

# Chapter 5

## An Exploration of Links between Levels of Tourism Development and Impacts on the Social Facet of Residents' Quality of Life



Elena Konovalov, Laurie Murphy, and Gianna Moscardo

**Abstract** Tourism is often recognized as having significant impacts on the quality of life (QOL) of the people who live and work in tourism destinations. Despite an extensive body of literature on tourism impacts, very little research has focused detailed attention on tourism and the social dimensions of residents' QOL. The available evidence in this area suggests that social impacts of tourism are related to the level and type of tourism development at a destination. This chapter will explore these proposed linkages by comparing three regional Australian destinations with different levels and styles of tourism on a series of measures of residents' QOL. The investigation of social impacts of tourism at the study locations was carried out in 2013–2014 and consisted of two components – an analysis of available relevant secondary data and a survey of residents. Consistent with previous research, a higher scale of tourism development was linked to increased crime, reduced volunteering and perceived influence over community development, and more/better community services. However, the results did not demonstrate a higher emotional connection to place, community pride, and needs fulfilment that are commonly assigned to benefits of tourism development. The chapter describes the complex pattern of results that emerged from the analyses before discussing the implications of these for further research and theoretical development in understanding the social impacts of tourism.

**Keywords** Tourism impacts · Quality of life (QoL) · Social impacts of tourism · Comparative research · Social facet of QoL · Scale of tourism development · Style of tourism development · The systems theory framework for QoL · The capitals-framework for QoL

---

E. Konovalov (✉) · L. Murphy · G. Moscardo  
James Cook University, Townsville, QLD, Australia  
e-mail: [e.konovalov@cqu.edu.au](mailto:e.konovalov@cqu.edu.au)

## 5.1 Introduction

Tourism is often promoted as a development opportunity for rural and regional communities based on the assumption that it will generate income and that higher income equates to improvements in Quality of Life (QOL) in destination communities. Research into community QOL, however, identifies a range of contributing factors often organised into economic, social and environmental dimensions, all of which are important, and progress in one is not always able to substitute for a decline in one of the others (Rogers and Ryan 2001). Despite recognition of this, the majority of tourism impact research has focused on economic indicators with some attention paid to environmental indicators, and only limited research into indicators for social impacts of tourism (Sharma et al. 2008). While discussions of tourism impacts often include a range of social benefits and costs associated with tourism development, there has been little research specifically focusing on identifying and explaining the links between tourism and the social dimensions of residents' QOL.

Planning and managing tourism in a way that positively contributes to local residents' QOL is a major challenge (Epley and Menon 2008). In response to this challenge recent tourism impact research has concentrated on better understanding the links between tourism and the different capitals that have been linked to QOL (cf. Andereck and Nyaupane 2011; McGehee et al. 2010; Moscardo 2009; Moscardo et al. 2013). This chapter is going to explore these links further, focusing on the social aspects of QOL in three Australian regional destinations with different histories and styles of tourism development. The main objective of the study was to investigate relationships between style and scale of tourism development and social aspects of QOL at the study communities, and then compare the observed relationships to the links proposed by current tourism impact research. The main research question investigated by the study was 'With the current knowledge of tourism impacts, can we predict the social impacts of tourism based on style and scale of tourism development at a destination community?'

The chapter will begin with a short review of the relevant literature identifying the processes that have been proposed or assumed to link tourism to changes in residents' QOL. It will then describe a study that used existing government data and the results from a survey of 597 residents in the three regions to examine whether or not, and how, different levels and types of tourism were linked to social aspects of destination residents' QOL. After describing the complex pattern of results that emerged from the analyses some implications of these for further research, theoretical development and practice in sustainable tourism development will be suggested.

## 5.2 Research on Social Impacts of Tourism

The term ‘social impacts of tourism’ is used to describe the impacts of tourism on the lifestyle of residents (Butler 1974), their social life, daily routines, habits, beliefs and values (Doğan 1989), and on individual behaviour, family relationships, safety levels, moral conduct, creative expressions, traditional ceremonies and community organizations (Ap 1990). Unlike economic and environmental impacts, social impacts of tourism have proven difficult to quantify and measure (Vanclay 2004).

The majority of research into tourism’s social impacts has examined residents’ perceptions (Sharpley 2014). Researchers commonly rationalise this research position arguing that for planning and managing tourism development residents’ perceptions of tourism are at least equally, or more important, than assessment of the actual tourism impacts (Deery et al. 2012). However, unlike economic and environmental tourism impacts studies, there has been little research into how well these subjective measures (residents’ perceptions) match up to the objective measures (actual impacts) (Northcote and Macbeth 2005).

There is also confusion about theoretical explanations of tourism’s social impacts. Theories proposed by current tourism impact research include Equity theory, Growth Machine theory, Power theory, Stakeholder theory (Easterling 2004), community attachment (McCool and Martin 1994) as well as some others (for more details please see the review by Nunkoo et al. 2013). Three main approaches dominate this area. Social exchange theory is the most common, proposing that resident’s perceptions of tourism result from weighing up the benefits, such as more jobs, against the costs, such as crowding (Ap 1992). The second are cumulative impact approaches like the Life Cycle Model (Butler 1980) and ‘Irridex model’ (Doxey 1975). These models propose that impacts develop as the level of tourism rises until they exceed the coping mechanisms of the residents, resulting in attitudes towards tourism becoming more negative. Finally there is Social Representations Theory which argues that residents’ perceptions are mostly determined by the everyday theories and images that residents have of tourism and tourists (Andriotis and Vaughan 2003; Fredline 2005). The first two approaches assume perceptions closely follow actual impacts, while the third one proposes the existence of only limited links between objective and subjective impact measures. To date, little research has been conducting linking objective and subjective measures of social impacts of tourism (Northcote and Macbeth 2005) and therefore little evidence is available to assess these different approaches. In the present chapter the social impacts of tourism are theorised as interactions between two complex phenomena: (1) the social aspects of community QOL, and (2) the style and scale of tourism development.

### ***5.2.1 Understanding the Social Facet of QOL***

QOL is a complex concept used for different research purposes and defined in many different ways (Sirgy et al. 2006). The unit of analysis at which the concept is applied can also vary across individuals or groups of individuals, communities, and nations. The research reported here focused on destination residents' or community QOL. It is important to note here that community well-being is frequently used as a synonym for community QOL as both concepts are very closely related. For this research project community QOL/community well-being was defined as "a function of the actual conditions of ... life and what a person or community makes of those conditions" (Michalos 2008, p. 357). Investigation of links between tourism and social aspects of community QOL required a conceptual model of community QOL. A review of existing literature in the interdisciplinary field of QOL research identified two potential concepts: the systems-theory framework and the capitals framework.

**The systems theory framework** for QOL builds on the work of Veenhoven (2001), who identified three main dimensions: quality of environment (external to an individual conditions of living), quality of performance (inner ability of an individual to respond to external living conditions), and quality of the result (the actual satisfaction/dissatisfaction with life). The systems theory framework, proposed by Hagerty et al. (2001), aligns Veenhoven's three dimensions of QOL with input, throughput and output components of a system and establishes causal relationships between them. The inputs (environment) represent exogenous or independent variables, which affect outputs (subjective well-being of an individual) by affecting throughputs (individual choices). The outputs in this system represent the endogenous or dependent variables, which denote overall contentment with various QOL domains and one's life overall.

**The capitals framework** sees community QOL as a community's ability to access and utilise various types of capitals/assets/resources (Flora and Flora 2013). Usually seven forms of community capitals are identified including natural, cultural, human, social, political financial and built (Emery and Flora 2006). As this research project was focused on links between tourism and social aspects of QOL, the above list of capitals was reduced to only those that have direct links to the social impacts of tourism.

### ***5.2.2 Proposed Theoretical Framework of the Social Facet of QOL***

An analysis of relevant review papers (Andereck et al. 2005; Deery et al. 2012; Easterling 2004) identified four key social dimensions of tourism impacts on local residents' QOL: (1) Human capital, (2) Social capital, (3) Community Identity and Pride (linked to cultural capital) and (4) Community Services (linked to built capital).

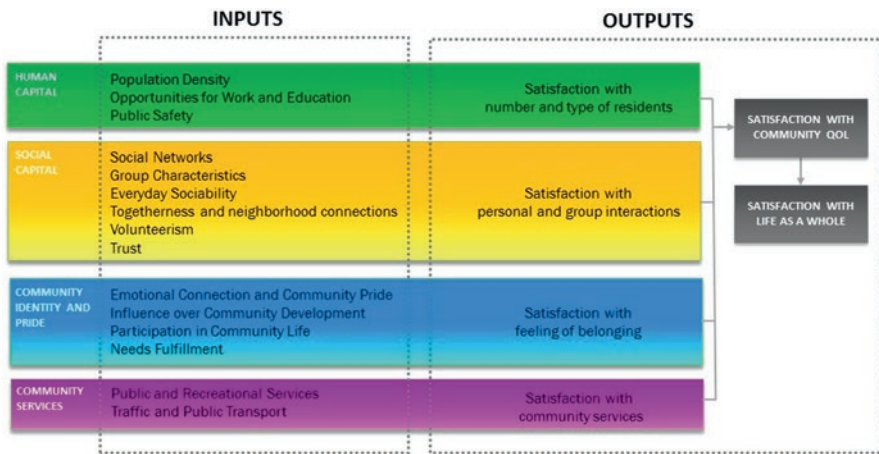


Fig. 5.1 Proposed theoretical framework of social facet of QOL

A simplified systems theory approach was then adopted and input and output measures were identified for each of those capitals. Figure 5.1 details the proposed theoretical framework. Inputs in this framework are the dimensions of the selected capitals representing the social aspects of QOL that have been previously linked to tourism. Outputs are dependent variables that are influenced by changes in inputs and which represent residents’ satisfaction with each of the selected aspects of QOL, overall community QOL and the individual’s life as a whole. It is proposed that satisfaction with the social aspects of QOL contribute to overall satisfaction with community QOL, which in turn contributes to individual satisfaction with their life overall.

### 5.2.3 Style and Scale of Tourism Development

Tourism development at different destinations varies in its style and scale. Faulkner and Tideswell (1997) proposed that specific tourism impacts at a destination are determined by the following tourism features: (1) stage of tourism development, (2) tourist/resident ratio, (3) types of tourists, and (4) seasonality. Links between those variables and identified social aspects of QOL suggested by previous tourism impact research (see reviews of research in Andereck et al. 2005; Deery et al. 2012; Easterling 2004; Harrill 2004; Nunkoo, et al. 2013; Sharpley 2014) are summarised in Fig. 5.2 (Human Capital), Fig. 5.3 (Social Capital), Fig. 5.4 (Community Identity and Pride) and Fig. 5.5 (Community Services). To date, these links, have not been tested in a consistent way across destinations that differ on the identified tourism features. Furthermore, tourism impact researchers have not yet proposed the nature of relationships between the four tourism features and residents’ satisfaction with community QOL and life as a whole (the overall outputs of the theoretical framework).

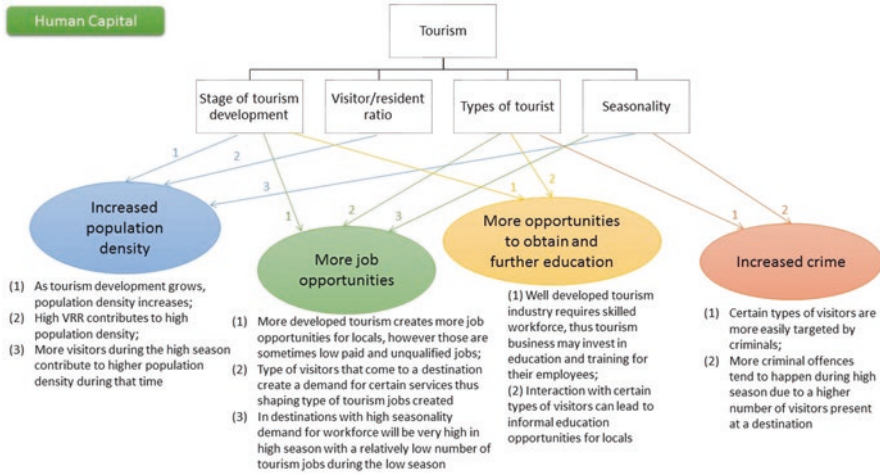


Fig. 5.2 Proposed links between features of tourism and dimensions of human capital

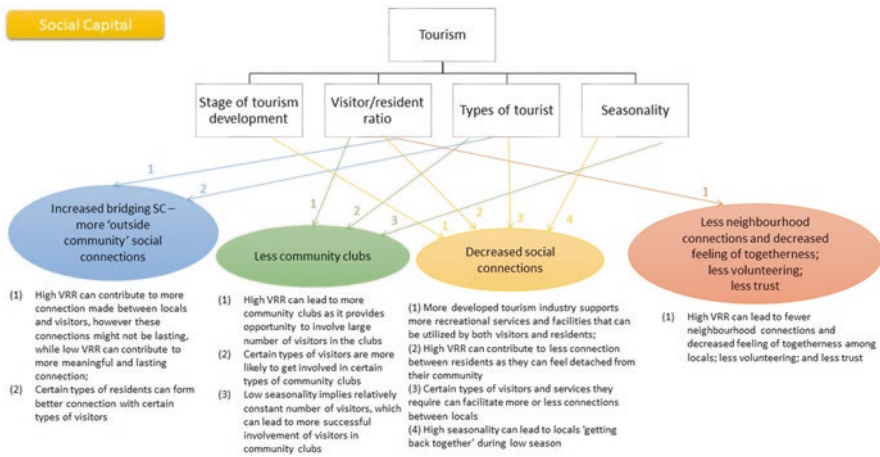


Fig. 5.3 Proposed links between features of tourism and dimensions of social capital

The present study aimed to address the research gaps by developing and implementing a set of measures of the actual features of tourism and of social aspects of QOL at three Australian tropical destinations. The aim of the study was to adopt a comparative approach for identifying specific links between the style and scale of tourism development and social aspects of QOL through combined implementation of objective and subjective measures. Small-N comparative analysis was utilised to achieve this goal with a small number of cases carefully selected by the ‘most similar system design’ method, with selected cases varying most significantly on the variable of interest – style and scale of tourism development (Druckman 2005).

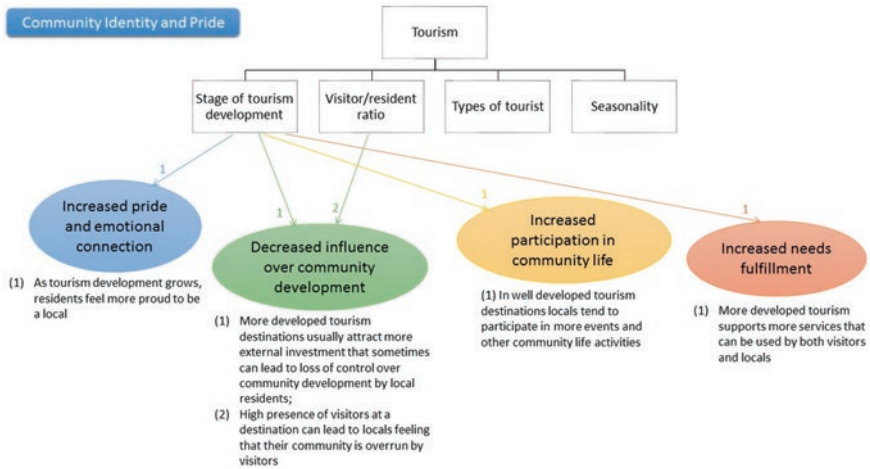


Fig. 5.4 Proposed links between features of tourism and dimensions of community identity and pride

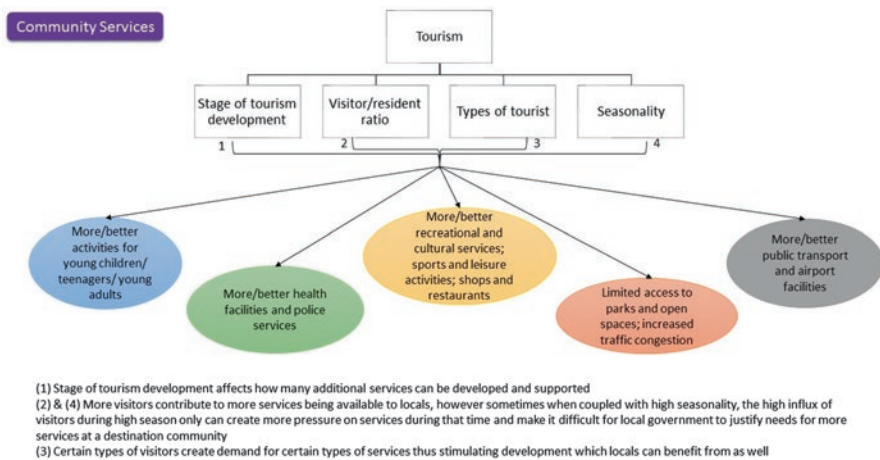
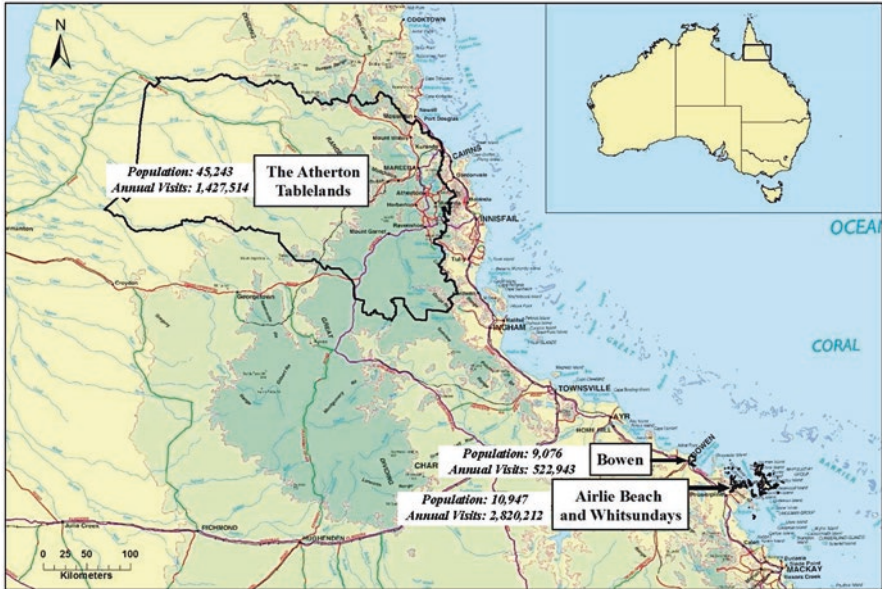


Fig. 5.5 Proposed links between features of tourism and dimensions of community services

### 5.3 Study Regions

The three selected communities, in North Queensland Australia, vary in their style and scale of tourism development but are relatively similar on main QOL aspects. They share similar climates as they are located within a restricted geographic range in the same state with the same government and business systems, and in a developed country with no major cultural, political, macro-economic or macro-climate



**Fig. 5.6** The three study regions: the Atherton Tablelands, Bowen, and Airlie Beach and Whitsunday Islands

*Population figures are for 2011; Annual visits is an aggregated number of day visitors and international and domestic visitor nights. Data sources: Australian Bureau of Statistics, Tourism Research Australia, Geoscience Australia and Queensland Government Information Service. Map was generated using ARC Map software*

differences. The study communities were: (1) Airlie Beach – a gateway to the Whitsunday Islands which is a high profile tourism destination with a well-developed tourism industry, (2) Bowen – a major industrial port and a local centre for the mining industry with an emerging tourism industry; (3) Atherton Tablelands – an agricultural region with a limited but established tourism industry, where tourism seen as a complementary opportunity for economic development. Figure 5.6 shows their locations.

## 5.4 Tourism Profiles

The first step in the research process was to construct tourism profiles for each study community. This was done through analysis of available secondary data from various tourism and government bodies (please refer to Kononov et al. 2013 for methodology and detailed results description). Table 5.1 summarises the findings of that analysis. Airlie Beach is the most developed tourism destination with the highest ratio of visitors to locals, the highest proportion of larger accommodation businesses, and the highest proportion of international and interstate tourists. It does not,



Table 5.1 Tourism measures of the three study regions

	Variables	Available measures	Airlie beach	Bowen	The Atherton tablelands
<b>Stage of tourism development</b>	Scale and diversity of tourism development (data for larger proxy geographical units used)	Number and type of accommodation establishments (abbreviations: CP – caravan parks, SA – serviced apartments, H – hotels, M – motels, (15+) – with 15 or more rooms, (5–14) – with 5–14 rooms)	Total number – 59	Total number – 23	Total number – 39
			Hostels	Hostels	Hostels
			Flats/units	Flats/units	Flats/units
<b>Visitor-resident contact</b>	Economic reliance on tourism	Average bed spaces (excluding H/M/SA(5–14))	CP	CP	CP
			SA (15+)	SA (15+)	SA (15+)
			M (15+)	M (15+)	M (15+)
<b>Visitor-resident contact</b>	Density of visitors	Employment in 'accommodation and food services' industry	H (15+)	H (15+)	H (15+)
			H/M/SA (5–14)	H/M/SA (5–14)	H/M/SA (5–14)
			220	80	56
<b>Visitor-resident contact</b>	Average daily visitor density per 1000 population <sup>a</sup>	Average daily visitor density per land area <sup>a</sup>	Number	Number	Number
			% total employment	% total employment	% total employment
			Between 1071 and 662 per 1000 residents	Between 201 and 62 per 1000 residents	Between 109 and 60 per 1000 residents
<b>Visitor-resident contact</b>	Average daily visitor density per land area <sup>a</sup>	Average daily visitor density per land area <sup>a</sup>	Between 34 and 21 per km <sup>2</sup>	Between 34 and 11 per km <sup>2</sup>	Between 0.07 and 0.04 per km <sup>2</sup>

(continued)

Table 5.1 (continued)

Type of visitors	Variables	Available measures		Airlie beach		Bowen		The Atherton tablelands		
		Visitors by length of stay		Day visitors	1 night	Day visitors	1 night	Day visitors	1 night	
Demographic and trip related characteristics		16%		16%	47%	65%		8%		
		8%		8%	16%	8%		13%		
		40%		40%	23%	6%		7%		
		27%		27%	6%	3%		2%		
	7%		7%	5%	3%		2%			
	1%		1%	3%	3%		2%			
	31 or more nights		31 or more nights	31 or more nights	31 or more nights		31 or more nights		31 or more nights	
	Travel party + age + length of stay (% of annual domestic and international overnight visitors mean) <sup>b</sup>		Adult couple, 25–64, 2–8 nights – 15%	Adult couple, 25–64, 2–8 nights – 12%	Friends/relatives, 15–24, 1–4 nights – 12%	Friends/relatives, 15–24, 1–4 nights – 10%	Adult couple, 45–64, 1–30 nights – 10%	Friends/relatives, 15–44, 1–4 nights – 7%		
			Unaccompanied Traveller, 15–44, 2–8 nights – 12%	Unaccompanied Traveller, 15–64, 2–4 nights – 10%	Unaccompanied Traveller, 15–64, 2–4 nights – 10%	Unaccompanied Traveller, 15–64, 2–4 nights – 10%	Unaccompanied Traveller, 15–64, 2–4 nights – 10%	Unaccompanied Traveller, 15–64, 2–4 nights – 10%		
			Family group, 25–44, 2–8 nights – 7%	Family group, 25–44, 2–8 nights – 7%	Adult couple, 45–64, 1–4 nights – 8%	Adult couple, 45–64, 1–4 nights – 8%	Adult couple, 45–64, 1–4 nights – 8%	Adult couple, 45–64, 1–4 nights – 8%		
		Friends/relatives, 15–44, 2–4 nights – 6%	Friends/relatives, 15–44, 2–4 nights – 6%	Family group, 15–44, 2–4 nights – 6%	Family group, 15–44, 2–4 nights – 6%	Family group, 15–44, 2–4 nights – 6%	Family group, 15–44, 2–4 nights – 6%			
Percent of international visitors		30%	30%	6%	6%	4%	4%			
Interstate/intrastate overnight domestic visitors ratio		50 inter- and 50 intrastate visitors per 100 domestic overnight visitors	50 inter- and 50 intrastate visitors per 100 domestic overnight visitors	16 inter- and 84 intrastate visitors per 100 domestic overnight visitors	16 inter- and 84 intrastate visitors per 100 domestic overnight visitors	21 inter- and 79 intrastate visitors per 100 domestic overnight visitors	21 inter- and 79 intrastate visitors per 100 domestic overnight visitors			

Seasonality <sup>a</sup>	Pattern	Seasonal index (tourism seasons correspond to the index above one)	0.947		0.769		0.806	
			March quarter	June quarter	March quarter	June quarter	March quarter	June quarter
			0.860	1.019	1.019	1.019	1.019	1.019
			1.083	1.239	1.239	1.239	1.239	1.203
			1.115	0.967	0.967	0.967	0.967	0.965
	Amplitude	Low season/high season ratio	77%	62%	67%			

Data Sources: Australian Bureau of Statistics and Tourism Research Australia

<sup>a</sup>95% Confidence Interval

<sup>b</sup>Data on domestic day visitors is not detailed by travel party and age

however, have strong seasonality and has far fewer day-trippers than the other two regions. The tourism industry in Bowen is relatively small and caters mostly to domestic visitors. The Atherton Tablelands is mostly visited by day-trippers from a major adjacent coastal tourism destination, and international and interstate visitors are a minority in the overall visitor mix. The tourism profiles presented in Table 5.1 confirm that the selected destinations have varying degrees and styles of tourism development.

## 5.5 Proposed Linkages

Connecting these tourism development profiles (Table 5.1) with the links between tourism features and impacts on social aspects of QOL (Figs. 5.2, 5.3, 5.4, and 5.5), allows for the researchers to propose potential relationships between tourism and social aspects of QOL at the three communities. Based on the scale and style of tourism development, tourism impacts at Airlie Beach are expected to be more significant compared to Bowen and Atherton Tablelands. Specifically, we would expect to find here a higher population density, along with more opportunities for work and to obtain or further education. Those benefits for human capital are expected to be offset by higher crime rates. In the area of social capital, in Airlie Beach we would expect to find increased ‘outside community’ social connections, offset by lower within community connections, including fewer neighbourhood connections, less volunteering, fewer community clubs, decreased feelings of togetherness and less trust of other local residents. It was also expected for Airlie Beach residents to have increased pride and emotional connection to the local area, increased participation in community life and increased needs fulfilment; this however would coincide with decreased ability to influence community development. In the area of community services, overall it would be expected that residents in Airlie Beach would have access to more and/or better community services, compared to residents in Bowen and Atherton Tablelands. Those benefits would be expected to be offset by higher traffic congestion and limited access for local residents to local parks and open/public spaces.

However, the relationships pattern is far from linear and is very complex. The severity of impacts could be lessened in Airlie Beach due to less pronounced seasonality and the diverse mix of visitors. While in Bowen, which relies on particular a type of visitors and has more pronounced seasonality, the actual impacts could be more significant than would be concluded from stage of tourism development and visitor/resident ratio. Thus, further investigation was conducted to identify specific links.

## 5.6 Methodology

The research adopted an approach in which objective and subjective measures were combined, as well as primary and available secondary data. First, the available secondary data on social aspects of community well-being were compiled for each community. Then, a questionnaire was developed to complement existing secondary data and to measure the components of the proposed theoretical framework relating to residents' experience with, and perceptions of, tourism (the copy of the questionnaire is available from the leading author on request).

The questionnaire included questions utilized in previous research as well as some original questions developed specifically for this research project. Most of the questions were derived from a review of previous research on measures of human capital (Cuthill, 2003; Morton and Edwards 2012), social capital (Burt 2000; Knack 2002; Narayan and Cassidy 2001; Onyx and Bullen 2000; Stone 2001), community identity and pride (Baker and Palmer 2006; McMillan 1996; Peterson et al. 2008), and community services (Grzeskowiak et al. 2003; Sirgy et al. 2000, 2008). The survey questions aimed to collect data for (1) objective measures of the framework's inputs (which could not be obtained from the secondary sources), (2) data for subjective measures of those inputs, and (3) data for outputs of the framework. For example, one of the identified inputs of Community Identity and Pride is 'influence over community development'. This input can be measured objectively (public meeting attendance rate) and subjectively (degree of agreement with an influence statement). As no secondary data was available for public meeting attendance rate, the survey included a question that asked respondents to specify whether or not they attended a public meeting within last 6 months, as well as a question on how much they agreed with a statement "I have a say in what goes on in my community".

Additionally, the survey was targeting longer-term residents of the study communities. Screening questions on residency type and length were used at the beginning of the survey so that only those participants who reported having lived in the area for more than 6 months were directed to questions about community QOL and perceptions of tourism.

The survey was carried out at the three study regions in late 2013 – early 2014. Qualtrics software was used to administer the survey. The study utilised convenience sampling. A press release was issued in each region with information about the study and a link via which the online survey could be accessed. Key community stakeholders were also asked to distribute the survey information and link among their networks. The online survey was complemented by a one week long site visit at each of the study locations. Passers-by in various public places were invited to take the survey via iPads and survey flyers were distributed throughout the community. This boosted the survey responses and ensured inclusion of people who did not have internet access.

The final sample size for Airlie Beach was 170, for Bowen 180 and for the Atherton Tablelands 247. Table 5.2 provides details on the size of the adult (18+) resident population at each of the regions and specifies the proportion of the population

**Table 5.2** Details of the resident survey at the study communities

	Airlie beach	Bowen	The Atherton tablelands
Dates of the survey	February – May 2014	December 2013 – March 2014	April – July 2014
Sample size	170	180	247
18+ Population <sup>a</sup>	8568	6851	33,061
% of sample in population	1.98%	2.63%	0.75%

<sup>a</sup>Data Source: ABS, Census of Australian of Australian Population and Housing, 2011

sampled, which varied between the regions from 2.63% to 0.75%. The objective of the survey was to explore links and explanatory elements of the research rather than establish absolute ratings and figures; and so while the sample did not necessarily provide a statistically representative analysis of the total population in the three regions, it did represent a diverse cross-section of the study communities. The convenience sampling approach adopted is consistent with other tourism impact research publications (see for example Chen 2016; Mensah 2012; Pranić et al. 2012; Wang and Chen 2015) and was the only feasible option given time and funding constraints.

The main demographic characteristics of the sample are summarised in Table 5.3. Persons' Chi Square test identified that significant differences between the three samples existed only on 'age' and 'length of residence' variables, with respondents in the Atherton Tablelands on average being older and living in the local community longer compared to the other two regions. These sample differences, however, are reflective of differences in the populations of the locations as established from Australian Bureau of Statistics census data and previous research projects at the study locations. Thus the observed differences in measured variables between the study regions are unlikely to be the result of differences in the samples.

## 5.7 Results

The first step in the analysis examined the underlying processes for the proposed theoretical framework presented in Fig. 5.1 using a series of regression analyses. A series of simple and multiple regression analyses were performed to explore the relationships among the variables. The results are summarized in Table 5.4 and show support for the theoretical model with the inputs contributing significantly to satisfaction with the four social aspects of community QOL, which in turn were significant contributors to satisfaction with overall community QOL, which then contributed to satisfaction with life as a whole.

The second stage of the analysis examined differences between the three regions on the objective and subjective indicators for each of the four social aspects of com-

**Table 5.3** Sociodemographic characteristics of the survey respondents

		Airlie beach	Bowen	The Atherton tablelands	$\chi^2$ <sup>a</sup>
		% in sample	% in sample	% in sample	
Gender	Male	39.2	33.8	31.8	2.011, df = 2
	Female	60.8	66.2	68.2	$p = .366$
Age	Under 35	17.0	17.3	8.3	25.664*, df = 8
	35–44	19.7	23.2	12.6	
	45–54	21.1	26.1	23.3	
	55–64	21.8	22.5	31.6	
	65 and over	20.4	10.9	24.2	
Education	Some postgraduate work	16.7	14.6	18.3	16.277, df = 6
	Bachelor degree	14.6	13.9	25.8	$p = .012$
	Some post-school qualifications	45.1	38.7	31.9	
	School education or below	23.6	32.8	23.9	
Length of residence	Less than 12 months	8.9	4.5	2.4	17.037*, df = 6
	1 year – Less than 5 years	18.8	19.4	13.5	
	5 years – Less than 10 year	18.8	19.4	15.2	
	10 year or more	53.5	56.7	68.9	
Connection to tourism	I work in tourism	14.4	5.3	11.2	10.996, df = 4,
	I work in industry which benefits from tourism	21.9	23.2	15.6	$p = .027$
	I work in other than tourism industry/I don't work	63.7	71.5	73.5	

<sup>a</sup>Pearson Chi-Square test

\* $p < .01$

munity QOL. Results are summarised in Tables 5.5, 5.6, 5.7, and 5.8. Please note that measures typed in bold font represent objective measures, measures typed in normal font are subjective measures, measures typed in italic are output measures and measures marked with (SS) were obtained from secondary data sources. For secondary data, observed differences are reported and for primary data a series of one-way ANOVA with Bonferroni Post Hoc tests were employed where appropriate to determine statistically significant differences in the measures between the study regions. Consistency of the observed links with those established by previous research is reported the following way: ✓✓ – consistent, ✓ – somewhat consistent, × – not consistent. ‘Somewhat consistent’ implies that the observed highest/lowest measures (as applicable) were consistent with proposed links.

The results for the measures of human capital are summarised in Table 5.5. Only one measure was consistent with the proposed links (see Fig. 5.2) – crime rates in

**Table 5.4** Regression analyses: Social facet of community QOL

Independent variable(s)	Dependent variable	$\beta$	$t$
<b>Model 1: Overall life satisfaction</b>		$F(1, 551) = 288.62, p = .000, \text{adjusted } R^2 = .343$	
Satisfaction with community Well-being	Satisfaction with life as a whole	.586*	16.99
<b>Model 2: Community well-being</b>		$F(4, 535) = 131.97, p = .000, \text{adjusted } R^2 = .493$	
Satisfaction with human capital	Satisfaction with community Well-being	.266*	4.82
Satisfaction with social capital		.223*	7.01
Satisfaction with identity and pride		.208*	4.92
Satisfaction with community services		.173*	4.39
<b>Model 3: Human capital</b>		$F(3, 441) = 41.456, p = .000, \text{adjusted } R^2 = .215$	
Population density	Satisfaction with human capital	.310*	10.94
Opportunities for work		.198*	7.06
Opportunities for education		ns	–
Public safety		.163*	3.80
<b>Model 4: Social capital</b>		$F(5, 475) = 30.818, p = .000, \text{adjusted } R^2 = .237$	
Group characteristics	Satisfaction with social capital	.098, $p = .042$	2.04
Everyday sociability		.172*	4.20
Togetherness		.204*	4.42
Neighborhood connections		ns	–
Volunteering		.152*	3.16
Trust		.170*	3.66
<b>Model 5: Community identity and pride</b>		$F(4, 458) = 64.390, p = .000, \text{adjusted } R^2 = .354$	
Emotional connections	Satisfaction with identity and pride	.195*	4.18
Community pride		.301*	6.46
Influence over Community development		.248*	6.18
Participation in community life		ns	–
Needs fulfillment		.080, $p = .046$	2.00
<b>Model 6: Community services<sup>a</sup></b>		$F(5, 225) = 30.654, p = .000, \text{adjusted } R^2 = .341$	
Activities for young children	Satisfaction with community services	.164*	2.96
Health facilities		.254*	4.21
Shops and restaurants		.185*	3.09
Airport facilities		.283*	4.99

Note: Condition of the roads was excluded due to presence of road works in Tablelands at the time of the survey which affected Tablelands residents’ responses

\* $p < .01$

<sup>a</sup>Nonsignificant predictors: Activities for teenage children, Activities for young adults, Police services, Recreational services, Cultural activities, Sports and leisure activities, Parks and open spaces, Public transport, Boat ramp facilities



**Table 5.5** Measures of human capital

Dimensions	Measures of human capital		ANOVA <i>F</i>	Observed differences/ Bonferroni Post Hoc	Consistency with previous research
	AB <i>M</i>	B <i>M</i>			
Population density	144	187	>1	B > AB > AT	✓
	<b>Number of persons per km<sup>2</sup> (SS)</b> Population change preference (7 pt scale from 1 big decrease to 7 big increase)		4.63	B > AB & AT	✓
Opportunities for work	6.7	10.1	8.2	B > AT > AB	✓
	<b>Unemployment rate (%) (SS)</b> Residents' evaluation (4 pt scale from 1 severely lacking to 4 more than enough)		1.97	AB & AT > B	✓
Opportunities for education	4.9	4.0	4.5	AB > AT > B	✓
	<b>% of post-school students (SS)</b> Residents' evaluation (as above)		2.01	AB & AT > B	✓
Public safety	145	104	89	AB > B > AT	✓✓
	<b>Offences per 1000 residents (SS)</b> Residents' perceptions (5 pt scale from 1 very unsafe to 5 very safe)		4.18	AT & AB > B	✓
Output	7.09	5.60	7.70	AT > AB > B	✓
	<i>Satisfaction with number and type of residents</i> (11 pt scale from 0 not at all to 10 completely satisfied)				

\*p < .01

Table 5.6 Measures of social capital

Dimensions	Measures of social capital	AB		B		AT		ANOVA		Observed differences/ Bonferroni Post Hoc	Consistency with previous research
		M	M	M	M	F	F				
Social networks	Measures of social capital	16	21			9				B > AB > AT	✓
	<b>Openness of social networks (%)</b> (% who's social networks consist of 'mostly new friends')										
Group characteristics	<b>Club membership per person</b> (5 pt scale from 0 none to 5 five or more)	0.91	0.84			1.57		$F(2, 547) = 20.49^*$		AT > AB & B	✓
	<b>Frequency of socialising informally</b> (6 pt scale from 1 never to 6 daily)	3.81	3.53			3.73		$F(2, 543) = 2.06$ , $p = .129$		No difference	×
Everyday sociability	<b>Frequency of socialising in public spaces</b> (as above)	3.56	3.28			3.12		$F(2, 543) = 5.73^*$		AB > AT	✓
	Agreement with a statement (5 pt scale from 1 strongly disagree to 5 strongly agree)	3.86	3.49			3.86		$F(2, 535) = 11.03^*$		AB & AT > B	×
Neighbourhood connections	Agreement with a statement (as above)	3.46	3.48			3.75		$F(2, 534) = 4.10$ , $p = .017$		AT > AB & B	✓
	<b>% volunteering (SS)</b> <b>Average hours devoted to volunteering</b> (5 pt scale from 1 none to 5 more than 20 h)	14.6	17.3	21.8		2.83		$F(2, 519) = 20.97^*$		AT > B > AB AT > AB > B	✓✓ ✓✓
Trust	Trust of people in your community (5 pt scale from 1 not at all to 5 to a very great extent)	3.55	3.32			3.88		$F(2, 492) = 19.46^*$		AT > AB > B	✓✓
	<b>Satisfaction with personal and group interaction</b> (11 pt scale from 0 not at all to 10 completely satisfied)	6.98	5.70			7.57		$F(2, 550) = 33.39^*$		AT > AB > B	✓✓

\*p &lt; .01

**Table 5.7** Measures of community identity and pride

Dimensions	Measures of community identity and pride	AB	B	AT	ANOVA	Observed differences/ Bonferroni Post Hoc	Consistency with previous research
		<i>M</i>	<i>M</i>	<i>M</i>	<i>F</i>		
Emotional connection	Evaluation of living in local community	2.29	2.16	2.55	$F(2, 470) = 15.72^*$	AT > AB & B	×
	(3 pt scale from 1 live here due to circumstances to 3 love living here)						
Community pride	Agreement with a statement	4.18	4.06	4.56	$F(2, 537) = 23.74^*$	AT > AB & B	×
	(5 pt scale from 1 strongly disagree to 5 strongly agree)						
Influence over community development	<b>Public meeting attendance</b>	1.27	1.46	1.42	$F(2, 517) = 7.07^*$	AT & B > AB <sup>a</sup>	✓
	(2 pt scale with 1 not attended a meeting and 2 attended a meeting)						
	Agreement with a statement	2.67	2.26	3.02	$F(2, 535) = 24.87^*$	AT > AB > B	✓
	(5 pt scale from 1 strongly disagree to 5 strongly agree)						
Participation in community life	<b>Event attendance</b>	1.73	1.78	1.62	$F(2, 507) = 6.19^*$	B > AT	✓
	(2 pt scale with 1 not attended an event and 2 attended an event)						
Needs fulfilment	<b>Frequency for travelling for purchases</b>	2.60	3.01	2.76	$F(2, 538) = 6.35^*$	B > AB & AT	×
	(6 pt scale from 1 never to 6 daily)						

(continued)

**Table 5.7** (continued)

Dimensions	Measures of community identity and pride	AB	B	AT	ANOVA	Observed differences/ Bonferroni Post Hoc	Consistency with previous research
		<i>M</i>	<i>M</i>	<i>M</i>	<i>F</i>		
	Agreement with a statement (5 pt scale from 1 strongly disagree to 5 strongly agree)	2.91	1.96	3.15	$F(2, 535) = 55.52^*$	AT & AB > B	×
<i>Output</i>	<i>Satisfaction with feeling of belonging</i> (11 pt scale from 0 not at all to 10 completely satisfied)	7.28	6.00	7.85	$F(2, 550) = 30.47^*$	AT > AB > B	×

\* $p < .01$

<sup>a</sup>Please note that in Bowen and Airlie Beach there were many public consultations held at the time of the survey due to government approval of expansion of a local port

Airlie Beach were higher than in Bowen, and in Bowen higher than at the Atherton Tablelands. For the rest of the input measures some consistency was observed. The observed output measures were also somewhat consistent with the expected pattern of residents’ satisfaction with Human Capital being lowest in Bowen. It was however, highest in the Atherton Tablelands rather than Airlie Beach.

Interestingly, despite the crime rates following the expected pattern, residents’ perceptions of safety did not follow the same rule, that is despite higher crime rates in Airlie Beach, residents here felt as safe as residents in Atherton Tablelands where the lowest crime rates were observed. Objective and subjective measures also did not align for population density. Despite Bowen already having the highest number of persons per square kilometre, compared to the other two locations residents here indicated a preference for the highest increase in resident numbers in the future. Objective and subjective measures for opportunities for work and education however provided the same information. Of the three regions, unemployment was the highest in Bowen, aligning with lowest resident evaluation of opportunities for decent work. The proportion of post-school students was the highest in Airlie Beach, and residents here also evaluated opportunities to obtain and further education in the community more positively compared to the other two regions.

The results for measures of Social Capital are summarized in Table 5.6. As expected (see Fig. 5.3) it was found that in the region with the lowest tourism presence (Atherton Tablelands) volunteering and trust in people in the local community were the highest. Also compared to the other two regions, there was a higher level of neighbourhood connections and club memberships per person. Frequency of socializing in public places was the highest in Airlie Beach, as expected. However,

**Table 5.8** Measures of community services

Dimensions	Measures of community services	AB	B	AT	ANOVA	Observed differences/ Bonferroni Post Hoc	Consistency with previous research
		<i>M</i>	<i>M</i>	<i>M</i>	<i>F</i>		
Activities for young children	<b>% who are young children (0–12 years old) (SS)</b>	15	16	17		No difference	–
	Agreement with sufficiency statement (5 pt scale from 1 strongly disagree to 5 strongly agree)	2.72	3.19	3.16	$F(2, 404) = 5.42^*$	AT & B > AB	×
Activities for teenagers	<b>% who are teenage children (13–19) (SS)</b>	6	9	9		AT & B > AB	–
	Agreement with sufficiency statement (as above)	2.34	2.68	2.61	$F(2, 395) = 2.79, p = .063$	No difference	×
Activities for young adults	<b>% who are young adults (20–25) (SS)</b>	12	8	5		AB > B > AT	–
	Agreement with sufficiency statement (as above)	2.75	2.42	2.40	$F(2, 387) = 3.72, p = .025$	AB > AT	✓
Health facilities	<b>% working in health care/ social assistance (SS)</b>	5	9	11		AT > B > AB	×
	Agreement with sufficiency statement (as above)	2.99	2.18	2.74	$F(2, 515) = 19.96^*$	AB & AT > B	✓
Police services	<b>Offences per 1000 residents (SS)</b>	145	104	89		AB > B > AT	✓✓

(continued)

**Table 5.8** (continued)

Dimensions	Measures of community services	AB	B	AT	ANOVA	Observed differences/ Bonferroni Post Hoc	Consistency with previous research
		<i>M</i>	<i>M</i>	<i>M</i>	<i>F</i>		
	Agreement with sufficiency statement (as above)	3.69	3.21	3.24	$F(2, 514) = 12.38^*$	AB > AT & B	✓
Cultural activities	Agreement with sufficiency statement (as above)	2.69	2.97	3.07	$F(2, 515) = 6.62^*$	AT & B > AB	×
Sports and leisure activities	Agreement with sufficiency statement (as above)	3.26	3.30	3.45	$F(2, 517) = 2.04, p = .131$	No difference	×
Recreational services/shops & restaurants	<b>Frequency of going out</b> (6 pt scale from 1 never to 6 daily)	3.47	3.20	2.81	$F(2, 521) = 14.13^*$	AB & B > AT	✓
	Agreement with sufficiency statement (as above)	3.50	2.13	3.07	$F(2, 517) = 71.14^*$	AB > AT > B	✓
Parks and open spaces	<b>Frequency of visiting</b> (as above)	4.09	4.26	3.25	$F(2, 518) = 33.20^*$	AB & B > AT	✓
	Agreement with sufficiency statement (as above)	3.74	3.89	3.79	$F(2, 517) = 1.29, p = .276$	No difference	×
Public transport	<b>Frequency of using</b> (as above)	1.53	1.07	1.13	$F(2, 520) = 18.42^*$	AB > B & AT	✓
	Satisfaction with access to public transport (5 pt scale from 1 very dissatisfied to 5 very satisfied)	3.61	2.89	2.46	$F(2, 422) = 43.71^*$	AB > B > AT	✓✓

(continued)

**Table 5.8** (continued)

Dimensions	Measures of community services	AB	B	AT	ANOVA	Observed differences/ Bonferroni Post Hoc	Consistency with previous research
		<i>M</i>	<i>M</i>	<i>M</i>	<i>F</i>		
Traffic	<b>Frequency of traffic jams</b> (as above)	1.37	1.12	2.73	<i>F</i> (2, 520) = 77.85*	AT > AB & B <sup>a</sup>	–
	Satisfaction with road conditions (as above)	2.92	3.20	2.40	<i>F</i> (2, 519) = 25.43*	AB & B > AT <sup>a</sup>	–
Airport facilities	<b>Frequency of using</b> (as above)	2.09	1.88	1.80	<i>F</i> (2, 519) = 6.32*	AB > AT & B	✓
	Satisfaction with airport facilities (as above)	4.00	3.09	3.34	<i>F</i> (2, 486) = 31.57*	AB > AT & B	✓
Boat ramp facilities	<b>Frequency of using</b> (as above)	1.84	1.79	1.31	<i>F</i> (2, 516) = 16.05*	AB & B > AT	✓
	Satisfaction with boat ramp facilities (as above)	3.61	3.68	3.36	<i>F</i> (2, 335) = 3.82, <i>p</i> = .02	AB & B > AT	✓
<i>Output</i>	<i>Satisfaction with community services<sup>a</sup></i>  (11 pt scale from 0 not at all to 10 completely satisfied)	6.40	4.74	6.42	<i>F</i> (2, 550) = 31.22*	AB & AT > B	×

\**p* < .01

<sup>a</sup>Please note that there were extensive road works in the Atherton Tablelands at the time the survey was conducted

togetherness, measured as agreement with ‘people in my community get along with each other very well’, did not follow the expected pattern and was as high in Airlie Beach as it was in the Atherton Tablelands. Also, somewhat unexpectedly, the openness of social networks measured as a proportion of people who described their social network as consisting of mostly friends they have met in the past 12 months, was the highest in Bowen, and not in the bigger tourism destination, Airlie Beach. Observed output measures for Social Capital followed the expected pattern – satisfaction with personal and group interactions was the highest in Atherton Tablelands and reflected the findings on the inputs. Despite some difficulty in aligning the different measures, both objective and subjective input measures of dimensions of

social capital demonstrated that social connections among residents were higher in Atherton Tablelands compared to the other two regions.

The results for measures of Community Identity and Pride are summarized in Table 5.7. Of the three regions, the highest emotional connection, community pride and needs fulfillment were observed in the region with the lowest tourism presence (Atherton Tablelands) which is not consistent with links proposed by previous research (see Fig. 5.4). Measures of participation in community life were somewhat consistent with expectations – respondents reported higher event attendance in Bowen than in Atherton Tablelands, however event attendance by Airlie Beach respondents fell between the other two regions, and was not the highest as would be expected. As expected, perceived influence over community development was higher in the Atherton Tablelands compared to the other two more tourism developed regions. Output measures for Community Identity and Pride were not consistent with previous research (perhaps reflecting inconsistency in inputs), with respondents in more developed tourism regions reporting lower satisfaction with feelings of belonging compared to Atherton Tablelands. In the case of needs fulfillment, both subjective and objective measures demonstrated that respondents' need fulfillment is lower in Bowen compared to the other two regions.

The results for measures of Community Services are summarized in Table 5.8. Very little support for the proposed links (see Fig. 5.5) was found for this social aspect of community QOL. It was confirmed that tourism can contribute to better/more public transport with satisfaction with public transport being highest in Airlie Beach, followed by Bowen and lowest in Atherton Tablelands, with Airlie Beach respondents also reporting using public transport more frequently. The more developed tourism regions, Airlie Beach and Bowen, had more/better services compared to the less tourism developed region, Atherton Tablelands, as measured by frequency of going out and visiting parks and open spaces, and use and satisfaction with airport and boat ramp facilities. Similarly, participants in Airlie Beach evaluated sufficiency of activities for young adults, police services, shops and restaurants more positively compared to Atherton Tablelands and Bowen. However, there was no consistency in observed results for activities for young and teenage children, cultural activities, sport and leisure activities, and sufficiency of parks and open spaces, where either no difference between regions was observed or Atherton Tablelands had higher results compared to more tourism developed Airlie Beach. Bowen respondents evaluated sufficiency of health services in their region lower compared to the other two regions. Of the three regions, satisfaction with community services was the lowest in Bowen, with Airlie Beach and Atherton Tablelands respondents reporting similar, but higher levels. Consistency between objective and subjective measures was evaluated where appropriate and, with the exception of parks and open spaces, information derived about various dimensions of community services through objective and subjective measures was consistent.

Lastly, the results for the overall outputs of the framework, i.e. satisfaction with community QOL and life as a whole, are summarised in Table 5.9. Respondents in all three communities were very satisfied with their life as a whole. That is, on average respondents in all three communities rated their overall life satisfaction above



**Table 5.9** Satisfaction scores for main outputs of the theoretical framework for study regions

Satisfaction scores (11 pt scale from 0 not at all to 10 completely satisfied)	Airlie beach	Bowen	The Atherton tablelands	ANOVA	Observed differences/ Bonferroni Post Hoc
				<i>F</i>	
Satisfaction with community quality of life	8.57	7.13	9.19	$F(2, 553) = 58.519^*$	AT > AB > B
Satisfaction with life as a whole	9.07	8.25	9.08	$F(2, 551) = 13.932^*$	AB & AT > B

\* $p < .01$ 

the national average, which in 2013 was estimated at 7.4 out of 10 (OECD Better Life Index data: <http://www.oecdbetterlifeindex.org/>). It is worth noting however, that scores in Bowen were lower, compared to Airlie Beach and the Atherton Tablelands, the regions with the most and the least developed tourism industry respectively. Satisfaction with community QOL was also lowest in Bowen, the region with medium tourism development. Thus, no direct link between level of tourism development (i.e. ‘stage of tourism development’ and ‘visitor/resident ratio’ features of tourism) and satisfaction with community well-being as well as life overall, was observed at the three study regions. That is, the highest satisfaction scores did not align with the highest or lowest level of tourism development.

## 5.8 Conclusions and Implications

The chapter described the theoretical underpinning, research process and findings of a study of social impacts of tourism on community QOL in three regional Australian destinations that vary in style and scale of tourism development. A theoretical framework for social aspects of community QOL was proposed and tested, with overall results supporting the framework. A system of measures was used to assess the style and scale of tourism development at each study region. The links between tourism and community QOL proposed by previous research (Figs. 5.2, 5.3, 5.4, and 5.5) were compared to observed links (Tables 5.5, 5.6, 5.7, and 5.8).

Consistent with previous research, it was found that a higher degree of tourism development was associated with (1) higher crime rates (however not necessarily with decreased perceptions of safety by local residents); (2) lower participation in volunteering activities, lower trust of people in the local community, and fewer neighborhood connections and club memberships, but a higher frequency of socialising in public spaces; (3) lower perceived influence over community development; (4) better/more activities for young adults, police services, public transport and airport facilities, recreational services/shops and restaurants, and more frequent visitation of parks and open spaces.

Conversely, some of the observed links contradicted previously assumed patterns of interaction between tourism and community QOL. Specifically: (1) community togetherness was as high in the region with highly developed tourism as it was in the region with low scale tourism development; there was no difference between frequency of socialising informally across the regions, despite substantial differences in the degree of tourism development; (2) the less developed tourism region had higher scores on emotional connection and community pride compared to the more developed tourism regions, and the region with medium tourism development had the lowest scores in the area of needs fulfillment; (3) the regions with lower tourism development had higher scores for activities for young children, cultural activities and there was no difference in scores for activities for teenage children, sports and leisure activities, sufficiency of parks and open spaces.

Some of the observed links did not strictly follow the patterns of the scale of tourism development, i.e. the more/less developed tourism region was not associated with highest/lowest scores as would be expected from previous research. Those links include links between tourism and perceptions of crowdedness, opportunities for work and education, and perceptions of safety (human capital), openness of social networks (social capital), participation in community life (community identity and pride), and health services (community services). This might be explained by the presence of a mitigating effect from either tourism style (including types of visitors and seasonality), or from specific community characteristics.

Consistency between objective and subjective measures was observed in some cases but not others. Both types of measures provided consistent information on opportunities for work and education, needs fulfillment, recreational services/shops and restaurants, public transport, airport and boat ramp facilities, as well somewhat consistent information for measures of social capital. However, there were contradictions between objective and subjective measures of crowdedness, public safety, and parks and open spaces. This overall pattern provides both more support for the Social Representation approach to understanding tourism impacts than the social exchange and cumulative impacts perspectives, and highlights the complexity of these relationships.

And lastly, the research has found no direct link between satisfaction with community QOL and life as a whole and level of tourism development. It appears that these relationships are very complex and mediated by other factors, perhaps including the style of tourism development (i.e. 'types of tourist' and 'seasonality' features of tourism). Additionally, as overall outputs of the proposed theoretical framework, these satisfaction scores are influenced by all the indicators for each of the four social aspects. Bowen scored lower on most of the indicators, and consistently, of the three regions, this destination had the lowest measures for the overall outputs.

The main theoretical contribution of this study was the proposition of a theoretical framework that can be utilized by other researchers and practitioners in the growing field of research on social impacts of tourism on community QOL. Additionally, the process of examining complex relationships between style and scale of tourism and social aspects of community QOL is outlined. This process

can be replicated for other study communities with a suitable adjustment of the measures used.

Based on research findings, the following recommendations for future tourism impact research can be made: (1) more research on variations in scale and style of tourism at destinations with the goal to establish some sort of a classification system by which destinations can be assigned to a certain group, for example high visitor/resident ratio, high seasonality, and high reliance on a specific type of visitors; (2) there is a pressing need for more comparative studies to clarify and confirm the links between tourism and community QOL that are commonly assumed/proposed by previous research; and (3) researchers are encouraged to use both objective and subjective measures as this provides greater insight into tourism-community QOL interrelationships.

The authors would like to point out one important limitation of this study – as the study relied on the review of the previous research, the measures included assessed only previously known links between tourism and social aspects of community QOL. Thus some other important links could have been overlooked and not included in the scope of the study. Another point to be made is that research that aims to combine secondary and primary data is bound to face some challenges, such as secondary data availability and level of detail, as well as the presence of inconsistencies in the way secondary data are collected by different government bodies and between years for which data are available. Also, as discussed by McKercher et al. (2015), within the geographical space of a community there tend to be areas that are open to visitors and tourism and those that are relatively closed to outsiders. Tourism impacts are therefore felt/perceived/evaluated differently depending on whether tourism follows the expected geographical pattern in a community or not. For example, although there is a much higher level of tourism development at Airlie Beach, it is mostly located in an area separated from the rest of the town by hills. It is possible to be a resident of this destination and avoid contact with visitors. Similarly, tourist circuits on the Atherton Tablelands are quite separate from residents' pathways. Other variables that could be important in mediating tourism-QOL relationships could include more specific types of tourism, the history of tourism development and the extent to which tourism is connected to other economic activities. These options provide guidance for further research.

The research also has some implications for tourism destination management and tourism development. Firstly, it reinforces calls for greater destination community involvement in, and control over, tourism development and practice (Marzuki and Hay 2013), as increased levels of tourism development were associated with lower levels of perceived influence over community development decision and erosion of various aspects of social capital. In particular, it directs policymakers and destination managers to more carefully and critically assess different types of tourism development in terms of the number and types of job and education opportunities and tourism markets in terms of the extent to which they can contribute to community life. The data supports an approach to tourism planning that focusses on community QoL and assesses potential tourism activities against various contributors to this QoL (cf., Moscardo and Murphy 2014 for an example of this alternative

approach). Finally, the data suggested that resident attitudes towards tourism can be influenced as much, and possibly more, by their social representations of tourism than their direct experience of it. This suggests that greater attention could be paid by destination managers to public education about tourism highlighting its positive contributions as well as the processes that are involved in managing its negative impacts (cf., Moscardo 2011 for more information on this type of public education).

In conclusion, it is believed that this study advances tourism impact research by adopting a comparative approach, employing both objective and subjective measures, as well using both secondary and primary data. The study also proposed a theoretical framework for social aspects of community QOL and objectively assessed tourism development differences between the study locations. It is hoped that the methods used will prove useful for other tourism impact researchers and facilitate the advancement of research into understanding the complex relationships between tourism and residents' QOL.

**Acknowledgement** This research was supported by a research grant from The Cairns Institute, James Cook University.

## References

- Andereck, K. L., & Nyaupane, G. P. (2011). Exploring the nature of tourism and quality of life perceptions among residents. *Journal of Travel Research*, 50(3), 248–260.
- Andereck, K. L., Valentine, K. M., Knopf, R. C., & Vogt, C. A. (2005). Residents' perceptions of community tourism impacts. *Annals of Tourism Research*, 32(4), 1056–1076. <https://doi.org/10.1016/j.annals.2005.03.001>.
- Andriotis, K., & Vaughan, R. D. (2003). Urban residents' attitudes toward tourism development: The case of Crete. *Journal of Travel Research*, 42(2), 172–185. <https://doi.org/10.1177/0047287503257488>.
- Ap, J. (1990). Residents' perceptions research on the social impacts of tourism. *Annals of Tourism Research*, 17(4), 610–616. [https://doi.org/10.1016/0160-7383\(90\)90032-m](https://doi.org/10.1016/0160-7383(90)90032-m).
- Ap, J. (1992). Residents' perceptions on tourism impacts. *Annals of Tourism Research*, 19(4), 665–690.
- Baker, D., & Palmer, R. (2006). Examining the effects of perceptions of community and recreation participation on quality of life. *Social Indicators Research*, 75(3), 395–418. <https://doi.org/10.1007/s11205-004-5298-1>.
- Burt, R. S. (2000). The network structure of social capital. *Research in Organizational Behavior*, 22, 345–423. [https://doi.org/10.1016/S0191-3085\(00\)22009-1](https://doi.org/10.1016/S0191-3085(00)22009-1).
- Butler, R. W. (1974). The social implications of tourist developments. *Annals of Tourism Research*, 2(2), 100–111. [https://doi.org/10.1016/0160-7383\(74\)90025-5](https://doi.org/10.1016/0160-7383(74)90025-5).
- Butler, R. W. (1980). The concept of a tourist area cycle of evolution: Implications for managers of resources. *Canadian Geographer/ Le Géographe Canadien*, 24(1), 5–12. <https://doi.org/10.1111/j.1541-0064.1980.tb00970.x>.
- Chen, C.-Y. (2016). The impact of the Chinese tourism market on Taiwan residents' attitudes. *Journal of Quality Assurance in Hospitality and Tourism*, 17(1), 1–23. <https://doi.org/10.1080/1528008X.2014.988777>.

- Cuthill, M. (2003). The contribution of human and social capital to building community well-being: A research agenda relating to citizen participation in local governance in Australia. *Urban Policy and Research*, 21(4), 373–391. <https://doi.org/10.1080/0811114032000147412>.
- Deery, M., Jago, L., & Fredline, L. (2012). Rethinking social impacts of tourism research: A new research agenda. *Tourism Management*, 33(1), 64–73. <https://doi.org/10.1016/j.tourman.2011.01.026>.
- Doğan, H. Z. (1989). Forms of adjustment: Sociocultural impacts of tourism. *Annals of Tourism Research*, 16(2), 216–236. [https://doi.org/10.1016/0160-7383\(89\)90069-8](https://doi.org/10.1016/0160-7383(89)90069-8).
- Doxey, G. V. (1975, September 8–11). A causation theory of visitor resident irritants: Methodology and research inferences. In *Travel and Tourism Research Association sixth annual conference proceedings* (pp.195–198), San Diego, California.
- Druckman, D. (2005). Comparative case study approaches. In D. Druckman (Ed.), *Doing research* (pp. 208–226). Thousand Oaks: SAGE.
- Easterling, D. S. (2004). The residents' perspective in tourism research – a review and synthesis. *Journal of Travel and Tourism Marketing*, 17(4), 45–62.
- Emery, M., & Flora, C. (2006). Spiraling-up: Mapping community transformation with community capitals framework. *Community Development*, 37(1), 19–35.
- Epley, D. R., & Menon, M. (2008). A method of assembling cross-sectional indicators into a community quality of life. *Social Indicators Research*, 88(2), 281–296.
- Faulkner, B., & Tideswell, C. (1997). A framework for monitoring community impacts of tourism. *Journal of Sustainable Tourism*, 5(1), 3–28. <https://doi.org/10.1080/09669589708667273>.
- Flora, C. B., & Flora, J. L. (2013). *Rural communities: Legacy and change* (4th ed.). Boulder: Westview Press.
- Fredline, E. (2005). Host and guest relations and sport tourism. *Sport in Society*, 8(2), 263–279. <https://doi.org/10.1080/17430430500087328>.
- Grzeskowiak, S., Sirgy, M., & Widgery, R. (2003). Resident's satisfaction with community services: Predictors and outcomes. *Journal of Regional Analysis and Policy*, 33(2), 1–36.
- Hagerty, M. R., Cummins, R. A., Ferriss, A. L., Land, K., Michalos, A. C., Peterson, M., et al. (2001). Quality of life indexes for national policy: Review and agenda for research. *Social Indicators Research*, 55(1), 1–96.
- Harrill, R. (2004). Residents' attitudes toward tourism development: A literature review with implications for tourism planning. *Journal of Planning Literature*, 18(3), 251–266. <https://doi.org/10.1177/0885412203260306>.
- Knack, S. (2002). Social capital and the quality of government: Evidence from the states. *American Journal of Political Science*, 46(4), 772–785. <https://doi.org/10.2307/3088433>.
- Konovalov, E., Murphy, L., & Moscardo, G. (2013, June 23–26). *Measuring tourism: Developing a regional level framework for assessing tourism impacts*. In Conference proceedings of BEST Educational Network Think Tank XIII: Engaging communities in sustainable tourism development (pp. 147–170). Kuala Lumpur, Malaysia.
- Marzuki, A., & Hay, I. (2013). Towards a public participation framework in tourism planning. *Tourism Planning & Development*, 10(4), 494–512.
- McCool, S. F., & Martin, S. R. (1994). Community attachment and attitudes toward tourism development. *Journal of Travel Research*, 32(3), 29–34.
- McGehee, N. G., Lee, S., O'Bannon, T. L., & Perdue, R. R. (2010). Tourism-related social capital and its relationship with other forms of capital: An exploratory study. *Journal of Travel Research*, 49(4), 486–500.
- McKercher, B., Wang, D., & Park, E. (2015). Social impacts as a function of place change. *Annals of Tourism Research*, 50, 52–66. <https://doi.org/10.1016/j.annals.2014.11.002>.
- McMillan, D. W. (1996). Sense of community. *Journal of Community Psychology*, 24(4), 315–325. [https://doi.org/10.1002/\(SICI\)1520-6629\(199610\)24:4<315::AID-JCOP2>3.0.CO;2-T](https://doi.org/10.1002/(SICI)1520-6629(199610)24:4<315::AID-JCOP2>3.0.CO;2-T).
- Mensah, C. (2012). Residents' perception of socio-economic impacts of tourism in Tafi Atome, Ghana. *Asian Social Science*, 8(15), 274–287. <https://doi.org/10.5539/ass.v8n15p274>.

- Michalos, A. C. (2008). Education, happiness and wellbeing. *Social Indicators Research*, 87(3), 347–366.
- Morton, A., & Edwards, L. (2012). *Community wellbeing indicators, survey template for local government*. Sydney: Australian Centre of Excellence for Local Government, University of Technology.
- Moscardo, G. (2009). Tourism and quality of life: Towards a more critical approach. *Tourism and Hospitality Research*, 9(2), 159–170. <https://doi.org/10.1057/thr.2009.6>.
- Moscardo, G. (2011). The role of knowledge in good governance for tourism. In E. Laws, H. Richins, J. Agrusa, & N. Scott (Eds.), *Tourist destination governance: Practice, theory and issues* (pp. 67–80). Wallingford: CAB International.
- Moscardo, G., & Murphy, L. (2014). There is no such thing as sustainable tourism: Re-conceptualizing tourism as a tool for sustainability. *Sustainability*, 6(5), 2538–2561.
- Moscardo, G., Kononov, E., Murphy, L., & McGehee, N. (2013). Mobilities, community wellbeing and sustainable tourism. *Journal of Sustainable Tourism*, 21(4), 532–556. <https://doi.org/10.1080/09669582.2013.785556>.
- Narayan, D., & Cassidy, M. F. (2001). A dimensional approach to measuring social capital: Development and validation of a social capital inventory. *Current Sociology*, 49(2), 59–102. <https://doi.org/10.1177/0011392101049002006>.
- Northcote, J., & Macbeth, J. (2005). Limitations of resident perception surveys for understanding tourism social impacts: The need for triangulation. *Tourism Recreation Research*, 30(2), 43–54. <https://doi.org/10.1080/02508281.2005.11081472>.
- Nunkoo, R., Smith, S. L. J., & Ramkissoon, H. (2013). Residents' attitudes to tourism: A longitudinal study of 140 articles from 1984 to 2010. *Journal of Sustainable Tourism*, 21(1), 5–25.
- Onyx, J., & Bullen, P. (2000). Measuring social capital in five communities. *The Journal of Applied Behavioral Science*, 36(1), 23–42. <https://doi.org/10.1177/0021886300361002>.
- Peterson, N. A., Speer, P. W., & McMillan, D. W. (2008). Validation of a brief sense of community scale: Confirmation of the principal theory of sense of community. *Journal of Community Psychology*, 36(1), 61–73. <https://doi.org/10.1002/jcop.20217>.
- Pranić, L., Petrić, L., & Cetinić, L. (2012). Host population perceptions of the social impacts of sport tourism events in transition countries: Evidence from Croatia. *International Journal of Event and Festival Management*, 3(3), 236–256. <https://doi.org/10.1108/17582951211262684>.
- Rogers, M., & Ryan, R. (2001). The triple bottom line for sustainable community development. *Local Environment*, 6(3), 279–289. <https://doi.org/10.1080/13549830120073275>.
- Sharma, B., Dyer, P., Carter, J., & Gursory, D. (2008). Exploring Residents' perceptions of the social impacts of tourism on the sunshine coast, Australia. *International Journal of Hospitality and Tourism Administration*, 9(3), 288–311. <https://doi.org/10.1080/15256480802096092>.
- Sharpley, R. (2014). Host perceptions of tourism: A review of the research. *Tourism Management*, 42, 37–49. <https://doi.org/10.1016/j.tourman.2013.10.007>.
- Sirgy, M., Rahtz, D. R., Cicic, M., & Underwood, R. (2000). A method for assessing residents' satisfaction with community-based services: A quality-of-life perspective. *Social Indicators Research*, 49(3), 279–316.
- Sirgy, M., Michalos, A., Ferriss, A., Easterlin, R., Patrick, D., & Pavot, W. (2006). The Quality-of-Life (QOL) research movement: Past, present, and future. *Social Indicators Research*, 76(3), 343–466. <https://doi.org/10.1007/s11205-005-2877-8>.
- Sirgy, M., Gao, T., & Young, R. F. (2008). How does residents' satisfaction with community services influence quality of life (QOL) outcomes? *Applied Research in Quality of Life*, 3(2), 81–105.
- Stone, W. (2001). *Measuring social capital: Towards a theoretically informed measurement framework for researching social capital in family and community life* (Research Paper No. 24). Canberra: Australian Institute of Family Studies.

- Vanclay, F. (2004). The triple bottom line and impact assessment: How do TBL, EIA, SIA, SEA and EMS relate to each other? *Journal of Environmental Assessment Policy and Management*, 6(3), 265–288. <https://doi.org/10.1142/S1464333204001729>.
- Veenhoven, R. (2001). Quality-of-life and happiness: Not quite the same. In G. DeGirolamo (Ed.), *Salute e qualità dell'vida* (pp. 67–95). Torino: Centro Scientifico Editore.
- Wang, S., & Chen, J. S. (2015). The influence of place identity on perceived tourism impacts. *Annals of Tourism Research*, 52, 16–28. <https://doi.org/10.1016/j.annals.2015.02.016>.