1	4.24	0.949	0.646	0.829	0.835	0.632
	NENVI 2	3.94	1.087	0.872			
	NENVI 3	3.9	1.007	0.848			
Community Attachment (CA)	CA3	3.93	9.47	0.871	0.821	0.8222	0.6985
	CA4	3.87	9.6	0.799			

Economic Dependence on Tourism (ETD)	ETD1	2.51	1.239	0.739	0.901	0.903	0.7008
	ETD2	2.48	1.236	0.884			
	ETD3	2.77	1.214	0.864			
	ETD4	2.63	1.314	0.854			
Support for Tourism Development (STD)	STD1	3.83	0.999	0.861	0.899	0.9003	0.694
	STD2	3.83	0.967	0.907			
	STD3	3.81	0.941	0.799			
	STD4	3.78	1.023	0.758			
Quality of Life (QOL)	QOL1	3.41	0.914	0.71	0.755	0.756	0.508
	QOL2	3.15	1.03	0.75			
	QOL3	3.71	1.001	0.678			

Notes: All standardized factor loadings are significant at $p < 0.001$.

Confirmatory Factor Analysis (CFA) was computed using AMOS to test the measurement model. As part of CFA, factor loading was assessed for each item. Items PEI2, PEI3, PEI5, PSCI1, PENV3, PENV4, NEI1, NEI2, NEI4, NSCI, NSCI2, NSCI3, NSCI4, NSCI5, and NENVI4 was removed due to low factor loadings (<.50). Further, items NEI3, CA1 and CA2 was deleted due to the cross loading with other constructs. The model fit measures were used to access the model's overall goodness of fit, (Gefen et al., 2000) $\chi 2$ test which should be insignificant but as $\chi 2$ is sensitive to larger sample sizes and the power of the test it is recommended to use "relative chi square test" i.e., the ratio of $\chi 2$ to degrees of freedom. (CMIN/df= 1 to 3, CFI$\geq$0.9, TLI$\geq$0.9, RMSEA$\leq$0.08, SRMR$\leq$0.09) and all values was within their respective common acceptance level (Collier, 2020). (Gefen et al., 2000) argue that AGFI$\geq$.80 and or approaching towards 9 is considered as a good fit. The six-factor model (Positive Tourism Impact, Negative Tourism Impact, Community Attachment, Economic Dependence on Tourism, Support for Tourism Development and Quality of Life) yielded a good fit P= .000, CMIN/df= 1.818, AGFI= .867, CFI=.950, TLI=.941, IFI=.950 and RMSEA= 0.052, SRMR= 0.0489.

Construct reliability was assessed using Cronbach's Alpha and Composite Reliability. Cronbach Alpha for each construct in the study was found over the required limit of .70 (Gefen et al., 2000). Composite reliability ranged from 0.75 to 0.9, which is above the 0.70 benchmark (Gefen et al., 2000). Hence, construct reliability was established for each construct in the study see (table 2).

Convergent Validity of scale items was estimated using AVE (Fornell & Licker, 1981). The AVE values were above the threshold value of 0.50 (Fornell & Licker, 1981). Therefore, the scale used for the present study have the required convergent validity (table 2). Discriminant Validity in this study was assessed using Fornell and Larcker Criterion. According to Fornell and Larcker divergent value is established when square root of AVE for a construct should be greater than its correlation with the other constructs in the study see (table 3).

Table 3: Discriminant Validity of the constructs.

	PTI	NTI	CA	ETD	STD	QOL
PTI	***0.709***					
NTI	-0.057	***0.795***				
CA	0.23	0.058	***0.835***			
ETD	0.039	-0.066	0.109	***0.837***		
STD	0.413	0.037	0.302	0.188	***0.833***	
QOL	0.13	0.043	0.16	0.426	0.279	***0.713***

4.2 Discussion

This study investigated residents' perception on tourism development for two tourist destinations Darjeeling and Sikkim hills in India. The conceptual theoretical framework was formed on the basis of two renowned theories in the literature CBT and SET. Before testing the relationships among the variables, all the variables went through CFA, having an appropriate model fit and after establishing a convergent and divergent validity, the hypothesized relationship was tested using SPSS AMOS 20.

4.3 Structural Model Assessment

The structural equation model generated through AMOS was used to test the relationships. The model fit measures were used to access the structural model's overall goodness of fit, (CMIN/df= 1 to 3, CFI$\geq$0.9, TLI$\geq$0.9, RMSEA$\leq$0.08 and SRMR$\leq$0.09) and all values was within their respective common acceptance level (Collier, 2020). (Gefen et al., 2000) argue that AGFI= $\geq$.80 and or approaching towards 9 is considered as a good fit. P= .000, CMIN/df=1.843, AGFI= .866, CFI=.947, TLI=.929, IFI=.948 and RMSEA= 0.052, SRMR=0.0567 (table 4). Thus, we can conclude that the structural model has a good fit.

In this study eleven hypothesis were tested where, seven hypothesis was supported, one hypothesis was partially supported and three hypothesis was rejected. The result of the proposed model is in line with the outcome of the previous studies.

The hypothesis (H1) perceived PTI is directly related to residents' STD was found to be positively significant (b=.361, t=5.578, p=0.000). The result of this study supports the result of the previous studies (Campón-Cerro et al., 2017; Chen and Chen, 2010; Choi & Murray 2010; Gannon et al., 2021; Kim et al., 2021; Meimand et al., 2017). The hypothesis (H2) the perceived NTI is negatively related to residents' STD was insignificant (b=.049, t=.846, p=.397). The result contradicts with the findings of (Chen and Chen, 2010; Choi & Murray 2010; Kim et al., 2021; Meimand et al., 2017).

The hypothesis (H3) association of PTI on QOL was found to be positive and partially significant (b=.129, t=1.950, p=.051), resulting in supporting the hypothesis. This study confirmed the findings of the previous research that more the positive impact of tourism more has a positive effect on the QOL of the residents' (Campón-Cerro et al., 2017; Yayla et al., 2023; Yu et al., 2018). Further, the association of NTI on QOL (H4) was found to be insignificant in

this study (b=.073, t=1.114, p=.265). This result supports the findings in the literature of (Yu et al., 2018).

The impact of QOL on CA i.e., (H5) was found to be positive and significant (b=.201, t=2.617, p=.009) the finding of this study is lined with the result of (Yayla et al., 2023) indicating that as there is an improvement in the overall QOL of the people will result in more CA. The impact of QOL on STD i.e., (H6) was found to be positive and significant (b=.165, t=2.196, p=.028) the finding of this result supports the findings of (Campón-Cerro et al., 2017; Yayla et al., 2023; Yu et al., 2018) that, improvement in the QOL of the residents will lead to more STD in the region.

The impact of CA on STD i.e., (H7) was found to be positive and significant (b=.181, t=2.911, p=.004). This finding confirmed the outcome of most of the studies that more the residents are attached to their community more the residents' will STD in their region (Campón-Cerro et al., 2017; Chen and Chen, 2010; Choi & Murray 2010; (Kim et al., 2021; Yayla et al., 2023). However, the findings of Gannon et al. (2021) contradict. The impact of ED on tourism on QOL was positive and significant (H8) (b=.430, t=5.929, p=0.000). No previous study had investigated the relationship between ED on tourism on QOL of the residence using SEM model.

The impact of ED on STD i.e., (H9) was found to be insignificant in this study setting (b=.085, t=1.299, p=.194). This finding of this study is consistent with (Chen and Chen, 2010; Gannon et al., 2021), while (Kim et al., 2021) study revealed the opposite result that more the ED of the residence more will they STD in their region. To know the ground reality, despite of having ED on tourism, residents did not significantly have a STD, we further tried to contact with those respondents who had ED and had less STD. Some interesting reasons came out such as: one respondent from Sikkim who is a taxi driver noted that tourists are generally unwilling to ride in older model cars, preferring instead to travel in more luxurious vehicles. Another respondent from Ghoom (Darjeeling) highlighted that the major crunch of tourists is observed by Darjeeling town, located 8 km from Ghoom. Despite Ghoom having several tourists' attractions such as world second highest railway station, Ghoom monastery etc. However, while traveling through Ghoom to visit these other places, they often stop briefly at its spots. Some, residents of Darjeeling mentioned that during peak tourist season, the influx of visitors to Darjeeling significantly affects traffic, making it difficult for locals, especially school children, to reach their destinations on time. Another major concern was littering, as tourists often discard waste on the streets, harming both the environment and the natural beauty of Darjeeling and Sikkim.

Table 4: Results of Structural Equation Modeling

Hypothesized Relationship	Standardized Estimate	t-value	p-value	Decision
H1: PTI→ STD	.361	5.578	***	Supported
H2: NTI→ STD	.049	.846	.397	Rejected
H3: PTI→ QOL	.129	1.950	.051	Partially Supported
H4: NTI→QOL	.073	1.114	.265	Rejected
H5: QOL→CA	.201	2.617	.009	Supported
H6: QOL→STD	.165	2.196	.028	Supported
H7: CA→STD	.181	2.911	.004	Supported
H8: ED→QOL	.430	5.929	***	Supported

H9: ED→STD	.085	1.299	.194	Rejected
Squared Multiple Correlation (R^2):				
QOL	.206			
CA	.040			
STD	.248			
Model fit Statistics: CMIN/df= 1.843, AGFI= .866, CFI=.947, TLI=.939, IFI=.948 and RMSEA= 0.052, SRMR=0.0567.				

Note: Positive Tourism Impact= PTI, Negative Tourism Impact= NTI, Quality of life= QOL, Economic Dependence=ED, Community Attachment=CA, Support for tourism development=STD.

4.4 Moderation Analysis

(Memon et al., 2019) Moderation is where the direct influence of an independent variable on a dependent variable is altered or changed because of the third variable (moderator). There are various methods to test for moderation in SEM. However, (Memon et al., 2019) interaction term approach for moderation analysis is mostly recommended for reflective constructs and models. Since, our constructs are reflective in nature. We applied "interaction term" approach for testing the moderation effect of economic dependence on (QOL & STD) and moderation effect of economic dependence on (CA & STD).

We first mean centred the variables ED, CA, and QOL, then we formed the interaction term, which is the product of the mean centred of the independent variables (CA and QOL) respectively with the mean centred moderator (ED) (Memon et al., 2019). Furthermore, we used a probing the interaction approach, which explores how the relationship from independent variable to the dependent variable changes with a different level of moderator (Collier, 2020). Therefore, we created a low level of moderator (1 standard deviation below the mean of the original moderator and high level of moderator (1 standard deviation above the mean of the original moderator) separately for (QOL*ED) and (CA*ED), which is also called a "pitch-a-point approach" (Collier, 2020).

Table 5: Results of Moderation Analysis

Hypothesized Relationships	**Unstandardized Estimate (b)**	**t-value**	**P-value**	**Decision**
ED→STD	0.95	2.181	0.29	
H10: CA*ED→STD	0.132	2.483	0.13	Supported
QOL→STD	0.41	.874	0.384	
H11: QOL*ED→STD	0.172	3.414	***	Supported
Probing the interaction of Economic Dependence				
Low Level: CA→STD	-1.191	-2.067		
Medium Level: CA→STD	0.263	4.824		
High Level: CA→STD	0.408	4.630		
Low Level: QOL →STD	-1.650	-3.019		
Medium Level: QOL →STD	0.237	3.785		
High Level: QOL →STD	0.426	4.747		

Note: *** = $p < 0.001$.

The result revealed a positive and significant moderating impact of economic dependence on the relationship between CA and STD (b=0.132, t=2.483, p=0.13), supporting H10 (table 5). Not any previous study had tested moderation role of ED on CA and STD. Furthermore, probing the interaction of economic dependence on CA and STD indicates that the moderation is significant at all level of tests and we can see the strengthening properties of the moderator across the test, the moderation effect gets stronger as it moves from low to high (low= -1.191, medium =0.263, High=0.408 (table 5).

The result of the moderation analysis also revealed a positive and significant moderating role of economic dependence on the relationship between QOL and STD (b=0.172, t=3.414, p=0.000), supporting H11 (table 5). No any previous study had tested moderation role of ED on the QOL and STD. Furthermore, probing the interaction of economic dependence on QOL and STD indicates that the moderation is significant at all level of tests and we can see the strengthening properties of the moderator across the test, the moderation effect gets stronger as it moves from low to high (low= -1.650, medium =0.237, High=0.426 (table 5).

Thus, it is clear that as the level of ED increases for a destination it leads to the improvement in the overall QOL and CA of the residents further leading to STD.

5 Conclusion

The findings of this study validate and strengthen the SET, (Chen & Chen, 2010; Choi & Murray 2010; Meimand et al., 2017; Yayla et al., 2023) residents will only develop positive attitudes towards tourism developments if they believe that they gain from increased living standards and that the benefits outweigh the costs. Similarly, the findings of this study reveals that the PTI had a positive and significantly impact in the STD whereas the negative tourism impact to STD was insignificant. Furthermore, the PTI was significantly associated with the overall QOL of the resident whereas the NTI was found to be insignificant in the study setting. In other words, residents are more concerned about the benefits from tourism rather than the cost.

The moderation result in this study, level of ED on QOL and STD indicates that as the level of ED increase will result in improving the QOL of the residents further leads to STD in the region. However, the Ownership of Hotels in Sikkim and Darjeeling, private sector plays a dominant role in both the destination, about 85 percent of the hotels in Sikkim and 65-70% of the hotels in Darjeeling are owned by private sector and majority of them (70-75%) hotels of Sikkim and (65-70%) hotels of Darjeeling have been leased out to people from outside the destination , mostly to the people from West Bengal under a power of attorney agreement (Saha, 2006).Therefore, there is economic leakage in the economy for both the destination as the huge amount of money spent by the tourist for accommodation could not flow in the economy of both the destinations, leading to low ED. (Kim et al., 2021) highlighted structuring development, which deals with bringing the tourism business is a structured way so that it provides a meaningful income to locals with no economic leakages. In this contest (Towner, 2016) homestay tourism can act as an alternative source of sustainable tourism product to ‘mass’ or mainstream tourism with authentic experiences.

Moreover, overcrowding and traffic congestions during peak seasons results in the life disturbance of the locals. Controlling the mass tourism becomes very crucial in the peak seasons, giving more importance to educating tourists on best behaviour practices (Yu et al., 2018), and should give more focus on green tourism and environmental responsible behavior.

Community attachment cannot be imposed on the residents rather it is naturally developed through positive feeling experienced over the time (Kim et al., 2021). Thus, to enhance CA the destination managers should take an appropriate step such as arranging more recreational community spaces where residents can perform different community activities. Further, income generated from community tourism, such as parking fees and entrance fees, should be invested in the community development projects, infrastructures and improving public services which may enhance quality of life for the residents and subsequently will help in the development of the destination. Thus, when CA increases it will result in more PTI and this will further reflect in STD of the destination. Further, community driven, local community participation, collaboration and communication among the policy makers with the locals and among the community itself, and support for tourism is necessary for the sustainable tourism development (Choi & Sirakaya, 2005; Yu et al., 2018).

5.1 Implication of the study

This study adds to the existing SET and CBT from theoretical perspective, this study investigated and proved the significant moderating role of ED on the tourism to the QOL and STD. Furthermore, the study also investigated and proved the significant moderating role of different levels of ED on CA and STD. The study also contributes to the literature as the theoretical framework includes various important constructs which was not studied simultaneously in one theoretical framework in previous studies. Moreover, the findings of this study contribute to the SET and CBT theories by supporting and extending these theories. Further, for managerial implication the study helps and suggest that the destination managers and policy makers should take an appropriate measure to increase the level of ED on tourism which ultimately increase CA, improvement in the QOL and STD. Furthermore, authorities should focus on diversifying the tourists from the main town if Darjeeling and Sikkim to reduce overcrowding by exploring and developing the nearby potential attractions, giving more priority and incentives to offbeat tourism and rural tourism.

5.2 Further Research Scope and Limitation of the Study

Despite of several theoretical and practical implications of the study, there exist some limitation. Firstly, the theoretical model was tested in hill stations, therefore the theoretical model should also be tested in other tourism destinations such as in the contest of rural tourism, coastal tourism etc. Secondly, the research was carried out during the peak tourists' seasons. Therefore, it is recommended to extend the study with incorporating the data analysis in off seasons too.

Researchers can add some other important constructs such as community participation, years of living in the destination etc, in a theoretical framework to see its impact on QOL and STD. Further, one can use Butler's (Tourism Area Life Cycle) TALC model along with this

theoretical framework to see whether the relationships alter as the level of development of the destinations differs (Butler, 1980).

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