Highlights of Sustainability

ISSN 2696-628X, A Peer-Reviewed Open Access Journal by Highlights of Science
https://www.hos.pub/ho/sustainability

A Normative Model of Overtourism with Implications for Sustainable Destination Management

by Michael Tarrant, Mikell Gleason, Steven Boyd and Tony Wellington

Cite this Article

Tarrant, M., Gleason, M., Boyd, S., & Wellington, T. (2025). A Normative Model of Overtourism with Implications for Sustainable Destination Management. *Highlights of Sustainability*, *4*(1), 1–15.
https://doi.org/10.54175/hsustain4010001

Highlights of Science

Publisher of Peer-Reviewed Open Access Journals
https://www.hos.pub
Barcelona, Spain

Article

A Normative Model of Overtourism with Implications for Sustainable Destination Management

Michael Tarrant [1,*], **Mikell Gleason** [1], **Steven Boyd** [2] and **Tony Wellington** [3]

[1] Warnell School of Forestry and Natural Resources, University of Georgia, Athens, GA 30602, USA
[2] School of Business and Law, CQUniversity, 160 Ann Street, Brisbane, QLD 4000, Australia
[3] Noosa Parks Association, 5 Wallace Drive, Wallace Park, Noosaville, QLD 4566, Australia
* For correspondence: tarrant@uga.edu

Abstract We adopt a normative model of crowd tolerance (expressed as a willingness to support more or fewer tourists) as a proxy for overtourism. Consistent with Social Exchange Theory, it is proposed that a person will perceive the impacts of tourism at a destination as positive or negative depending on the extent to which they view visitor levels as under or over a threshold that they expect or support (i.e., their norms or tolerance level). A total of 420 residents and 1048 visitors completed a survey interview in the tourist shire of Noosa between 2022 and 2024. Results show that residents and visitors differed significantly on many of the perceived tourism impacts, with long-term residents less favorable to the positive impacts than visitors. There was broad consensus across both residents and tourists, and the highest level of agreement, with negative impacts (especially that tourism contributes to traffic and parking congestion, and higher prices). The lowest levels of agreement with positive tourism impacts were found for "over tourists" (respondents who supported a fewer number of tourists). Implications for sustainable destination management are discussed in the context of the Quadruple Bottom Line, including efforts that enable tourism communities to grow well using a guardianship ethos and collective action of Gifts and Gains.

Keywords norms; overtourism; perceived impacts; destination management; residents; visitors

Received: 31 October 2024
Accepted: 9 January 2025
Published: 15 January 2025

Academic Editor
Haywantee Ramkissoon, University of South Australia, Australia

1. Introduction

Tourism globally is facing an existential crisis, one that threatens to undermine and curtail the very nature of its export industry boom of the preceding 50+ years. Residents in destinations across the world are raising concerns about the impact of visitors on their community's well-being. In a growing number of cases, locals are actively protesting against the number of tourists, prompting tourism agents to re-assess their modus operandi, de-emphasizing the role of visitor marketing in favor of management actions to mitigate tourism impacts. Such concerns are largely the result of widespread and growing demand for tourism experiences. Aside from intermittent and temporary pressures, largely related to socio-economic downturns (e.g., 1970s energy crisis, late 2000s Great Recession, early 2020s COVID-19) and/or localized environmental disasters (e.g., 2005 hurricane Katrina in the U.S., 2010 BP oil spill in the Gulf of Mexico, 2010 Icelandic volcano, 2011 earthquakes in Japan and Christchurch, 2017 hurricane in the Caribbean, 2019 Venice floods), the growth in annual global visitation has been incessant. Indeed, only four years after COVID-19 halted virtually all travel across the globe, international tourist arrivals were already at 96% of pre-pandemic levels.

1.1. Overtourism

What jeopardizes the long-term global trend in tourism is therefore likely not an external factor. Rather an internal threat to the core of the industry—support from within the destination base itself, commonly expressed as "overtourism", a situation of both unacceptable visitor capacities and source of visitor–resident conflicts. Under the myth that more tourists are always better because they support more jobs and build a bigger economy, we fail to acknowledge that the benefits are without costs. As with Aesop's fable, are we now killing the proverbial goose that laid the golden egg? Has the tipping point been reached for some destinations?

The Center for Responsible Travel [1] defines overtourism as, "tourism that has moved

beyond the limits of acceptable change in a destination due to quantity of visitors, resulting in degradation of the environment and infrastructure, diminished travel experience, wear and tear on built heritage, and/or negative impacts on residents". It occurs when the short-term accommodation market has changed the social fabric of neighborhoods, when the environment is losing biodiversity because of tourism pressures, when national parks are forced to close their gates because there's no parking left, and when locals are willing to forgo the economic benefits of more tourism for the social and environmental pleasures of less tourism. Peeters et al. [2] propose that overtourism is reached when physical, ecological, social, and/or economic capacity thresholds are exceeded, while the U.N. World Tourism Organization [3] recognizes that "a serious situation" exists and such impacts are realized by both residents and visitors. More recently Mihalic [4] argues that these impacts have rendered tourism "irresponsible".

Common to most interpretations of overtourism is a recognition that visitor congestion, or a *tipping point* is reached [5] which begins "where there is an imbalance between the perception of positive and negative impacts of tourism" [6]. Inherent in the problem of overtourism is that it (i.e., additional units/tourists) is not in itself a deterrent to visitors, often compounding a positive feedback effect on visitation levels. As places become more crowded, visitors less tolerant of higher numbers of people are displaced by those more tolerant of mass tourism levels, alienating residents even further. The outdoor recreation literature has long acknowledged the issue of visitor displacement [7,8], to the point that user satisfaction is no longer a viable dependent measure in understanding how increasing tourism numbers impact the tourism experience.

Clearly, at the heart of overtourism is declining support from locals for tourism and concomitantly, rising visitor–resident conflicts. Notably, when tourists are asked what they like least about a destination, the response is typically "nothing", but when residents are posed the same question, the answer is often resoundingly "tourists". Arguably, residents are the most vital component of the tourism destination as they are the cultural agent, and provide the social context, in which the tourism service or product is delivered [5]. In a growing number of destinations worldwide, residents are taking combative actions toward visitors. Over the past decade, anti-tourism rallies have gained traction in several (mostly) European cities (e.g., Amsterdam, Barcelona, Dubrovnik, Hong Kong, and Venice), culminating in a call for destinations to create a more balanced approach that benefits residents and the local environment [9]. As a testament to the potential for such conflicts to pose a sustained impact on the industry, regional (and national) tourism boards are beginning (in some cases, arguably slowly and begrudgingly) to shift their focus from destination marketing to destination management. Mihalic ([4], p. 2) asks responsible destination managers to question, "Is your destination already a Barcelona?"

Overtourism obviously varies depending on the type of destination and historical context (the throngs of cruise ship visitors to major European cities such as Venice, for example, is different than the rise in passenger numbers at ports in Alaska or increased vehicle traffic to smaller tourist towns such as Noosa, Australia or Everest-bound climbers in Nepal). Common to all overtourism situations across the globe, however, is local resident antipathy to visitors and the need for local ordinances and legal frameworks to manage the impacts of increasing tourism numbers. Practical solutions have ranged from restrictions on short-term accommodations (including annual limits on nights/stays, council permits, taxes, zoning, and property ownership requirements) to social conditions such as noise ordinances and differential parking fees (for residents and visitors). Whilst such restrictions have positive, short-term effects they do not address the fundamental problem of "how many visitors is too many".

By addressing the needs of the destination broadly, rather than simply the needs of visitors, the goal is to move from unbalanced planning (based on driving demand) to one that aligns with the needs of people and place. Understanding the nature and source of visitor–resident conflicts therefore will be critical to ensuring a balanced and long-term viability of the industry. More specifically, by addressing both residents' and visitors' perceptions of tourism impacts, strategic tourism plans can harness this information to add value to the well-being and quality of life of a destination community [10].

1.2. Social Exchange Theory

Several studies have assessed the impact of perceptions of tourism as an indicator of social carrying capacity using Social Exchange Theory (SET). SET proposes that people will evaluate a potential exchange (such as a proposed tourism development) based on their perceived costs and benefits. In other words, residents are more likely to support tourism development when

they perceive that the benefits of tourism development exceed the cost [10]. Accordingly, those who evaluate the tourism exchange as beneficial (i.e., express a willingness to support development) will perceive the impacts of tourism differently than those who view the exchange as harmful [11]. At the core of SET is the notion that tourist activities can result in positive or negative impacts at social, environmental, and/or economic levels. Thus, residents will likely have more (less) favorable attitudes toward tourism if they perceive the activity has positive (negative) impacts (to themselves and/or to their community) [12]. As an example, Martin et al. [13] demonstrated that residents' aversion to tourist activities rests on their perceptions of perceived economic and social impacts associated with the availability and cost of long-term accommodation rentals.

In other work using SET, Muler et al. [5] report that residents' willingness to accept more tourism (in the town of Besalú, Spain) was (a) significantly associated with (in order from most to least) being employed in tourism, female, middle-aged (40–49 years), and higher educated and (b) corresponded with negative perceptions of certain tourism impacts (namely, "tourists get in the way of residents" and "prices are higher due to tourism"). The effect of socio-demographic characteristics on perceived tourism impacts has been largely inconsistent. Females are reported to hold more negative attitudes toward tourism in New Zealand [14,15] while other studies [16] suggest gender has no significant effect. There is limited evidence that higher education residents have more favorable attitudes toward tourism [17,18], as does middle-age [15,16], but the relative effects are not strong. Overall, the strongest socio-demographic predictor of perceived tourism impacts is employment. Not unsurprisingly, those working in the tourism industry, and/or those who gain personal benefit from tourism, tend to hold more favorable attitudes toward the economic impacts of tourism [16,19].

In other adoptions of SET, Kuscer & Mihalic [6] demonstrated support for an overtourism risk assessment model, by identifying key economic, social, and environmental impacts of concern for residents of a (fast-growing) tourism destination in Slovenia. These impacts (including traffic, crowding, and life quality) had a negative influence on residents' satisfaction with tourism development, presenting a potential overtourism risk. Han et al. [10] used SET to show a relationship between perceived tourism impacts and quality of life (personal and community well-being). Specifically, residents who perceived favorable economic tourism impacts were more satisfied with their material well-being, while positive sociocultural and environmental impacts predicted non-material well-being (emotional, health, and safety). SET was used by Gursoy & Rutherford [20] to show the direct and indirect effect of impact perceptions on host community support for tourism development.

Other work has also shown that residents' support for additional tourism development is closely related to perceptions of both positive and negative (social, economic, and environmental) tourism impacts [21–23]. Yu et al. [24] for example, concluded that economic and sociocultural benefits positively influence resident support for tourism, whereas negative sociocultural and environmental consequences reduce their support. Several studies of tourism in the Sunshine Coast, Queensland, Australia conducted in the late 2000s report that residents' support for tourism development in the region was influenced by perceived (positive and negative) economic impacts, followed by positive and negative social impacts [25–27].

1.3. Visitor Capacities and Norms

To date, most studies of perceived tourism impacts have focused on residents, and relatively few have examined how such perceptions differ between visitors and residents, despite the importance of understanding conflicts between the two groups. We use the case of Noosa, an iconic coastal tourism destination in Southeast Queensland, Australia to explore visitor and resident perceptions of environmental, social, and economic tourism impacts. Such impacts serve as indicators of tourism carrying capacities and help determine if (and how) visitor capacities in the destination have been reached. Noosa was selected as the case study as it exemplifies many of the characteristics of sustainable tourism planning (for further information on the study site, see below).

One of the most dominant models of visitor capacities in the past four decades has been the Limits of Change (LAC) [28,29]. Originating in the outdoor recreation field, recent tourism studies have adopted the LAC framework to address visitor capacities by addressing respondents' (visitor and resident) tolerance for crowd levels. Perceived crowding has therefore become a common primary dependent measure in the study of visitor capacities. Crowding is a normative concept, defined as a subjective evaluation of density. In other words, density is not interpreted negatively (as crowding) until it exceeds one's norms or expectations about acceptable visitor levels.

Consistent with SET, respondents' tolerance for crowding (i.e., a willingness to support more or less tourism) affects the extent to which a person (resident or visitor) perceives impacts as beneficial or harmful. In sum, crowding tolerance can be used as a proxy for overtourism, as a measure of whether people view visitor levels as under or over a threshold that they expect or support. For the purposes of this study, respondents who support fewer tourists are described as being *overtourism* while those who support more tourists reflect a condition of *undertourism*.

It is important to recognize that both resident and visitor groups can be categorized further based on their experience or relationship with the destination. Day-visitors, for example, likely experience a different tourism product than overnight tourists, by virtue of the length of stay and their mode of transport. In the Noosa case, almost one-half of the 1.164M overnight visitors are interstate with air travel as the most common form of transport [30]. In contrast, most of the 995,000 day-visitors are intrastate (QLD) and arrive by car, contributing to localized traffic congestion and demand for limited parking spaces. A Noosa Council report [31] shows that the economic impact of each visitor group is also highly variable: Average daily expenditure of day-visitors (A$108/day, total spend of ~A$103M) is only 7% of that of overnighters (~A$1500/day, total spend of ~A$1.6Bn) to the region. In the 5-year period prior to COVID-19 (2015–2019), the number of overnight visitors increased by 27% (with corresponding nights up by 32% and spending up by 59%) indicative of a strong growth trend.

In a similar vein, longer-term residents (i.e., those who have resided in the community more than the median average length of stay) are more likely to have negative perceptions of tourism, than short-term residents, simply because they will have experienced more relative increases in visitation over time. As with many popular tourism destinations across the globe, Noosa is reportedly being "loved to death" [32]. Accordingly, longer-term residents also have greater potential to be displaced by more recent migrants (i.e., short-term residents) to the community who are likely more tolerant of higher tourism impacts/numbers.

1.4. Research Questions

Our research is framed by the following questions:

1. How do perceived tourism impacts (economic, environmental, and social) vary by type of resident (short- and long-term) and visitor (day- and overnight)?
   a. We hypothesize that visitors will have significantly more positive perceptions of tourism impacts than residents (H1).
2. How does crowding tolerance vary by resident/visitor type?
   a. We hypothesize that residents will exhibit significantly lower levels of crowding tolerance (i.e., support fewer tourists) than visitors (H2).
3. What is the relationship between perceived tourism impacts and crowding tolerance?
   a. We hypothesize that impact perceptions will be significantly and inversely correlated with crowding tolerance (i.e., respondents who support more (less) tourists will report lower (higher) perceptions of tourism impacts) (H3).
4. What are the socio-demographic characteristics (or correlates) of crowding tolerance?
   a. We hypothesize that (i) employment in the tourism industry is significantly and positively correlated with undertourism, while (ii) the effect of gender, age, and education on crowding tolerance is unknown, given that past studies report mixed effects (H4).

2. Materials and Methods

2.1. Location

Noosa, 120 km north of Brisbane contains a world surfing reserve (established 2017), the country's most visited national Park (Noosa National Park, 1939), is a designated UNESCO Biosphere Reserve (2007), and 30% of the Shire is protected greenspace. Home to ~58,000 residents (49% male, median age of 50 years) with a relatively flat ~1% recent annual residential population growth rate, after several years of ~7% growth, and an aging population—the median age of residents is 47 years, compared to the QLD state average of 36 years. In 2022/23 the primary employment sectors were health care (15.6% of total employment in the Shire) accommodation and food services (13.3%), retail trade (12.7%), construction (11.9%), and technical services (7.4%) industries [33].

The region has a history of conflict and the natural and human environments which characterize Noosa today are a direct result of numerous battles among various stakeholders (residents,

organizations, councils, local developers, and multinational corporations) who have fought vigorously over the years to protect and/or enhance the types of values and uses of the area they consider to be important [34,35]. Since the 1950s, the residents of Noosa have formed numerous volunteer community organizations to consciously shape the evolution of their own community, with an emphasis on social, economic, and environmental sustainability. For example, the town harbors the oldest conservation organization in the state of Queensland (Noosa Parks Association) and local council plans and ordinances reflect a green philosophy.

In 1995 the Council introduced a population cap for the Noosa Shire of 56,000 (later increased to 62,000 people). Subsequent town plans have included *Noosa design styles* that reflect community values and desired village (versus city) features such as the absence of high-rise buildings (no buildings taller than the highest tree, with only a single exception grandfathered into the clause), limited signage, single level car parking, limited traffic lights (only two currently exist in the Shire), no parking meters, and a commitment to making the town walkable and bikeable (with extensive pedestrian and biking paths). Such planning has not happened by chance, rather it reflects the activities and attitude of local residents (both as individuals and through organizations) that, over the past half-century, have voted consistently against commercial development that has not been aligned with Triple Bottom Line (TBL) thinking.

The battle between conservation and development, however, ever looms on the horizon and the current major challenge (notwithstanding constant demands by the Queensland state government to increase the residential population in direct competition with local plans) is to establish a Destination Management Plan emphasizing acceptable limits of visitor capacities. In 2018, Noosa Council invited a number of local stakeholders, representing local businesses (e.g., Hastings Association, Noosa Chamber of Commerce, and Tourism Noosa), residents (Noosa Residents and Ratepayers Association), and conservation groups (such as Noosa Integrated Catchment Area, Noosa Parks Association, and Noosa Biosphere Reserve) under the guise of the Sustainable Tourism Stakeholder Reference Group to produce a written accord/statement about how tourism should be managed in the Shire. Their ensuing report, though not an accord (which was deemed unattainable across disparate interests) did recognize that the growth in visitor numbers (especially day trippers) and climate change will present the greatest challenges to managing Noosa as a tourist destination.

2.2. Data Collection

As part of an overseas study abroad citizen science project, cohorts of ~30–32 students from a large public university in the Southeastern United States administered a survey at selected locations in and around the Noosa region in Southeast Queensland, Australia in March, May, June, and December annually from 2022 to 2024. All students were trained in survey techniques and interview protocols by the Principal Investigator. Students worked in pairs (one administering the survey interview, the other recording responses) for approximately 1–1.5 hours on each data collection period, collecting a minimum of 6–8 completed surveys per pair at each of two locations (i.e., 12–16 surveys per pair).

2.3. Sampling

Sampling was conducted at several locations around the Noosa region including Eumundi markets (the most visited arts and crafts market in Australia, in a town called Eumundi neighboring the Noosa Shire), along Hastings Street (a tourist high street in Noosa), Main Beach and at the trailhead of Noosa National Park (the two primary tourism destinations in Noosa), in Noosaville (a historically residential area but more recently a growing tourism destination along Noosa River), and at Sunshine Beach (a small coastal village on the Eastern seashore of Noosa Shire). Respondents were contacted using one of three types of convenience sampling:[1]

- For crowded locations (such as Main Beach) interviewers walked to-and-fro in a straight line, asking every third person that came within 1–2 meters.

[1] A convenience sampling method was used to collect a nonprobability sample in cases where individuals in a population cannot be randomly assigned. In our case, sampling days (and times of the day) and locations were selected based on convenience. This does not invalidate the results, rather the data are only representative of the days and locations selected. It should be noted, however, that respondents were randomly selected within the convenience sample.

- In areas where people were mobile with relatively high density (such as Hastings Street, Eumundi market, and Noosa River), interviewers situated themselves at a single location with a steady flow of people passing (e.g., shaded picnic table at a trailhead or on the street) and used a random number generator (e.g., via a mobile phone app) from 1–10 to select a respondent [36].
- In areas where people were mobile but with low-density levels (such as Sunshine Beach village), interviewers were situated at a single location and asked every person who passed by.

Only adults (respondents aged 18 years or older) were interviewed and no incentives to participate were provided. In cases where a group (i.e., a pair or more) of people was encountered, only one person was selected to interview; this was done by either using another random digit (from 1–X, where X is the group size or by first selecting the tallest person from the first group identified, then the second/third, etc., highest for the second/third group, etc.). Student training was conducted by the Principal Investigator for each cohort prior to administration of the survey instrument. The training included a session on ethical research with human subjects with addressed the following principles: Integrity (to be honest, fair, impartial, and unbiased), excellence (to perform duties to foster a culture of high quality), accountability (to be good stewards of the human, intellectual, physical and fiscal resources), and respect (to recognize the rights of every person and to treat each person with fairness, compassion, and decency).

2.4. Measures

First, respondents were asked if they currently lived in Noosa Shire (resident) and length of residency (in years). Short- (long-) term residents were classified as residing in Noosa for less (more) than the median number of years. Visitors were asked how many nights (if any) they were staying in Noosa. Day-visitors were those visiting, but not staying overnight in the Noosa Shire.

The following socio-demographic variables were measured: Gender (Male/Female/Indeterminate) and age (18–25 years, 25–40 years, 40–60 years, and 60+ years). Neither the respondents' age nor gender were asked, rather they were self-recorded by the interviewer. Respondents were asked for their highest level of formal education (namely, Certificate I/II, Certificate III/IV, diploma, bachelor's, master's, and PhD) and whether they (or a family member/close relative) were employed in the tourism industry.

We used SET as a framework to examine the hypotheses. To measure crowding tolerance (i.e., over- and undertourism), respondents were asked to indicate their "support for Noosa having more tourists, fewer tourists, or if the current number of tourists in Noosa was about right" (adapted from [5]). A series of nine items, three negative and six positive (selected from [5] and [6]) was used to measure respondent's perceived (economic, environmental, and social) impacts of tourism in Noosa on a 5-point bi-polar scale (from 1 "strongly disagree" to 5 "strongly agree," with a mid-point of 3 "neither agree nor disagree") (Table 1). Three items were selected for each of the three respective factors with factor scores ranging from a low of 3 to a high of 15. For each factor, two items represented positive impacts, and one item represented a negative impact. Negative items (indicated with an asterisk) were reverse-coded for the purposes of computing the respective factor. Therefore, a high score on each item (and factor) indicates a more positive impact perception, i.e., a score of 15 on the economic factor represents an extremely favorable perspective that tourism provides positive economic benefits. Similarly, high scores on the environmental and social items (and factors) reflect favorable perspectives that tourism generates positive environmental and social impacts.

2.5. Analysis

Data was analyzed using Stata statistical software [37]. H1 and H3 were tested using a MANOVA with follow-up post-hoc Scheffe tests. H2 and H4 were tested using a Chi-Square. A significance level of $p < 0.05$ was used for all statistical testing.

Table 1. Descriptive Analysis of Perceived Tourism Impacts for All Respondents.

	Mean	S.D.
5-point scale (1 = strongly disagree, 5 = strongly agree)		
Tourism brings jobs and money (Econ)	3.66	1.10
Prices are higher because of tourism* (Econ)	3.74	1.31
Tourism improves the quality of services (Econ)	3.89	1.03
Because of tourism, beaches/parks are cared for (Env)	3.70	1.11
Tourism has led to traffic congestion/parking* (Env)	3.97	1.31
Tourism helps preserve the natural environment (Env)	2.98	1.19
Tourism improves the quality of life (Social)	3.23	1.08
Tourists get in the way of residents* (Social)	3.52	1.23
Airbnb makes life more desirable (Social)	3.12	1.17
15-point scale (computation of three respective items)		
Economic factor	9.43	1.94
Environmental factor	8.38	2.60
Social factor	8.49	2.22

* Negative items were recorded for the purpose of computing the respective factor.

3. Results

3.1. Descriptives

We obtained a total sample of 1498 respondents: 30.0% (n = 450) residents and 70.0% (n = 1048) visitors with a response rate of 69% (No follow-up test of nonrespondents was conducted, thus a non-response bias could not be determined). A total of 30 residents were discarded because they indicated "resident" in the interview but provided a postcode not located within the Noosa Shire, leaving a total sample of 1468 respondents. Missing cases were excluded listwise, meaning that a case was dropped from an analysis if it contained a missing value in at least one of the specified variables.

Of all respondents, 44.6% (n = 654) were male (there were no indeterminate genders) and 16% (n = 228) worked in the tourism industry. There was a relatively uniform distribution of age categories: 23% were aged 18–25 years (n = 339), 28% aged 26–40 years (n = 415), 28% aged 41–60 years (n = 409), and 21% were aged above 60 years (n = 305). Over one-half (52%) of the sample had obtained at least an undergraduate degree.

Short- (long-) term residents were defined as those residing less (more) than the median average of 12 years in the Shire (the range of residency was less than one year to 74 years). Of all visitors to the Shire, 19.5% (n = 204) were day-visitors and 80.5% (n = 844) were overnighters (with a mean length of stay of 6.6 nights).

Overall, 12.5% (n = 184) supported more tourists, 21.9% (n = 321), supported fewer tourists, and 65.6% (n = 963) supported the current number of tourists. This means that the vast majority (87.5%) of respondents did not support an additional increase in the number of tourists to Noosa.

Table 1 shows mean and standard error (s.d.) scores for each tourism impact perception item. Two of the three highest-rated impact items were negative (there were only three negative items in total), suggesting that both residents and visitors are concerned about the negative impacts of tourism in Noosa. The strongest levels of agreement were "tourism has led to traffic congestion", "tourism improves the quality of services", and "prices are higher because of tourism". Conversely, the lowest levels of agreement were reported for "tourism helps preserve the natural environment", "Airbnb makes life more desirable", and "tourists get in the way of residents".

By recoding the negative items, the lowest levels of agreement with the 3-item factors (on a scale from 3/lowest to 15/highest) were for the environmental ($\bar{x}$ = 8.72, s.d. = 2.37) and social ($\bar{x}$ = 8.82, s.d. = 2.22) factors; while the economic impacts of tourism ($\bar{x}$ = 9.79, s.d. = 2.11) had the most favorable perceptions. However, these differences must be understood within the context of the hypothesized relationships (see below).

3.2. Hypothesis 1: Visitors Will Have Significantly More Positive Perceptions of Tourism Impacts than Residents

Overall, residents (both short- and long-term) rated all three tourism impact factors (environmental, social, and economic) significantly lower than overnight visitors (Pillai's Trace = 0.0245,

$F = 3.85$, $p < 0.001$). Overnight visitors rated all three impact factors significantly more favorably than either short- or long-term residents (Table 2). There were no significant differences among short-term residents, long-term residents, and day-visitors across the three impact factors.

Table 2. ANOVA of Economic, Environmental, and Social Items (and Factors) by Resident/Visitor (Short-term resident, Long-term resident, Day-visitor, Overnight visitor).

	Short-term (*n* = 188)		**Long-term (*n* = 188)**		**Day-visitor (*n* = 204)**		**Overnight (*n* = 844)**			
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	*F*	*p*
5-point scale (1 = strongly disagree, 5 = strongly agree)										
Tourism brings jobs and money (Econ)	3.56	1.04	3.51	1.37	3.66	1.15	3.71	1.04	2.32	0.073
Prices are higher because of tourism* (Econ)	$3.80^{a,b}$	1.29	3.55^{a}	1.38	4.03^{b}	1.18	$3.73^{a,b}$	1.29	4.90	**0.002**
Tourism improves the quality of services (Econ)	3.73^{a}	1.13	3.63^{a}	1.05	3.98^{b}	1.04	3.98^{b}	0.96	8.31	**<0.001**
Because of tourism, beaches/parks are cared for (Env)	3.71^{b}	1.18	3.49^{a}	1.20	3.76^{b}	1.05	3.75^{b}	1.06	3.01	**0.029**
Tourism has led to traffic congestion/parking* (Env)	3.99	1.43	3.90	1.34	4.14	1.24	3.92	1.29	1.68	0.170
Tourism helps preserve the natural environment (Env)	2.68^{a}	1.24	2.77^{a}	1.21	$2.90^{a,b}$	1.20	3.09^{b}	1.15	8.98	**<0.001**
Tourism improves the quality of life (Social)	3.06^{a}	1.08	3.05^{a}	1.23	$3.20^{a,b}$	1.07	3.29^{b}	1.02	4.28	**0.005**
Tourists get in the way of residents* (Social)	3.60	1.21	3.51	1.33	3.54	1.19	3.52	1.22	0.27	0.846
Airbnb makes life more desirable (Social)	3.03^{b}	1.22	2.69^{a}	1.30	3.14^{b}	1.21	3.22^{b}	1.08	11.33	**<0.001**
15-point scale (computation of three respective items)										
Economic factor	9.43^{a}	1.94	9.55^{a}	2.43	$9.60^{a,b}$	2.03	9.95^{b}	2.04	4.93	**0.002**
Environmental factor	8.38^{a}	2.60	8.37^{a}	2.67	$8.52^{a,b}$	2.25	8.92^{b}	2.22	5.24	**0.001**
Social factor	8.49^{a}	2.22	8.24^{a}	2.48	$8.77^{a,b}$	2.28	9.00^{b}	2.08	7.80	**<0.001**

Manova, Pillais = 0.0245, $F = 3.85$, $p < 0.001$.
* Negative items were recorded for the purpose of computing the respective factor.
Superscripts indicate significant differences between means (at $p < 0.05$).

In terms of specific factor items, significant differences between visitors and residents were observed for six of the nine items (Table 2):

1. Economic impacts of tourism
   a. Cost of services: Day-visitors were significantly more likely than long-term residents, to agree that prices were higher because of tourism ($F = 4.90$, $p = 0.002$).
   b. Quality of services: Residents (both short- and long-term) were less likely to agree than both day- and overnight visitors, that tourism improves the quality of services, $F = 8.31$, $p < 0.001$).
2. Environmental impacts of tourism
   a. Beaches and parks: Long-term residents were significantly less likely than all other groups, to agree that beaches and parks were better cared for because of tourism ($F = 3.01$, $p = 0.029$).
   b. Environmental preservation: Both short- and long-term residents were less likely than overnighters, to agree that tourism helps preserve the natural environment (F 8.98, $p < 0.001$).
3. Social impacts of tourism
   a. Quality of life: Both short- and long-term residents were significantly less likely than overnighters, to agree that tourism improves the quality of life ($F = 4.28$, $p = 0.005$).
   b. Short-term accommodation: Long-term residents were significantly less likely than all other groups, to agree that Airbnb makes life more desirable ($F = 11.33$, $p < 0.001$).

Overall, the positive tourism impacts (five of the six items) were more likely to elicit significant differences in perceptions across the visitor–resident groups than the negative tourism impacts (only one of the three items). This suggests that there is a higher consensus across all groups about the negative (than positive) impacts of tourism. Again, the lowest scores were recorded by the long-term residents for the two items: Airbnb makes life more desirable, and tourism helps preserve the natural environment.

3.3. Hypothesis 2: Residents Will Exhibit Significantly Lower Levels of Crowding Tolerance (i.e., Support Fewer Tourists) than Visitors

This hypothesis examined how crowding tolerance varied by visitor/resident type. Overall, findings suggest that most respondents (ranging from 54–71%) support maintaining the current level of visitors to Noosa (Table 3). However, the distribution varies significantly across the four groups of visitor/resident types. Results of the Chi-Square test show that residents (both short- and long-term) were significantly more likely than visitors to be overtourism/support fewer tourists ($\chi^2 = 28.49$, $p < 0.001$); i.e., the number of observed cases of short- and long-term residents supporting fewer tourists was much greater than expected by chance. Almost one-third of long-term residents (30.6%) and over a quarter (26%) of short-term residents are overtourism versus less than one-fifth (18.7% and 18.9% respectively) of visitors (day- or overnight).

Conversely, visitors (both day- and overnight) reported significantly higher support, than residents, for maintaining the current levels of tourists. Relatively few respondents (ranging from 10–16% only) supported more tourists. In other words, the prevalence of undertourism in Noosa is extremely low. Interestingly, the lowest support for more tourists of any visitor/resident group (at only 10%) occurred for overnight visitors.

Table 3. Chi-Square (28.49, $p < 0.001$) of Support for More, Fewer, Current Levels of Tourists in Noosa by Resident/Visitor (Short-term resident, Long-term resident, Day-visitor, Overnight visitor).

	More Tourists	Fewer Tourists	Current Levels of Tourists	Total
Short-term resident				
Actual *n*	29	47	105	181
Expected *n*	22	39	120	
%	16.0%	**26.0%**	58.0%	100%
Long-term resident				
Actual *n*	28	56	99	183
Expected *n*	22	39	122	
%	15.3%	**30.6%**	54.1%	100%
Day-visitor				
Actual *n*	30	38	135	203
Expected *n*	25	43	134	
%	14.8%	18.7%	**66.5%**	100%
Overnight visitor				
Actual *n*	85	158	594	837
Expected *n*	103	178	556	
%	10.1%	18.9%	**71.0%**	100%

3.4. Hypothesis 3: Impact Perceptions Will Be Significantly and Inversely Correlated with Crowding Tolerance

H3 explored whether respondents who support more (less) tourists will report lower (higher) perceptions of tourism impacts. Overall, respondents who supported fewer tourists (overtourism) rated all three tourism impact factors (environmental, social, and economic) the lowest of any group (Pillai's Trace = 0.0152, $F = 3.61$, $p = 0.001$). Table 4 shows that those respondents who supported more tourists (undertourism) reported the highest/most favorable environmental ($F = 4.59$, $p = 0.010$ and social factors ($F = 7.13$, $p < 0.001$) and the second highest economic factor ($F = 3.64$, $p = 0.027$).

In terms of perceived impact items, significant differences were observed for the following:

1. Economic impacts of tourism
   a. Jobs and money: Respondents who supported fewer tourists were significantly less likely than those who support maintaining current levels, to agree that tourism brings jobs and money ($F = 5.58$, $p = 0.004$).
   b. Quality of services: Respondents who supported the current level of tourists were more likely than those who supported more tourists, to agree that the quality of services is higher because of tourism ($F = 4.64$, $p = 0.010$).
2. Environmental impacts of tourism

a. Environmental preservation: Respondents who supported fewer tourists were significantly less likely, while those who supported more tourists were significantly more likely to agree that tourism helps preserve the natural environment ($F = 9.17$, $p < 0.001$).

3. Social impacts of tourism
   a. Quality of life: Respondents who supported fewer tourists were significantly less likely than those who support maintaining current levels, to agree that tourism improves the quality of life ($F = 15.03$, $p < 0.001$).
   b. Short-term accommodation: Respondents who supported fewer tourists were significantly less likely than those who support maintaining current levels to agree that Airbnb makes life more desirable ($F = 3.82$, $p = 0.002$).

Table 4. ANOVA of Economic, Environmental, and Social Items (and Factors) by Crowding Tolerance.

	More Tourists (*n* = 184)		**Fewer Tourists (*n* = 321)**		**Current Tourists (*n* = 963)**			
	Mean	S.D.	Mean	S.D.	Mean	S.D.	*F*	*p*
5-point scale (1=strongly disagree, 5=strongly agree)								
Tourism brings jobs and money (Econ)	$3.64^{a,b}$	1.17	3.50^{a}	1.28	3.73^{b}	1.00	5.58	**0.004**
Prices are higher because of tourism* (Econ)	3.60	1.30	3.79	1.32	3.80	1.28	1.66	0.190
Tourism improves the quality of services (Econ)	3.73^{a}	1.16	$3.81^{a,b}$	1.10	3.95^{b}	0.98	4.64	**0.010**
Because of tourism, beaches/parks are cared for (Env)	3.76	1.11	3.61	1.18	3.74	1.07	1.68	0.186
Tourism has led to traffic congestion/parking* (Env)	3.92	1.32	3.96	1.34	3.99	1.30	0.23	0.798
Tourism helps preserve the natural environment (Env)	3.25^{c}	1.18	2.79^{a}	1.20	3.01^{b}	1.18	9.17	**<0.001**
Tourism improves the quality of life (Social)	3.33^{b}	1.10	2.94^{a}	1.22	3.31^{b}	1.01	15.03	**<0.001**
Tourists get in the way of residents* (Social)	3.36	1.34	3.52	1.33	3.55	1.17	1.90	0.150
Airbnb makes life more desirable (Social)	3.05^{a}	1.21	3.00^{a}	1.20	3.19^{b}	1.34	3.82	**0.022**
15-point scale (computation of three respective items)								
Economic factor	$9.76^{a,b}$	2.16	9.52^{a}	2.47	9.88^{b}	1.96	3.64	**0.027**
Environmental factor	9.09^{b}	2.03	8.45^{a}	2.56	$8.76^{a,b}$	2.35	4.59	**0.010**
Social factor	9.01^{b}	2.37	8.43^{a}	2.41	8.94^{b}	2.10	7.13	**<0.001**

Manova, Pillais = 0.0152, $F = 3.71$, $p = 0.001$.
* Negative items were recorded for the purpose of computing the respective factor.
Superscripts indicate significant differences between means (at $p < 0.05$).

As with H1, the positive tourism impacts (five of the six items) were considerably more likely to elicit significant differences in perceptions between the three groups. Indeed, none of the three negative tourism impacts produced differences between those wanting more, fewer, or current levels of tourists. Again, this implies higher agreement across all groups about the negative (than positive) impacts of tourism.

3.5. Hypothesis 4: Socio-demographic Characteristics (Especially Employment) Will Be Significantly Related to Crowding Tolerance

H4 examined the socio-demographic characteristics of over- and undertourism in Noosa. Results show that none of the four variables were significantly related to crowding tolerance: age ($\chi^2 = 12.11$, $p = 0.060$), employment ($\chi^2 = 2.28$, $p = 0.319$), education ($\chi^2 = 2.06$, $p = 0.579$), and gender ($\chi^2 = 5.17$, $p = 0.075$).

4. Discussion

The wicked problems that contemporary society faces (of which overtourism is but one example) ultimately demand the reconciliation of stakeholder interests governing shared norms or expectations. In the case of destination management, problems arise when stakeholders' (visitors, residents, and other community groups) expectations for *how things should be* are violated. Accordingly, destination management begins with understanding social norms. Such norms provide a benchmark (or standard) by which social conflicts (for example, over- or undertourism) can be understood and evaluated. In essence, destination management relies on understanding

stakeholders' desired outcomes regarding acceptable future economic, social, and environmental impacts of tourism.

We used respondents' tolerance for crowding (i.e., a willingness to support more or less tourism) as a normative indicator of whether people view visitor levels as under or over a threshold that they expect or support. Respondents who supported fewer tourists were termed *overtourism* while those who supported more tourists reflected a condition of *undertourism*. Two-thirds of respondents supported retaining the number of visitors at current levels and only one in eight people supported more tourists to the region. Indeed, almost twice as many respondents, and significantly more residents (both short- and long-term) than visitors, supported fewer (than more) tourists. Collectively, the evidence suggests Noosa is on the cusp of experiencing a condition of overtourism.

To understand where the impact of overtourism is most likely to occur in Noosa, the results of H1 and H3 are telling. There is broad consensus across all groups, and the highest level of agreement, with negative impacts (especially that tourism contributes to traffic and parking congestion, and higher prices). Conversely, the lowest levels of agreement were found for several positive tourism impacts (tourism preserves the natural environment, tourism improves the quality of life, and Airbnb makes life more desirable). Consistent with previous studies, respondents were most likely to agree with two of the positive economic benefits (tourism improves the quality of services and brings jobs and money).

Most importantly, residents and tourists differed significantly on many of the perceived tourism impacts, with long-term residents less favorable toward any of the positive impacts than visitors (there were no differences between visitors and residents for two of the three negative impact items, reflecting the consensus noted above). Given there was a significantly higher proportion of (both short- and long-term) residents (than visitors) that supported fewer tourists, it is not surprising that the lowest levels of agreement with positive tourism impacts were found for "over tourists" (e.g., tourism helps preserve the natural environment and improves the quality of life). Again, there were no significant differences across the three groups for any of the three negative impact items, suggesting general and broadscale concern about the effect of tourism on traffic congestion/parking and prices.

Finally, data was collected at various locations and days throughout the year. Historically, December is peak season, March is low-mid season and May/June is relatively low season. Evidence that the potential for overtourism is ubiquitous (i.e., occurs broadly and outside of the peak season and away from solely the hotspots) should be cause for concern for tourism planners, especially those who suggest that overtourism is limited to a few days/weeks of the year and/or specific locations within the Shire.

5. Conclusions

We used Noosa as a case example to demonstrate how SET can be used as a normative model to better understand visitor–resident conflicts and acceptable visitor capacities. As such, Noosa is no different than many other destinations globally that are faced with the prospect of overtourism and the challenge of improving local tourism planning through effective destination management. The implications described below apply as equally to those destinations as they do to Noosa.

Noosa Council's Sustainable Tourism Reference Group (see earlier) was charged with "establishing a sustainable future for the local tourism sector that is aligned to and respects the aspirations of the Noosa community [on the assumption that] what is good for the resident is also good for the visitor. A place that is great to live is also a place that is great to visit" [38]. At the core of this strategic mission is (a) to recognize and describe residents' perceived impacts of tourism in the region and (b) to understand visitor–resident conflicts arising from those impacts (e.g., in areas such as short-term accommodation, infrastructure pressures, quality of life, and the local parks and beaches). The effect of day-versus overnight visitors is of particular concern given the local tourism organization (Tourism Noosa) has historically taken a "value over volume" approach to marketing, as likely do many other regional and local tourism organizations, both in Australia and globally. Some practical solutions to addressing the influx of day-visitors include an entrance fee (Venice, for example, has introduced an access fee for occasional visitors to the ancient city on specific days throughout the year) and parking fees (though this idea is rebuked in Noosa because it is inconsistent with the "village-like atmosphere" that drives the planning culture). The debate about value over volume is, of course, fraught with concerns over inequities

and lack of diversity, especially since the primary tourism drivers in Noosa are public spaces (Noosa National Park and Main Beach).

Before enacting sustainable destination management plans, local and regional tourism boards will need to address stakeholder disagreements regarding the use of the term overtourism and whether such a condition has been reached in their markets [4], many traditional marketing boards will balk at the idea that more tourism does not necessarily equate to more positive benefits. Our results challenge this assumption. Not only are the perceived costs/negative impacts of tourism noticeably higher than the perceived benefits/positive impacts but there is more agreement across all stakeholders (both resident and visitor groups) regarding the negative impacts.

Some degree of overtourism has already been reached in the case of Noosa, notably among residents but to some degree also among visitors. Certainly, such communities can ride the wave of displacement [39]—the idea that both residents and visitors will ultimately be displaced by those more tolerant of higher visitor levels and with different, i.e., higher (lower) agreement with positive (negative) impacts. But, in doing so, they are disregarding the opinions of their current visitor and resident base, and ultimately the local planning process that is built on democratic community input. In the case of Noosa, there is also the potential for irreparable damage to the Noosa brand, which is associated with a blend of greenness/unspoiled nature, chic style, and relaxation. This image has been used to sell not only tourism experiences but also local goods from yogurt to specialty beers. Additionally, the current state of tourism management in Noosa has the potential of discouraging the existing overnight market—only 10% of overnight visitors supported an increase in more tourists, the lowest of any visitor/resident group.

Successful destination management will need to move beyond simply sustainable thinking, rather it will also need to embrace a moral framework. The Triple Bottom Line concept forwarded by Elkington [40] has been the primary model for sustainable development over the past two or three decades. However, by addressing *only* the 3Ps (planet, profit, and people) it fails to acknowledge the importance of ethics or morals (a fourth dimension) in decision-making, termed the Quadruple Bottom Line [41,42]. A moral responsibility argues that humans should consider what is *right or wrong* in terms of our actions. As a society, we have spent the last 50+ years building an information database (the Internet) that has brought us artificial intelligence and machine-based learning capable of human logic but perhaps not human morals (at least not yet). In other words, we now have the technology and science to play God, we just don't know if we should. In this sense, the moral dimension may well become the prevailing challenge for the remainder of the 21st Century permeating all aspects of society from AI and medicine to export industries such as travel. In the case of destination management, the moral dimension begs planners to consider *what is right is wrong* for the local community (as both a place to live and play/vacation) and environment. In essence, how do tourism-dependent communities grow well and progress?

A novel approach for *Growing Well* is the guardianship ethic that has been promoted in New Zealand through the *Tiaki Promise* (https://www.tiakinewzealand.com) and in the United States through the Island of Hawai'i *Pono Pledge* (https://ponopledge.com). At the heart of these approaches is a position that visitors and tourists alike share a responsibility to take care of a place, now and in the future. It means visitors treat the destination as they would their own home, acting as a guardian to protect and preserve its cultural, natural, and social values. However, visitors can only add value to a place when the community (and the wider tourism system) is adequately positioned for it.

We advocate that tourism destinations consider adopting a *Gifts and Gains* [43] strategy to reconcile differences in stakeholder interests and values and to position themselves to Grow Well. Gifts and Gains is a process by which consensus in collective actions/decision-making depends on interested parties/stakeholders relinquishing individual benefits to achieve communal rewards. Originally conceived and implemented in the Fiordland (*Te Manoa o Atawhenua*) Marine Management Act (2005), it requires that stakeholders relinquish (Gift) individual needs and wants to achieve (Gain) sustainability that reflects the community good [44]. In Fiordland, the process led to the creation of the Fiordland Marine Guardians, a group that represents the broad interests of stakeholders from commercial and recreational fishers to marine science, conservation, representative iwi, and the local communities. In adopting the guiding ethic of *kiatiakitanga* (a responsibility to look after community treasures for current and future generations) the concept of guardianship has been enacted and realized. Such thinking holds considerable potential in communities such as Noosa, with strong indigenous heritage (and a commitment to traditional

ecological knowledge and worldviews) and links to managing destinations based on a *sense of place* (i.e., one that has value and meaning to visitors and residents alike).

From a theoretical perspective, the Gifts and Gains strategy also has relevance to broader concepts such as social justice. Rawls's framework [45] supports the idea that fairness (not utility) is at the heart of society. Contemporary developed societies are based on the utilitarian principle of distributing resources based on the greatest good for the greatest number. In accordance with the justice philosophy, Gifts and Gains requires that society (in this case a community of stakeholders) frame their decisions regarding the distribution of scarce resources on what is in the fairest interests of the collective. In an ecological sense, it represents the ideals of Aldo Leopold's *Land Ethic* [46] in which decisions are made in the best interests of the community as a whole (land and water, humans and non-human species).

Finally, future work should not only prescribe visitor norms and acceptable capacities for tourism destinations but also identify action plans for implementing and managing such capacities. Importantly, such actions (including Airbnb/short-term stay accommodation policies and practices, user/entrance fees, alternative transport networks, etc.) cannot realistically be instituted without an understanding of the *apriori* (baseline) conditions of visitor and resident perceptions and demands. Otherwise, how can we evaluate if such actions have been successful?

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Data Availability

Data supporting this study are not publicly available due to human subjects review. Requests for data access can be made to irb@uga.edu.

Acknowledgements

The authors wish to acknowledge the support of Noosa Parks Association (in particular Michael Gloster and Darlene Gower), Noosa Council, and the Original Eumundi Markets with data collection.

Author Contributions

Conceptualization: M.T., M.G., S.B., & T.W.; Data curation: M.T., & T.W.; Formal analysis: M.T.; Investigation: M.T., M.G., S.B., & T.W.; Methodology: M.T., & M.G.; Project administration: M.T., M.G., S.B., & T.W.; Resources: M.T., & M.G.; Software: M.T.; Supervision: M.T., M.G., S.B., & T.W.; Validation: M.T., M.G., & S.B.; Visualization: M.T.; Writing – original draft: M.T., & T.W.; Writing – review & editing: M.T., M.G., S.B., & T.W.

Conflicts of Interest

The authors have no conflict of interest to declare.

References

1. The Center for Responsible Travel. (2018). *The Case for Responsible Travel: Trends and Statistics 2018*. https://www.responsibletravel.org/wp-content/uploads/sites/213/2021/03/trends-and-statistics-2018.pdf (accessed 29 October 2024).
2. Peeters, P., Gössling, S., Klijs, J., Milano, C., Novelli, M., Dijkmans, C., et al. (2018). *Research for TRAN Committee—Overtourism: Impact and Possible Policy Responses*. European Parliament, Policy Department for Structural and Cohesion Policies.
3. United Nations World Tourism Organisation. (2018). *Overtourism: Understanding and Managing Urban Tourism Growth Beyond Perceptions*.
4. Mihalic, T. (2020). Conceptualizing Overtourism: A Sustainability Approach. *Annals of Tourism Research*, *84*, 103025. https://doi.org/10.1016/j.annals.2020.103025
5. Muler Gonzalez, V., Coromina, L., & Galí, N. (2018). Overtourism: Residents' Perceptions of Tourism Impact as an Indicator of Resident Social Carrying Capacity-Case Study of a Spanish Heritage Town. *Tourism Review*, *73*(3), 277–296. https://doi.org/10.1108/TR-08-2017-0138
6. Kuscer, K., & Mihalic, T. (2019). Residents' Attitudes towards Overtourism from the Perspective of Tourism Impacts and Cooperation – The Case of Ljubljana. *Sustainability*, *11*, 1823. https://doi.org/10.3390/su11061823

7. Anderson, D. H., & Brown, P. J. (1984). The Displacement Process in Recreation. *Journal of Leisure Research*, *16*(1), 61–73.
8. Kuentzel, W. F., & Heberlein, T. A. (1992). Cognitive and Behavioral Adaptations to Perceived Crowding: A Panel Study of Coping and Displacement. *Journal of Leisure Research*, *24*(4), 377–393. https://doi.org/10.1080/00222216.1992.11969903
9. Epler Wood, M., Milstein, M., & Ahamed-Broadhurst, K. (2019). *Destinations at Risk: The Invisible Burden of Tourism*. The Travel Foundation.
10. Han, S., Ramkissoon, H., You, E., & Kim, M. J. (2023). Support of Residents for Sustainable Tourism Development in Nature-Based Destinations: Applying Theories of Social Exchange and Bottom-up Spillover. *Journal of Outdoor Recreation and Tourism*, *43*, 100643. https://doi.org/10.1016/j.jort.2023.100643
11. Abdollahzadeh, G., & Sharifzadeh, A. (2012). Rural Residents' Perception of Tourism Development: A Case Study from Iran. *International Journal of Tourism Research*, *16*(2), 126–136. https://doi.org/10.1002/jtr.1906
12. Segota, T., Mihalic, T., & Perdue, R. (2024). Resident perceptions and responses to tourism: Individual versus community level impacts. *Journal of Sustainable Tourism*, *32*(2), 340–363. https://doi.org/10.1080/09669582.2022.2149759
13. Martín Martín, J. M., Guaita Martínez, J. M., & Salinas Fernández, J. A. (2018). An analysis of the factors behind the citizen's attitude of rejection towards tourism in a context of overtourism and economic dependence on this activity. *Sustainability*, *10*, 2851. https://doi.org/10.3390/su10082851
14. Mason, P., & Cheyne, J. (2000). Residents' Attitudes to Proposed Tourism Development. *Annals of Tourism Research*, *27*(2), 391–411. https://doi.org/10.1016/S0160-7383(99)00084-5
15. Williams, J., & Lawson, R. (2001). Community Issues and Resident Opinions of Tourism. *Annals of Tourism Research*, *28*(2), 269–290. https://doi.org/10.1016/S0160-7383(00)00030-X
16. Ritchie, B. W., & Inkari, M. (2006). Host Community Attitudes Toward Tourism and Cultural Tourism Development: The Case of the Lewes District, Southern England. *International Journal of Tourism Research*, *8*(1), 27–44. https://doi.org/10.1002/jtr.545
17. Haralambopoulos, N., & Pizam, A. (1996). Perceived Impacts of Tourism: The case of samos. *Annals of Tourism Research*, *23*(3), 503–526. https://doi.org/10.1016/0160-7383(95)00075-5
18. Kayat, K. (2002). Power, Social Exchanges and Tourism in Langkawi: Rethinking Resident Perceptions. *International Journal of Tourism Research*, *4*(3), 171–191. https://doi.org/10.1002/jtr.375
19. 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. https://doi.org/10.1177/0047287510362918
20. Gursoy, D., & Rutherford, D. G. (2004). Host Attitudes Toward Tourism: An Improved Structural Model. *Annals of Tourism Research*, *31*(3), 495–516. https://doi.org/10.1016/j.annals.2003.08.008
21. Ko, D.-W., & Stewart, W. P. (2002). A Structural Equation Model of Residents' Attitudes for Tourism Development. *Tourism Management*, *23*(5), 521–530. https://doi.org/10.1016/S0261-5177(02)00006-7
22. Nunkoo, R., & Ramkissoon, H. (2012). Power, Trust, Social Exchange and Community Support. *Annals of Tourism Research*, *39*, 997–1023. https://doi.org/10.1016/j.annals.2011.11.017
23. Stylidis, D., Biran, A., Sit, J., & Szivas, E. M. (2014). Residents' Support for Tourism Development: The Role of Residents' Place Image and Perceived Tourism Impacts. *Tourism Management*, *45*, 260–274. https://doi.org/10.1016/j.tourman.2014.05.006
24. Yu, C.-P., Cole, S. T., & Chancellor, C. (2018). Resident Support for Tourism Development in Rural Midwestern (USA) Communities: Perceived Tourism Impacts and Community Quality of Life Perspective. *Sustainability*, *10*(3), 802. https://doi.org/10.3390/su10030802
25. Dyer, P., Gursoy, D., Sharma, B., & Carter, J. (2007). Structural Modelling of Resident Perceptions of Tourism and Associated Development on the Sunshine Coast, Australia. *Tourism Management*, *28*, 409–422. https://doi.org/10.1016/j.tourman.2006.04.002
26. Gursoy, D., Chi, C. G., & Dyer, P. (2010). Locals' Attitudes Toward Mass and Alternative Tourism: The Case of Sunshine Coast, Australia. *Journal of Travel Research*, *49*(3), 381–394. https://doi.org/10.1177/0047287509346853
27. Sharma, B., & Dyer, P. (2012). A Longitudinal Study of the Residents' Perceptions of Tourism Impacts Using Data from the Sunshine Coast Australia. *Pasos*, *10*(2), 37–46.
28. McCool, S. F., & Cole, D. N. (1997). *Proceedings - Limits of Acceptable Change and Related Planning Processes: Progress and Future Directions*. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. https://doi.org/10.2737/INT-GTR-371
29. Stankey, G. H., Cole, D. N., Lucas, R. C., Petersen, M. E., & Frissell, S. S. (1985). *The Limits of Acceptable Change (LAC) System for Wilderness Planning*. U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station.
30. Tourism Research Australia. (2023). *Visitor Economy Facts and Figures*. https://www.tra.gov.au/en/economic-analysis/visitor-economy-facts-and-figures (accessed 29 October 2024).
31. Noosa Council. (2023). *Noosa Shire Destination Management Plan* (Discussion Paper).
32. ABC News. (2023). *Will the Gold, Sunshine coasts, and Noosa be loved to death?* https://www.youtube.com/watch?v=IQ9XKAYEo1k (accessed 29 October 2024).
33. Economy.id. (2024). *Noosa Shire Council area: Employment by industry*. https://economy.id.com.au/noosa/employment-by-industry (accessed 29 October 2024).
34. Cato, N. (1979). *The Noosa story: a study in unplanned development*. Jacaranda Press.

35. Gloster, M. (1997). *The Shaping of Noosa*. Noosa Blue Publishing.
36. Salant, P., & Dillman, D. A. (1994). *How to Conduct Your Own Survey*. John Wiley & Sons.
37. StataCorp. (2023). *Stata Statistical Software*.
38. Noosa Council. (2020). *Report on the Sustainable Tourism Stakeholder Reference Group*.
39. Hall, T., & Shelby, B. (2000). Temporal and Spatial Displacement: Evidence from A High-Use Reservoir and Alternate Sites. *Journal of Leisure Research*, *32*(4), 435–456. https://doi.org/10.1080/00222216.2000.11949926
40. Elkington, J. (1997). *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*. John Wiley.
41. Sawaf, A., & Gabrielle, R. (2014). *Sacred Commerce: A Blueprint for a New Humanity*. EO Enterprises.
42. Tarrant, M. A. (2024). *Sustaining People, Planet and Profit*. Sentia Publishing.
43. Fiordland Marine Guardians. (2018). *Beneath the Reflections*. Ministry for the Environment: Wellington, New Zealand.
44. Mulcahy, K., Peart, R., & Bull, A. (2012). Fiordland Marine Guardians. *Environmental Defence Society*, 248–272.
45. Chapman, J. W. (1975). Rawls's theory of justice. *American Political Science Review*, *69*(2), 588–593. https://doi.org/10.2307/1959089
46. Leopold, A. (2020). *A sand county almanac*. Oxford University Press.