



Exploring length of stay: International tourism in south-western Norway

Jens Kr. Steen Jacobsen ^{a,*}, Stefan Gössling ^{b,c}, Petter Dybedal ^d, Thea S. Skogheim ^a

^a Norwegian School of Hotel Management, University of Stavanger, NO-4036, Stavanger, Norway

^b Western Norway Research Institute, NO-6851, Sogndal, Norway

^c School of Business and Economics, Linnaeus University, SE-391 82, Kalmar, Sweden

^d Institute of Transport Economics, Gaustadalléen 21, NO-0349, Oslo, Norway

ARTICLE INFO

Article history:

Received 29 March 2017

Received in revised form

15 December 2017

Accepted 19 February 2018

Keywords:

Length of stay

Round trip

Holiday planning

Temporal flexibility

Activity time

Segmentation

Destination management

ABSTRACT

This article explored length of stay (LOS) in the context of tour planning, to assess as to whether LOS can be increased. LOS is an important parameter for tourism destination management, at the same time as evidence have suggested that LOS is declining on a global scale. The study was based on responses from 1592 foreign leisure travellers in south-western Norway, a region dominated by round-trips. The study uniquely explored aspects that influenced visitor planning of length of stay, finding that perceptions of time 'needed' for desired activities is the most important aspect of holiday duration planning, followed by limitations in the number of vacation days, holiday budgets and accommodation-related considerations. Visitors with a focus on the region, those with their own vehicles and those emphasising outdoor recreation and/or landscape sightseeing were likely to have longer stays. Findings suggested that destinations have potential to increase LOS. The paper additionally reflected on how identification of tourist segments with flexible time frames can contribute to destination management focused on LOS.

© 2018 The Authors.

1. Introduction

Leisure travellers' length of stay (LOS) has received considerable attention because of its relevance for hospitality enterprises and holiday destinations at large (Alegre & Pou, 2006; Fleischer & Pizam, 2002; Gokovali, Bahar, & Kozak, 2007). There has also been a growing concern in many tourism destinations that travellers are not staying as long as they did in the past (Alegre & Pou, 2006; Barros & Machado, 2010; Eurostat, 2014; Ferrer-Rosell, Martínez-García, & Coenders, 2014; Fleischer, Peleg, & Rivlin, 2011; Gokovali et al., 2007; Salmasi, Celidoni, & Procidano, 2012; UNWTO, 2006, 2007). Declining LOS has various implications for destinations, as well as the overall environmental impacts of tourism. For example, where visitors stay for shorter periods, arrival numbers need to increase in order to maintain a given number of bed nights. This is of importance as destinations do not profit from arrival numbers per se: It is spending within the

destination, for accommodation (bed nights), activities, shopping or food that determines local economic contributions. Furthermore, where arrival numbers grow, environmental externalities increase as well: Most of the contribution of tourism to climate change, for example, is related to transport (UNWTO, UNEP & WMO, 2008). On the destination level, it is thus paramount to increase LOS if benefits of tourism are to be optimized without further growth in environmental externalities (Gössling, Ring, Dwyer, Andersson, & Hall, 2016).

LOS is in a global decline, a pattern that is also noticeable in Norway. This country experienced a decrease in the mean number of foreign leisure guest nights during the extended summer season, from 8.3 in 2000 to 7.9 nights in 2011, according to a foreign visitor border survey that was discontinued in 2011 (Farstad, Rideng, & Landa Mata, 2012; Haukeland, Rideng, & Grue, 2000). Several explanations of such development have been identified, including opportunities to travel more frequently at a low cost (Barros & Machado, 2010; Castillo-Manzano, Lopez-Valpuesta, & Gonzalez-Laxe, 2011), sociocultural changes with tendencies towards annual leisure trips for shorter periods of time (UNWTO et al., 2008), the popularity of multi-destination holiday tours (Jacobsen, 2004) and the emergence of social media with an

* Corresponding author.

E-mail addresses: jens.s.jacobsen@uis.no (J.Kr.S. Jacobsen), sgo@vestforsk.no (S. Gössling), pd@toi.no (P. Dybedal), thea.skogheim@fhi.no (T.S. Skogheim).

emphasis on travel pattern communication for generation of social capital (Gössling & Stavrinidi, 2016). However, the factors that influence leisure travellers' planning of length of stay are still under-researched. This is more than an academic matter; this is vital to tourism-related livelihoods, particularly since length of stay may be indicative of overall tourist spending (Losada, Alén, Domínguez, & Nicolau, 2016) and of holiday budget shares spent in the places mobile tourists choose to call on.

This study uniquely investigated aspects of independent leisure tourists' considerations when deciding the length of stay in south-western Norway, a mature and rather expensive destination area. The article aimed at filling an empirical gap in the understanding of length of stay considerations in the context of a region with a large proportion of independent visitors on round trips encompassing other districts (Dybedal, 2014). The research additionally identified socio-demographic and other variables that influenced the duration of international tourists' visits, including weather forecast. The objective was to make an empirical contribution to the understanding of the factors that shape developments in length of stay and to discuss their implications for destination area management. Specifically, the project sought to understand differences in length of stay for international independent tourists in south-western Norway and to identify parameters that influence their decision-making related to length of stay. Implications of results for destination management are discussed, such as promotion developments and opportunities to improve tourism and hospitality enterprise earnings and tourism-related livelihoods.

2. Literature review

Length of stay is pivotal to tourism destination areas, as it influences both visitor activities and expenditures (see Baum & Lundtorp, 2001). On the one hand, declining length of stay may have a pronounced impact on lodging enterprises, as operating costs might increase and they would need to attract more visitors to maintain occupancy rates. On the other hand, shorter stays may imply that more tourists could find accommodation during peak season(s) (Alegre & Pou, 2006), thus benefitting tourism-related businesses and organisations such as transport companies, toll roads, activity providers, and museums. Length of stay has also relevance for climate change, as the largest share of emissions from long-distance tourism is commonly a result of transport: more leisure trips interfere with global efforts to mitigate global warming (UNWTO et al., 2008).

Various temporal constraints are known to affect the duration of an entire holiday tour and the length of stay in an area (Bull, 1995; Gronau, 1970). These include a limited number of vacation days, having to return at certain times, and also wanting to spend time in other regions or places (Gössling et al., 2016). Additionally, there might be temporal constraints on the supply side, as some accommodation can only be booked by the week, leading to large proportions of one- or two-week stays (Dybedal, 2014), with a possible addition of necessary travel time from and to a region's exit points. The availability of desired accommodation may thus have both a positive and a negative influence on length of stay.

Particularly in the context of multi-destination tours, the status of destinations and attractions in the tourists' minds may affect length of stay (see Botti, Peypoch, & Solonandrasana, 2008; Leiper, 1990). For instance, a study of both business and leisure travellers in Brazil associated multi-destination trips with short stays in each place (Santos, Ramos, & Rey-Maqueira, 2015). In the same vein, a study in Madeira found that tourists making short trips have tended to stay at central locations and visit major tourism attractions (Barros & Machado, 2010). Then again, a study in the Azores

(encompassing 9% business travellers) has shown that increase in the number of islands visited led to a statistically significant increase in the expected total duration of the stay in this archipelago (de Menezes, Moniz & Vieira, 2008).

Financial constraints and limited budgets may likewise affect length of stay (Alegre & Pou, 2006; Crompton, 1979; Fesenmaier & Jeng, 2000). For instance, a study in the Balearic Islands revealed that high prices at a destination may not necessarily deter tourists but may affect visit durations (Alegre & Pou, 2006). Moreover, favourable prices on transport on certain days can affect not only travel timing but also the visitors' length of stay in an area. Such pricing patterns may vary with weekdays, seasons, and modes of transport (e.g. Alderighi, Nicolini, & Piga, 2016; Cosgunna, Ekinici, & Yanik, 2014).

Variations in travel motivations have also been found to influence length of stay (Alegre & Pou, 2006; Barros, Butler, & Correia, 2010). More specifically, holidayers' desire to participate in certain activities might affect how long they will stay in an area. A study of European leisure airline passengers in Spain found that those respondents taking part in hiking and in cultural visits tended to stay longer than tourists who did not (Ferrer-Rosell et al., 2014), though this may also indicate a specific, 'slower' type of visitor. Moreover, emphasis on event(s) in a destination has been found to lead to a longer stay (Barros et al., 2010).

Weather conditions and forecasts might also influence the length of stay in a district. Research in an area in Northern Norway found that predictions of adverse weather led to shorter stays in the study region, particularly for visitors travelling with their own motor vehicles (Denstadli, Jacobsen, & Lohmann, 2011). In contrast, a study of golf tourists in southern Portugal found that visitor highlighting of expected 'good' climate and weather was associated with longer stays (Barros et al., 2010).

Evidence from a number of studies suggests that repeat visitors stay longer in a destination than do first-time arrivals (Gokovali et al., 2007; Oppermann, 1997; Santos et al., 2015; Thrane & Farstad, 2012; Uysal & McDonald, 1989; Yang, Wong, & Zhang, 2011; de Menezes et al., 2008). These more recent studies contradicted earlier research advancing that first-timers would stay longer than return tourists (Paul & Rimmawi, 1992; Silberman, 1985).

Explorations of length of stay in terms of common demographic variables such as education and age have come up with mixed results. Research in Madeira found that more educated tourists tended to stay longer than those who were less educated (Barros & Machado, 2010). However, a survey in the Azores associated a higher level of education with shorter stays (de Menezes et al., 2008). In comparison, research on seaside destinations in Turkey found no influence of education on length of stay (Gokovali et al., 2007). Enquiries have uncovered a positive effect of age on the length of stay (see Martínez-García & Raya, 2008; Santos et al., 2015; Thrane & Farstad, 2011; Yang et al., 2011). Conversely, an investigation of people using charter flights from Portugal to Latin American destinations found that older tourists typically stayed for shorter periods than did the younger ones (Barros, Correia, & Crouch, 2008). There is also some evidence that younger travellers, born between the 1980s and the early 1990s (Generation Y), can be highly mobile, 'ticking off' destinations to accrue social capital through communication of travel patterns on social media (Gössling & Stavrinidi, 2016).

Taken together, although these studies pertain to different types of destinations and travellers, they show that length of stay is influenced by a wide range of factors. However, it remains unclear how these dimensions interact, whether they are hierarchically ordered, or whether there is flexibility regarding some parameters that destinations could focus on to increase length of stay.

3. Background to the study area

This research was conducted in south-western Norway, in the counties Sogn og Fjordane, Hordaland, and Rogaland, a region that is commercially branded as Fjord Norway, although there are also fjords in other parts of Norway. South-western Norway additionally comprises agricultural coasts, numerous islands, and mountain plateaus. In 2011, the region was visited by approximately 970,000 international summer season leisure tourists who booked overnight stays. Most of these tourists were from Germany, the Netherlands, France, Denmark, Sweden, the United States, and the United Kingdom (Dybedal, 2014). On average, foreign summer tourists visiting this region in 2011 spent 11.9 nights in Norway, 6.7 of which were in south-western Norway. Foreign summer tourists travelling to and from the country by car (and on car ferry) spent most of their nights in south-western Norway, with distinct peaks at seven and 14 nights, reflecting that a significant proportion of these tourists (mainly those who rented seaside or mountain cabins) had booked fixed arrival and return travel dates. In this area, leisure summer visitors who travelled by air tended to stay from two to 15 nights in Norway, with a peak of seven nights, while their stays in south-western Norway were significantly shorter; two-thirds staying four nights or less, with a peak of two nights (Dybedal, 2014). These figures were based on analyses of the most recent available data from the Norwegian Foreign Visitor Survey.

4. Methodology

4.1. Sample

An *en route* temporally stratified sampling procedure was employed, interviewing ferry and airline passengers on selected dates. The survey days and the times of the days were varied across weeks to reduce potential sampling bias (Rideng & Christensen, 2004). Data were collected among international leisure travellers departing from Bergen airport, Bergen seaport, Kristiansand seaport, and at three car ferry landings at the Sognefjord, Norway's longest fjord (Tables 1 and 2). Departing passengers were contacted on selected days from 1 July to 8 August 2014, at the peak of the summer season. A screening question confirmed that respondents were leisure travellers not participating in group package tours. Some respondents might have bought packages for individual travel, such as a combination of car ferry tickets and lodging. As the Kristiansand seaport is outside the study region, an additional screening question was used there to identify passengers who had visited the counties Sogn og Fjordane, Hordaland and/or Rogaland. Travellers were then asked to fill in a self-instructing questionnaire and return it to the survey staff. The questionnaire was available in Danish/Norwegian, Dutch, English, German, and Swedish, as these are the native languages of a broad majority of independent leisure travellers in the area. A map of the study area and its surroundings was included in the survey form. In the seaport of Kristiansand and at the Sognefjord ferry landings, the response rate was about 62%, in Bergen seaport, the response rate was nearly 90%, and at Bergen airport (Flesland), the response rate was 77%, yielding an effective total sample size of 1592.

4.2. Measurement

The study design was based on a literature review to identify relevant aspects of length of stay and to ensure comparability of results with previous studies. This was supplemented with qualitative interviews to understand visitor views prior to the design of the questionnaire. Moreover, the feasibility of a questionnaire draft was tested on a small number of tourists ($n = 24$) in the region in

Table 1
Interview places (percentages).

	Percent	<i>n</i>
Bergen airport	28	450
Bergen seaport	31	487
Kristiansand seaport	24	383
Fodnes ferry landing	6	94
Oppedal ferry landing	4	56
Vangsnes ferry landing	8	122
Total	101	1592

Table 2
Selected respondent characteristics.

	Percent	<i>n</i>
<i>Gender</i>		
Female	39	613
Male	61	961
<i>Educational level</i>		
Primary school	3	54
Secondary education	30	480
University/college	66	1043
<i>Age, in years</i>		
Up to 50 years	43	617
51 years or older	57	818
<i>Length of stay in south-western Norway</i>		
No overnight stay	3	40
One to two nights	9	149
Three to four nights	20	317
Five to seven nights	25	402
Eight to fourteen nights	33	518
Fifteen nights or more	10	165
<i>Total trip duration</i>		
Up to seven nights	30	482
Eight to fourteen nights	38	607
Fifteen nights or more	32	502
<i>Type of visit flexibility</i>		
Fixed length of stay in south-western Norway	69	1092
Flexible timeframe in south-western Norway	31	484
<i>Experience with south-western Norway</i>		
First visit	51	812
Once before	19	294
Twice before or more	30	483
<i>Number of places for overnight stays in south-western Norway</i>		
None	6	91
One	28	442
Two to three	32	501
Four or more	35	545

the summer preceding the survey.

Visitors were asked to indicate on a four-point Likert-type scale ranging from zero ("unimportant") to three ("very important") how they rated aspects of the planning of their trip to Norway, particularly length of stay decisions (Tables 3 and 4). Respondents were also enquired about the total duration of their trip, the share of time spent in the study region, whether they had a fixed or flexible timeframe in the region, their main reasons for visiting the region, familiarity with the region, transport mode choices in south-western Norway, and possible travel companions. Moreover, the study elicited regular demographic variables such as gender, year of birth, and education. The interview situation required that it was possible to fill in the questionnaire within a few minutes, restricting the number of questions and their complexity.

A series of independent sample *t*-tests was carried out to identify associations between continuous outcome variables (mean scores) and categorical determining variables. Chi-square statistic (χ^2) was used to test distribution randomness. Only differences statistically significant at the 0.05% level ($p < 0.05$) are reported.

To explain the influence of various variables on length of stay, binary logistic regression analysis was used. This technique is valid

for the construction of one or many models describing the relationship between a dichotomous or binary dependent variable (length of stay), which may only take two mutually exclusive values, and a series of features that form a set of independent variables, categorical or continuous.

4.3. Sample characteristics

Some 39% of the respondents were female and 61% were male, partly reflecting the fact that the questionnaires at seaports and ferry landings were handed to car drivers, most of whom were male. Two-thirds (66%) of the interviewees had university or college education, compared to a European Union average of 28% among 25- to 64 years-olds in 2011 (Corner, 2015). Approximately 43% of the visitors were 50 years of age or younger, while 57% were older than 50.

One-third of the respondents had a flexible timeframe for their travel in south-western Norway, while two-thirds had a fixed length of stay in the region. Half of the respondents were first-time visitors to the study region, 19% had been in the region once before, and 30% had made two or more previous visits.

The respondents were asked about their main mode of transport within the region. Some 62% travelled mainly by car/van, 11% with motor home/caravanette, 2% had a car with caravan, and 3% used a motorcycle. Bus was the main mode of transport for 13%, train was predominantly used by 4%, and ship/ferry by 4%.

Mean length of stay in the study region was 8.3 nights and both median and mode were seven nights. Some 3% did not stay overnight in the region, and 2% stayed only one night. There were peaks at 3, 4, 7 and 14 nights. Total trip duration mean was 12.8 nights, median was 12 nights, and mode was 14 nights, with peaks at seven and 14 nights. Some 30% of the respondents had total trip durations up to seven nights, 38% between eight and 14 nights, while 32% were on trips that lasted more than 14 nights.

5. Results

5.1. Aspects influencing the planning of length of stay

The most frequently mentioned reason for the visitors' planning of their length of stay in south-western Norway was 'time for desired activities', that is, the number of days considered necessary to visit favoured areas and/or to engage in specific activities. Two-thirds of respondents regarded this to be fairly important or very important (Table 3). This reason was followed by 'limited number of vacation days', 'overall trip budget', and 'availability of desired accommodation'; cited by 60%, 58%, and 55% of the interviewees, respectively (Table 3). Less important and noted by between 42% and 50% of the sample were the 'desire to spend time in other regions', 'weather forecast', 'relatively high prices' in the region more

generally and especially regarding accommodation. The least important reasons were 'good price on transport on certain days', 'good price on accommodation on certain days', and 'event(s) in the region'; these were found to be fairly important or very important by between 25% and 31% of respondents (Table 3).

When planning their length of stay in the region, returning visitors emphasised more than did the first-time visitors, the relevance of time for desired activities, availability of desired accommodation, and the weather forecast. Conversely, first-time visitors accentuated a desire to spend time in other regions and high prices in the study region (Table 4).

Travellers with a flexible timeframe also tended to want to spend time in other regions and emphasised the weather forecast more than visitors with a fixed length of stay did (Table 4). In contrast, respondents with a fixed length of stay in south-western Norway emphasised more than others having time for desired activities, a limited number of vacation days, the overall trip budget, availability of desired accommodation in the region, and a relatively high price level in the region.

The availability of desired accommodation and the weather forecast was more likely to be mentioned by visitors of up to 50 years of age than by tourists over age 50. Conversely, travellers older than 50 years of age underlined more than younger visitors that a limited number of vacation days and event(s) in the region had influenced their planning (Table 4).

Respondents with primary or secondary education highlighted more than those with higher education the availability of desired accommodation, the weather forecast, good price on transport on certain days, and good price on accommodation on certain days. Respondents with a university or college education put greater weight on wanting to spend time in other regions than did the less educated visitors.

Generally, tourists who used public transport put more weight on several of the proposed factors than did those who travelled with their own vehicle. The availability of desired accommodation, prices in the region and the weather forecast were most frequently cited. The only factor that travellers with their own vehicle accentuated more than others was "good price for transport on certain days" (Table 4).

5.2. Planning factors and reported length of stay

For cross-tabulations, length of stay in the region was recoded to a dichotomous variable (up to seven nights and eight nights or more) and to a variable with four values (up to three nights, four to seven nights, eight to 14 nights, and 15 nights or more).

The variables 'overall budget' ($\chi^2 = 0.97$, d.f. = 3, $p < 0.808$) and 'relatively high prices in the region' ($\chi^2 = 5.62$, d.f. = 3, $p < 0.132$) were not significantly associated with the reported length of stay in the region as a dichotomous variable.

Table 3
Aspects that influenced planning of length of stay in south-western Norway (percentages and mean scores, scale 0–3).

	Unimportant	Somewhat important	Fairly important	Very important	Total	Mean score	SD	n
Time for desired activities	15	19	37	29	100	1.81	1.02	1539
Limited number of vacation days	20	21	29	31	101	1.71	1.10	1541
Overall budget for the entire trip	17	26	33	25	101	1.66	1.02	1542
Availability of desired accommodation	26	19	30	24	99	1.52	1.12	1522
Wanted to spend time in other regions	32	18	27	23	100	1.41	1.16	1547
Relatively high prices in the region	25	30	27	18	100	1.39	1.05	1568
Relatively high prices on accommodation	29	26	29	17	101	1.33	1.07	1536
Weather forecast	32	26	21	21	100	1.30	1.13	1555
Good price for transport on certain days	49	20	21	10	100	0.92	1.05	1512
Good price on accommodation on certain days	49	22	18	10	99	0.89	1.04	1458
Event(s) in the region	49	26	16	9	100	0.84	0.99	1528

Table 4

Factors that Influenced Planning of Length of Stay in South-western Norway, Mean Scores by Experience with Region, Flexible vs. Fixed Length of Stay in Region, Educational Level, Age, and Type of Transport (Scale 0–3) (n = 1315–1565).

	Region experience		Type of stay in region		Education		Age, years		Transport type	
	First visit	Repeat visit	Fixed length	Flex length	Primary, secondary	Uni, college	Up to 50	51 or older	Public transport	Own vehicle transport
Time for desired activities	1.76	1.87*	1.87	1.69*	1.82	1.81	1.78	1.84	1.87	1.79
Limited number of vacation days	1.75	1.66	1.77	1.57*	1.67	1.73	1.56	1.81*	1.80	1.62*
Overall budget for the entire trip	1.69	1.63	1.72	1.53*	1.69	1.64	1.65	1.64	1.72	1.70
Availability of desired accommodation	1.37	1.69*	1.61	1.32*	1.75	1.41*	1.72	1.34*	1.66	1.31*
Wanted to spend time in other regions	1.52	1.30*	1.27	1.75*	1.22	1.51*	1.39	1.45	1.61	1.50
Relatively high price level in the region	1.49	1.27*	1.42	1.31	1.31	1.41	1.34	1.36	1.57	1.26*
Relatively high prices on accommodation	1.40	1.25*	1.34	1.30	1.27	1.36	1.36	1.26	1.41	1.41
Weather forecast	1.20	1.41*	1.24	1.43*	1.54	1.17*	1.36	1.22*	1.27	0.82*
Good price for transport on certain days	0.93	0.91	0.95	0.85	1.00	0.88*	0.84	0.93	1.19	1.34*
Good price on accommodation on certain days	0.90	0.88	0.90	0.86	0.97	0.85*	0.87	0.86	1.17	0.80*
Event(s) in the region	0.87	0.82	0.82	0.91	0.81	0.86	0.70	0.93*	1.05	0.78*

Note. * Statistically significant difference calculated by independent samples *t*-test ($p < 0.05$).

High prices for accommodation as important for the length of stay was associated with spending fewer nights in the region when length of stay was split into four categories ($\chi^2 = 26.48$, d.f. = 9, $p < 0.002$) but not when split into the two categories of seven nights or less and eight nights or more ($\chi^2 = 1.51$, d.f. = 3, $p < 0.680$).

The item 'wanted to spend time in other regions' was significantly correlated with length of stay both when recoded into two categories ($\chi^2 = 71.53$, d.f. = 3, $p < 0.001$) and into four categories ($\chi^2 = 96.39$, d.f. = 9, $p < 0.001$), that is, respondents planning to visit other regions stayed in south-western Norway for shorter periods of time than did other respondents. Although the item 'limited number of vacation days' was important for trip planning, it was not significantly associated with the reported length of stay in south-western Norway.

5.3. Binary regression analysis

Binary logistic regression analysis was performed to explore the association of length of stay with selected traveller and tour characteristics (Table 5). Results further disclosed that education was significantly associated with length of stay, as visitors with less education were almost twice as likely (OR = 1.90) to have a longer stay than were those with higher education. Returning visitors were 1.46 times more likely to stay longer than first-timers. Respondents who travelled with their own vehicle (car, motor home/caravanette, motor cycle) were almost three times more likely to have a longer stay (OR = 2.98) than visitors using other/public transport. Tourists who focused on the study region (not spending time in other regions) were almost four times more likely (OR = 3.99) to have a longer stay than those travellers who wanted to spend time also in other regions. Respondents who stayed in two or more places in the region were 1.73 times more likely to stay longer than those who stayed in one place in the area (Table 5).

Age, weather forecast, and availability of desired accommodation were not significantly associated with length of stay when controlling for other variables. However, when unadjusted for the other variables, respondent age was significantly associated with length of stay; those who were 50 years of age or younger were 1.65 times more likely to have a longer stay than were those older than 50. Weather forecast and availability of desired accommodation were still not significantly associated with length of stay when unadjusted.

Binary logistic regression analysis was used to test whether selected activities were of importance for the length of stay (Table 6). All but one item – visiting family/friends in the region – were significantly associated with length of stay. Respondents who regarded hiking/outdoor recreation as important were 1.74 times

more likely to stay longer than those who regarded it as less important. Visitors who valued nature/landscape sightseeing were 1.62 times more likely to have a longer stay, than were those who did not regard this as important.

The pattern was opposite for culture sightseeing and event(s) in the region: Tourists who valued cultural attractions and events in the region tended to stay less than eight nights. Regarding cultural attractions as important for the visit lowered the odds for a longer stay (OR = 0.68) compared to those who found cultural sightseeing less important. Similarly, visitor interest in events in the region lowered the odds for a longer stay (OR = 0.57) compared to travellers who regarded events as unimportant (Table 6).

6. Discussion

As indicated in the literature review, earlier studies of tourists' length of stay have shown mixed results, as visit durations are influenced not only by visitor characteristics but also by destination and trip types.

One of the strongest predictors for a longer stay in south-western Norway was not spending time in other regions, which is in line with the findings of Santos et al. (2015). It was also shown that holidaymaker interests in hiking and outdoor recreation and landscape/nature sightseeing were positively associated with length of stay, corroborating the results of Ferrer-Rosell et al. (2014) in their exploration of European leisure visitors arriving by air to Spain. On the other hand, tourists emphasising cultural attractions as important had lower odds for a longer stay in south-western Norway, contrasting the findings of Ferrer-Rosell et al. (2014). Moreover, visitor interest in events in the study region lowered the odds for a longer stay, which is in opposition to the results of Barros et al. (2010).

Tourist age was not significantly associated with length of stay in south-western Norway when controlling for other variables, contrasting several earlier studies. When unadjusted for the other variables, leisure travellers who were 50 years of age or younger were more likely to have a longer stay than were those older than 50. This is more or less in line with Barros et al. (2008) but contrasting some other studies (Martínez-García & Raya, 2008; Santos et al., 2015; Thrane & Farstad, 2012; Yang et al., 2011).

Visitors with less education were more likely to have a longer stay than were those with higher education, corroborating the study of de Menezes et al. (2008) and being in opposition to Barros and Machado (2010). Returning visitors to south-western Norway were more likely to stay longer than first-timers, which is in line with a number of other studies (Gokovali et al., 2007; Oppermann, 1997; Santos et al., 2015; Thrane & Farstad, 2012; Uysal &

Table 5
Associations of length of stay with traveller and tour characteristics.

Length of stay in south-western Norway				
	<i>p</i>	OR	95% CI	
Wanted to spend time in other regions	.000	3.99	2.99	5.33
Transport	.000	2.98	2.02	4.40
Education	.000	1.90	1.43	2.54
Number of overnight places	.000	1.73	1.28	2.34
Repeat visit	.006	1.46	1.11	1.91
Availability of desired accommodation	.091	1.26	0.96	1.66
Weather forecast	.197	1.20	0.91	1.57
Age	.979	1.00	0.76	1.30

Note. OR = odds ratio; CI = confidence intervals; reference category: "8 nights or more".

Table 6
Associations of length of stay with activities.

Length of stay in south-western Norway				
	<i>p</i>	OR	95% CI	
Hiking/outdoor recreation	.000	1.74	1.37	2.22
Sightseeing, natural attractions/landscapes	.038	1.62	1.03	2.55
Sightseeing, cultural attractions	.001	0.68	0.54	0.86
Event(s) in the region	.001	0.57	0.40	0.80
Visiting family/friends	.618	0.93	0.69	1.25

Note. OR = odds ratio; CI = confidence intervals; reference category: "8 nights or more".

McDonald, 1989; Yang et al., 2011; de Menezes et al., 2008).

That relatively high prices for accommodation was negatively associated with length of stay, is in accordance with Alegre and Pou (2006), who found that high prices at a destination may not necessarily deter visitors but affect how long they stay.

7. Conclusions

Various new insights were gained from this study regarding length of stay patterns and visitor flexibilities. Analyses have shown that some of the factors that leisure travellers cited as important for planning their length of stay (overall budget, limited number of vacation days, relatively high prices in the region) were not significantly associated with the reported length of stay in the region. This might be a consequence of holidaymakers' adaptation to time and money constraints when planning their visit. As many as one-third of the visitors had a flexible travel schedule, which destination management and tourism enterprises can take advantage of. Interestingly, travellers with a flexible timeframe stressed more than did visitors with a fixed length of stay the weather forecast and their intention to spend time also in other regions, indicating that temporal visitor flexibility is not a straightforward advantage for the region. Still, tourists with a flexible timeframe may help lodging businesses to rent vacant rooms, apartments and cabins on short notice. Moreover, when the weather forecast is good, the study indicated that the region might attract tourists with flexible plans, from nearby areas.

Destination managers may particularly consider two insights regarding repeat visitors and guests with quite long stays. Firstly, repeaters who stay longer than newcomers are important in an expensive region such as south-western Norway, that has fewer 'affordable' markets. As returning visitors can be rather easily identified, it may be possible to develop products and services that can attract such visitors and tempt them to prolong their stay.

As shown, visitor interests in hiking and outdoor recreation and landscape/nature sightseeing were positively associated with length of stay. Enhanced promotion of the variety of popular activities might therefore increase the length of stay and thus

augment regional tourist spending, particularly in hospitality enterprises. Furthermore, visitor loyalty reward systems could be developed to connect international tourists even more closely to the region. More attractive offers to tourists staying in more than one lodging enterprise might include further development of round-trip packages, particularly for price-sensitive travellers with their own transport. An important question is whether tourists who are already spending long periods in Norway could easily be persuaded to extend their stay for another day or two, as this would not significantly change their itineraries. Taken together, findings indicate a potential for prolonging visitors' stays, though there is limited evidence of destination areas that have proactively focused on this dimension to improve the benefits of tourism.

Future research on length of stay might include more specifications for travel types, for instance based on visitor motivations and activities as well as supply side aspects such as lodging and transport availabilities and pricing. It would also be interesting to employ a quite similar approach in other destination areas.

Acknowledgments

The authors thank Berit Grue for data preparation and adaptation. The study was funded by the Research Council of Norway (Regional Research Fund Vestlandet), project no. 224690.

References

- Alderighi, M., Nicolini, M., & Piga, C. A. (2016). Targeting leisure and business passengers with unsegmented pricing. *Tourism Management*, 54, 502–512.
- Alegre, J., & Pou, L. (2006). The length of stay in the demand for tourism. *Tourism Management*, 27, 1343–1355.
- Barros, C. P., Butler, R., & Correia, A. (2010). The length of stay of golf tourism: A survival analysis. *Tourism Management*, 31, 13–21.
- Barros, C. P., Correia, A., & Crouch, G. (2008). Determinants of the length of stay in Latin American tourism destinations. *Tourism Analysis*, 13, 329–340.
- Barros, C. P., & Machado, L. P. (2010). The length of stay in tourism. *Annals of Tourism Research*, 37, 692–706.
- Baum, T., & Lundtorp, S. (2001). *Seasonality in tourism*. Amsterdam: Pergamon.
- Botti, L., Peypoch, N., & Solonandrasana, B. (2008). Time and tourism attraction. *Tourism Management*, 29, 594–596.
- Bull, A. (1995). *The economics of travel and tourism* (2nd ed.). Melbourne: Longman.
- Castillo-Manzano, J., Lopez-Valpuesta, L., & Gonzalez-Laxe, F. (2011). The effects of the LCC boom on the urban tourism fabric: The viewpoint of tourism managers. *Tourism Management*, 32, 1085–1095.
- Corner, T. (Ed.). (2015). *Education in the European union*. London: Bloomsbury.
- Cosguna, Ö., Ekinci, Y., & Yanik, S. (2014). Fuzzy rule-based demand forecasting for dynamic pricing of a maritime company. *Knowledge-Based Systems*, 70, 88–96.
- Crompton, J. (1979). Motivations for pleasure vacations. *Annals of Tourism Research*, 6, 408–424.
- Denstadli, J. M., Jacobsen, J. K. S., & Lohmann, M. (2011). Tourist perceptions of summer weather in Scandinavia. *Annals of Tourism Research*, 38, 920–940.
- Dybedal, P. (2014). *Profiles of foreign summer season tourism in Western Norway 2011*. Oslo: Institute of Transport Economics.
- Eurostat. (2014). *Trends in number of trips, nights spent and average duration of trips made by EU-28 residents, 2005–2014*. Available online [http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Trends_in_number_of_trips,_nights_spent_and_average_duration_of_trips_made_by_EU-28\(%C2%B9\)_residents,_2005-2014](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Trends_in_number_of_trips,_nights_spent_and_average_duration_of_trips_made_by_EU-28(%C2%B9)_residents,_2005-2014).
- Farstad, E., Rideng, A., & Landa Mata, I. (2012). *Gjesteundersøkelsen 2011: Utenlandske ferie- og forretningsreiser i Norge [Norwegian foreign visitor survey 2011: Foreign holiday and business travel in Norway]*. Oslo: Institute of Transport Economics. Report 1166.
- Ferrer-Rosell, B., Martínez-García, E., & Coenders, G. (2014). Package and no-frills air carriers as moderators of length of stay. *Tourism Management*, 42, 114–122.
- Fesenmaier, D. R., & Jeng, J.-M. (2000). Assessing structure in the pleasure trip planning process. *Tourism Analysis*, 5, 13–27.
- Fleischer, A., Peleg, G., & Rivlin, J. (2011). The impact of changes in household vacation expenditures on the travel and hospitality industries. *Tourism Management*, 32, 815–821.
- Fleischer, A., & Pizam, A. (2002). Tourism constraints among Israeli seniors. *Annals of Tourism Research*, 29, 106–123.
- Gokovali, U., Bahar, O., & Kozak, M. (2007). Determinants of length of stay: A practical use of survival analysis. *Tourism Economics*, 14, 205–222.
- Gössling, S., Ring, A., Dwyer, L., Andersson, A.-C., & Hall, C. M. (2016). Optimizing or maximizing growth? A challenge for sustainable tourism. *Journal of Sustainable Tourism*, 24, 527–548. <https://doi.org/10.1080/09669582.2015.1085869>.

- Gössling, S., & Stavrinidi, I. (2016). Social networking, mobilities, and the rise of liquid identities. *Mobilities*, 11, 723–743. <https://doi.org/10.1080/17450101.2015.1034453>.
- Gronau, R. (1970). The effect of traveling time on the demand for passenger transportation. *Journal of Political Economy*, 78(2), 377–394.
- Haukeland, J. V., Rideng, A., & Grue, B. (2000). *Gjesteundersøkelsen 2000 [Foreign visitor survey 2000]*. Oslo: Institute of Transport Economics. Report 496.
- Jacobsen, J. K. S. (2004). Roaming romantics. *Scandinavian Journal of Hospitality and Tourism*, 4, 5–23. <https://doi.org/10.1080/15022250410003475>.
- Leiper, N. (1990). Tourist attraction systems. *Annals of Tourism Research*, 17, 367–384.
- Losada, N., Alén, E., Domínguez, T., & Nicolau, J. L. (2016). Travel frequency of seniors tourists. *Tourism Management*, 53, 88–95.
- Martínez-García, E., & Raya, J. M. (2008). Length of stay for low cost tourism. *Tourism Management*, 29, 1064–1075.
- de Menezes, A. G., Moniz, A., & Vieira, J. C. (2008). The determinants of length of stay of tourists in the Azores. *Tourism Economics*, 14, 205–222.
- Oppermann, M. (1997). First-time and repeat visitors to New Zealand. *Tourism Management*, 18(3), 177–181.
- Paul, B. K., & Rimmawi, H. S. (1992). Tourism in Saudi Arabia: Asir National Park. *Annals of Tourism Research*, 19, 501–515.
- Rideng, A., & Christensen, P. (2004). En route surveys. *Scandinavian Journal of Hospitality and Tourism*, 4, 242–258.
- Salmasi, L., Celidoni, M., & Procidano, I. (2012). Length of stay: Price and income semi-elasticities at different destinations in Italy. *International Journal of Tourism Research*, 14, 515–530.
- Santos, G. E. d. O., Ramos, V., & Rey-Maqueira, J. (2015). Length of stay at multiple destinations of tourism trips in Brazil. *Journal of Travel Research*, 54(6), 788–800.
- Silberman, J. (1985). A demand function for length of stay: The evidence for Virginia Beach. *Journal of Travel Research*, 23(4), 16–23.
- Thrane, C., & Farstad, E. (2011). Domestic tourism expenditures: The non-linear effects of length of stay and travel party size. *Tourism Management*, 32, 46–52.
- Thrane, C., & Farstad, E. (2012). Tourists' length of stay: The case of international summer visitors to Norway. *Tourism Economics*, 18(5), 1069–1082.
- United Nations World Tourism Organization (UNWTO), United Nations Environment Programme (UNEP), & World Meteorological Organization (WMO). (2008). *Climate change and tourism: Responding to global challenges*. Madrid: UNWTO.
- UNWTO (United Nations World Tourism Organization). (2006). *Tourism market trends: World overview & tourism topics*. Madrid: UNWTO.
- UNWTO (United Nations World Tourism Organization). (2007). *Tourism: 2020 vision: Global forecast*. Madrid: UNWTO.
- Uysal, M., & McDonald, C. D. (1989). Visitor segmentation by trip index. *Journal of Travel Research*, 27(3), 38–42.
- Yang, Y., Wong, K. K. F., & Zhang, J. (2011). Determinants of length of stay for domestic tourists: Case study of Yixing. *Asia Pacific Journal of Tourism Research*, 16(6), 619–633.