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Short break drive holiday destination attractiveness during COVID-19 border closures

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ABSTRACT

Research into the topic of destination image has been popular in the tourism literature since the 1970s. However, only a minority of destination image studies have focused on the context of short break drive holidays. Domestic holidays have taken on increased importance for the tourism industry in many parts of the world during travel restrictions caused by COVID-19. Building on theorizing from evolutionary psychology, this paper reports a study with the data collected from two samples in New Zealand and Australia during the COVID-19 pandemic. Conjoint analysis revealed the two most important destination attributes in terms of crowdedness and accommodation type, and latent class analysis revealed four segments. These insights have practical implications for marketers of smaller, less crowded destinations interested in the short break drive market, particularly given uncertainties about international leisure travel during the ongoing COVID-19 pandemic and the possibility of future coronavirus outbreaks.

1. Introduction

‘Destination attractiveness,’ also referred to as ‘destination image’ and ‘perceptions of destinations,’ has been one of the most popular constructs in the destination marketing literature since the early 1970s. However, there has been a paucity of research reported about destination image in the context of short break holidays. Indeed, most destination image studies have not mentioned any specific travel situation to their research participants but measured destination image in a generic sense. For example, in a series of three categorizations of a combined sample of 418 destination image publications from 1973 to 2019 (see Alahakoon et al., 2021; Pike, 2002; Pike, 2007), only 99 (24%) showed an explicit interest in any specific travel situation and only 10 (2.4%) stated an interest in the context of short break holiday destinations.

This is a significant oversight for two reasons. The first is the long-held proposition that a destination’s attractiveness might vary across different travel situations (see Gertner, 2010; Hu & Ritchie, 1993; Spence, 1990). For example, a nearby mature destination might be appealing to a traveler interested in a weekend getaway. Still, it might not appeal to that same individual for other travel situations such as a honeymoon or family summer vacation. In a rare investigation of this proposition, Mussalam and Tajeddini (2016) found differences in perceptions of destination attribute importance between short and long holidays among visitors to Switzerland. Therefore, it might be misleading to base marketing decisions on the destination’s generic image, so it behooves destination marketers to understand their region’s perceptual strengths and weaknesses across different travel situations and traveler segments. The second reason has been the increased importance of domestic drive tourism during the COVID-19 global pandemic when many countries’ international borders have been in lockdown for inbound visitors, and social distancing measures have impacted domestic air travel.

New Zealand and Australia have been isolated from international visitor arrivals for most of the COVID-19 pandemic in 2020. Early moves by both countries’ governments to close borders contributed to the relative success of minimizing the spread of the coronavirus in local populations. However, the international border closures to non-residents and non-citizens from March 2020 have been devastating for the wider economies and businesses reliant on international tourism revenues. Prior to COVID-19 international tourism was New Zealand’s largest export industry generating 21% of the country’s foreign exchange earnings and directly employing 8.4% of the country’s workers.

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Given that residents of Australia and New Zealand were unable to travel to other countries and limited inter-state, domestic and intra-state tourism increased in importance for consumers and destination marketing organizations (DMOs). Consequently, we focus on domestic short break drive holidays around Auckland and Brisbane as part of an ongoing project that has been monitoring short break destination attractiveness in both locations since 2000 with the aim to identify determinant attributes of short break destination attractiveness and key traveler segments.

Travelers often have a large range of destinations to choose from for most travel situations. For example, previous surveys in this project have elicited over 100 destinations from open-ended questions about top-of-mind awareness short break drive destinations. Also, competing destinations for any given travel situation usually offer a similar range of features. Since destinations are multi-attributed (multi-featured), the aim is to identify those few attributes of the many that will be important or salient when considering destination attractiveness, which determines destination choice. This enables more targeted marketing communications to cut through the clutter of messaging from competing destinations and substitute products. It is likely the current emphasis by marketers on domestic travelers in many parts of the world during COVID-19 will continue post-pandemic due to uncertainties about future outbreaks, and so the issue of destination attribute determinance, in the context of a domestic short break drive holiday, represents an important issue in the tourism literature.

To identify destination attributes and traveler segments relevant to the short break holiday destination context during COVID-19, we respond to calls for the application of biological epistemology and theorizing in tourism research (Kock et al., 2020). Specifically, we apply and extend the concept of the “behavioral immune system” from evolutionary psychology, which complements the physiological immune system, and similarly prevents individuals from contracting diseases (Griskevicius & Kenrick, 2013; Kock et al., 2020; Schaller & Park, 2011). Moreover, we extend the literature on the behavioral immune system by considering variability in terms of age-based tourist segments.

Specifically, this study aims to a) demonstrate that based on the “behavioral immune system” (Griskevicius & Kenrick, 2013), people’s perceptions of crowding and negative associations with crowded environments during the COVID-19 pandemic are amplified, given that this is an adaptive response to disease (Kock et al., 2020; Wang & Ackerman, 2019) and b) further extend this theory by showing that these preferences are exhibited more strongly for older consumer segments, given the particular risk they experience from COVID-19.

2. Literature review

2.1. Destination attractiveness

The construct of destination image has consistently been the most popular topic in the destination marketing literature, which can, in part, be attributed to the intangible nature of tourism experiences, where consumers’ perceptions of destinations play such a critical role in their travel planning (Gertner, 2010; Hu & Ritchie, 1993; Pike & Page, 2014). Indeed, Hunt’s (1975) proposition that a destination’s image held among target consumers is as important as its tangible features has become axiomatic.

Importantly, destinations are multi-attributed, but most offer similar features, leading to potential substitutability among competing places. That is to say that the small number of destinations in a consumer’s evoked decision set (see Woodside & Wilson, 1985) for a short break holiday by car might ultimately be substitutable in the final decision depending on the choice criteria. Previous surveys of Auckland and Brisbane residents have elicited over 100 preferred contiguous destinations within a comfortable drive for a short break drive holiday, with decision sets consistently averaging only four destinations, which makes it important for DMOs and stakeholders to understand which attributes determine destination choice (Lovelock, 1991; Ritchie & Zins, 1978), among the competitive set of destinations for the travel situation (e.g., short break drive holiday). In this regard, destination attractiveness has been conceptualised as the extent to which a region is perceived to provide features desired by target travelers, relative to competing places (Goodrich, 1978; Mayo & Jarvis, 1981). The first definition of attribute determinance was offered in the marketing literature by Myers and Alpert (1968, p. 13):

"Attitudes toward features which are most closely related to preference or to actual purchase decisions are said to be determinant; the remaining features or attitudes, no matter how favourable, are not determinant."

This means that while there might be a large number of destination attributes that are considered important by target consumers, not all will be considered during travel planning. Within this set of attributes, there will be a sub-group that becomes salient during decision making, from which only one or a few will determine destination selection. Therefore, DMOs need to identify the small number of determinant destination attributes in target markets, which lead to a destination being considered the most attractive for the travel situation.

2.2. The influence of the travel situation on destination attractiveness

It has long been proposed that the attractiveness of a destination might vary according to the travel situation (Gertner, 2010; Hu & Ritchie, 1993; Snepenger & Milner, 1990). That is, the same individual’s perceptions of, and preferences for, a destination might differ across travel situations such as a short break, honeymoon, or family summer vacation, for example. However, there is a lack of literature to test this proposition. Relative to the large volume of destination image studies, the majority have not stated an interest in a specific travel situation. Most often, research participants have been asked to comment on or rate destinations without any travel context frame of reference (c.f. introduction). The risk of not analyzing a destination’s image without a specific travel situation is that the findings might be misleading, particularly in guiding the development of branding and promotional initiatives that aim to differentiate the place from key competing destinations. Not advising research participants of a specific travel situation potentially limits the generalisability of findings, given those attributes that determine destination attractiveness for a short break drive holiday might be quite different from those for other travel situations. Providing initial support for this conjecture, Mussalam and Tadjedini (2016) found differences in perceptions of destination attribute importance for visitors to Switzerland between short and long holidays to that country.

2.3. Short break holidays, destination attributes, and the behavioral immune system

A short break holiday is defined as a stay away from home between one and four nights (White, 2000). In this ongoing project, several surveys of consumers in Auckland and Brisbane since 2000 have consistently confirmed this. As suggested in the introduction, domestic tourism has taken on increased importance for tourism stakeholders in many parts of the world during the 2020 COVID-19 global pandemic, and yet only 10 out of 418 destination image publications (2.4%) considered short break holidays. For instance, Davison and Riley (2010) investigated short break preferences of low-cost airline users in the East Midlands. However, our literature search did not identify any previous studies that attempted to the determinant attributes of short break holiday destination attractiveness or any that attempted to segment the...
market. In an attempt to address this gap in the literature, we turn to theories on the “behavioral immune system” (Griskevicius & Kenrick, 2013), which can be defined as a system that helps avoid infection through behavior (Schaller & Park, 2011). The system is activated by cues that suggest the presence of pathogens, such as information about COVID-19, which was omnipresent during the pandemic. Previous research suggests that, for instance, when confronted with information about diseases, consumers become more socially avoidant (Schaller & Park, 2011). This can also affect travel decisions, such as avoiding exotic destinations (Hamamura & Park, 2010).

Based on this theory, we argue that in the case of short break holidays during the 2020 COVID-19 pandemic, two destination attributes are of critical relevance: Accommodation type and crowdedness. Specifically, we argue that crowding during short trips in the context of Covid19 should be met with significant aversion by potential tourists. Prior literature and theorizing from evolutionary psychology suggest a “behavioral immune system” (Griskevicius & Kenrick, 2013) which increases people’s perceptions of crowding and negative associations with such crowded environments, given that this is an adaptive response to avoid contracting a disease (Kock et al., 2020; Wang & Ackerman, 2019). In support of this, crowded spaces have been associated with disgust (Curtis et al., 2011). Notably, such reactions are relevant for DMOs on their own merit and have downstream consequences for accommodation type preferences. Specifically, we argue that hotels and serviced apartments, which provide less crowded and thus more private sanitation facilities (e.g., bathrooms), should be preferred as they relate to opportunities to address negative consequences of crowding in the context of COVID-19. Such adverse reactions to crowding and accommodation types with limited sanitation facilities should be particularly relevant in the context of short trips, given that travelers may return to work or other responsibilities following the short trip, which, in the case of close contact or exposure may not be possible.

2.4. Market segmentation and discrete choice experiments

Understanding homogenous segments that differ in systematical ways in their preferences from other segments presents challenges and opportunities for destination marketing organizations (DMO) and their stakeholders (Tkaczynski et al., 2009). It has become increasingly important for DMOs to recognize and focus on targeted segments, such as short break holidays, to customize and optimize their promotional strategies (Murphy, Niinnen & Sanders, 2010). This study aimed to construct a discrete choice experiment on individuals’ preferences for short break drive destinations in New Zealand and Australia and analyze their choice data in terms of destination attributes and observable characteristics such as demographics and motivations using a latent class model to identify market segments. Latent class modeling has been proved useful in tourism research to gain insights into destination preferences. For example, Van der Ark and Richards (2006) conducted a latent class analysis to determine cultural tourism behavior and destination preferences for 19 European capital cities.

Similarly, Crouch et al. (2016) employed latent class modeling to investigate the relationship between actual past tourism experience and preferred future experience choices. While those two studies were based on survey data to collect choice information, we developed a systematic discrete choice experiment to elicit consumers’ preferences for short break drive destinations. Our literature review did not identify any previous studies that had attempted to segment the domestic short break drive market. Thus, we designed a discrete choice experiment (DCE) to elicit individuals’ short break drive destination preferences and analyzed their choice data to identify segments that differ systematically in their preferences. DCE is a standard approach that has been widely used in many disciplines to uncover the importance of a product, a service, or a course of action’s attributes to influence individual’s choice decisions (Louviere et al., 2010). Individuals state their preferences from alternatives in the form of combinations of attributes at different levels in a survey context. Based on estimated posterior probabilities, their choice data and observable characteristics can be estimated with a latent class model to derive market segments that have common preferences for attribute levels (DeSarbo et al., 1992; Kamakura et al., 1994).

In the context of short break holidays during COVID-19, we further extend on our above theorizing regarding the “behavioral immune system” (Griskevicius & Kenrick, 2013) and suggest that preferences for uncrowded environments and accommodations with private sanitation facilities such as serviced apartments and hotels should be particularly notable among age groups who feel most under threat by COVID-19. Specifically, we postulate that these preferences should be exhibited stronger for older consumer segments, given the particular risk they experience from COVID-19.

3. Method

The DCE was designed and implemented using Sawtooth Software (Sawtooth Software, 2020). DCE incorporates a hypothetical scenario in which participants are instructed to complete seven choice tasks. Each choice task consists of destinations having different attributes (distance to the beach, crowdedness, things to see and do, accommodation type, and distance from home to the destination). For each choice task, participants were asked to indicate their preference from three destinations and a no-choice option, as illustrated in Fig. 1. The five attributes selected from attribute importance results from previous surveys in this project in Australia and New Zealand, and their levels, are shown in Table 1. In the previous New Zealand and Australian surveys, a list of 20 attributes was used. These were developed from an extensive literature review and personal interviews with consumers and tourism stakeholders. We selected five of the attributes that have consistently been rated most important in both countries across the multiple surveys over 20 years.

In each task, the 15 features from 18 possible features, as shown in Table 1, defined the levels of five attributes across three destination alternatives. Each attribute had two to four levels. Of the seven choice tasks, the first one was a warm-up task to help participants get familiar with the attributes of destinations and the interface of choice tasks. The warm-up task was fixed such that the attribute levels held constant across all respondents. After the warm-up task, based on a complete enumeration algorithm, the Sawtooth Software generated six randomized choice tasks such that they were nearly orthogonal across attributes and balanced for the frequencies of the features. Orthogonality refers to levels of any two attributes occurring independently and balance refers to levels of an attribute occurring with equal frequency across six tasks for each participant (Huber & Zwerina, 1996). We excluded the data of the warm-up task and focused on the following six choice tasks in the data analysis.

To measure participants’ motivations for taking short break drive holidays, we used Ryan and Glendon’s (1998) shortened version of the Leisure Motivation Scale (see Beard & Ragheb, 1983). The shortened scale has 13 questions that are loaded to four dimensions of holiday motivations: social (establish and sustain existing relationships while on holiday), relaxation (get away from the pressures of daily life and search for those areas that offer calm and peace), intellectual (increase knowledge and discover new places and things) and mastery (challenge abilities). The scale was measured using a 7-point Likert-type scale (1 = strongly disagree to 7 = strongly agree). Finally, we collected participants’ demographic information, including gender, age, marital status, number of children, income, and education level. The information obtained on participants’ holiday motivations and demographics was identified as individual’s characteristics and was used in combination with their choice data to estimate and profile market segments in the subsequent latent class analysis.
3.1. Sample

The two markets of interest in this study are residents of Auckland in New Zealand and residents of Brisbane in Australia. Auckland is New Zealand’s most populous city and is the main source of visitors for a majority of key destinations in the top half of the country’s North Island, such as Bay of Islands, Coromandel, Mount Maunganui, Rotorua, and Lake Taupo. Brisbane is the state capital of Queensland and the largest source of visitors for the state’s regional tourism organizations. In both Auckland and Brisbane, large samples of consumers in previous surveys over two decades have consistently reported an average of three short break drive holidays by car per year, of between one and four nights away from home.

Data was collected from two samples during the COVID-19 pandemic: the first in New Zealand in February 2020 (N = 225, M_age = 41.5), a few weeks before the country closed the international border to non-residents and non-citizens in March, and the second in Australia in July 2020 (N = 225, M_age = 47.2), four months after that country’s international border closure, also in March. Both samples were recruited via an online research panel of a UK-based research company. Quotas were applied for age, gender, and region to ensure the sample was broadly representative of the population. We also included filter questions as the selection criteria to ensure the relevance and involvement of the sample to complete the survey. Specifically, participants who were eligible for completing the survey needed to satisfy the following criteria: (1) they had taken some short break by car during the past 12 months; (2) they perceived taking short breaks each year as important; (3) they were likely to take a short break in the next 12 months. Indeed, results show a strong tendency amongst participants to undertake a short break to travel by car (M_{New Zealand} = 5.81, SD = 1.10; M_{Australia} = 5.92, SD = 1.13), and thus the sample can be identified as information-rich about domestic short break drive holidays. Table 2 summarizes participant characteristics.

4. Results

4.1. Attribute determinance

To understand the importance of each attribute relative to others in influencing destination choice decisions, we estimated and compared the partworth utilities of each attribute level. Partworth utilities are re-scaled from the coefficients (marginal utilities) estimated in Table 3 such that the partworths for any attribute have a sum of zero, by subtracting

![Table 1: Attributes and levels of the DCE.](image-url)

![Table 2: Characteristics of participants.](image-url)

\[ a \quad AU$78,000 is the national average income in Australia, NZ$52,000 is the national average income in New Zealand.\]
Table 3
Means of motivation, importance, and likelihood items.

| Item                                      | Mean | S.D. |
|-------------------------------------------|------|------|
| Be with others                            | 4.55 | 1.66 |
| Have a good time with friends             | 4.81 | 1.63 |
| Develop close friendships                 | 4.33 | 1.57 |
| Build friendships                         | 4.33 | 1.63 |
| Relax mentally                            | 6.11 | 0.92 |
| Be in a calm atmosphere                   | 5.92 | 1.09 |
| Motivation for taking holidays\(^{\text{a}}\)| 5.96 | 1.07 |
| Relax physically                          | 5.72 | 1.26 |
| Avoid the hustle and bustle               | 4.50 | 1.56 |
| To increase my knowledge                  | 5.40 | 1.23 |
| Discover new places and things            | 4.82 | 1.30 |
| Use my imagination                        | 4.53 | 1.43 |
| Use my physical abilities                 | 4.32 | 1.58 |
| Challenge my abilities                     | 6.13 | 1.02 |
| Likelihood to take a short break in the next 12 months\(^{\text{c}}\)| 5.87 | 1.12 |

\(^{\text{a}}\) 1 = strongly disagree to 7 = strongly agree.
\(^{\text{b}}\) 1 = not important at all to 7 = very important.
\(^{\text{c}}\) 1 = not likely at all to 7 = very likely.

the mean of the coefficients for all levels of each attribute. The relative importance of an attribute is derived from the range of partworth utilities for all attribute levels (i.e., the difference between the highest partworth and the lowest partworth in the attribute); thereby, a greater range index indicates greater importance of the attribute. As presented in Fig. 2a, ‘accommodation type’ and ‘crowdedness’ were the most important attributes (41% and 37% respectively), followed by ‘distance to the beach’ (15%), ‘Distance from home to the destination’ (5%) and ‘things to see and do’ (3%) were the least important attributes. This finding supports previously discussed theorizing around the “behavioral immune system” (Griskevicius & Kenrick, 2013) and is in line with our expectations.

In the Australian data, there were 5400 observations associated with the 225 participants, 6 tasks per participant. The Likelihood Ratio (LR) Test by comparing the likelihood of the base (intercept only) model with that of the final model shows a significant improvement ($\chi^2(11) = 249.06, p < .001$) in the model fit. Results from Australian data replicate those of New Zealand data, in terms of direction and significance of the effects of destination attributes, with the exception of the attribute distance from home to the destination. Estimates show that relative to ‘above 3 h’, both ‘within an hour’ and ‘1-2 h’ had significant positive effects, and ‘2-3 h’ had no effect on the choice probabilities of a destination. These results suggest that a relatively short distance from home to the destination is likely to impact the destination’s choice outcomes. Still, such an effect tends to be diminished when the distance becomes farther and ultimately disappears when the distance is relatively far (i.e., over 2 h) since there is no significant difference between ‘2-3 h’ and ‘above 3 h’.

As presented in Fig. 2b, ‘crowdedness’ and ‘accommodation type’ were similarly the most important attributes (40% and 39% respectively) influencing destination choice decisions, followed by ‘distance to the beach’ (11%) and ‘distance from home to the destination’ (8%). ‘Things to see and do’ is the least important attribute (2%). Therefore, it can be concluded that both New Zealand data and Australian data show similar effects of various attributes on destination choices, although New Zealand participants were concerned slightly more about the accommodation than crowdedness.

To confirm the model results and facilitate the interpretation of the effects of multi-level attributes, we also estimated a model that assumed the effects of attributes ‘distance to the beach’, ‘things to see and do,’ and ‘distance from home to the destination’ to be linear, while other attributes remained as dummy variables. These estimates are presented in Table 4. The LR Test shows a significant improvement from the base model for both the New Zealand data ($\chi^2(7) = 210.5, p < .001$) and Australian data ($\chi^2(7) = 320.31, p < .001$). The LR Test was used to compare model 2 with model 1 and shows a significant improvement in fit with model 2 for the Australia data ($\chi^2(4) = 71.25, p < .001$) but not for the New Zealand data ($\chi^2(4) = 6.35, p = .17$).

Results of model estimates reveal that the non-linear effects of attributes crowdedness and accommodation type remain unchanged in significance and direction across both datasets. For New Zealand data, only the linear effect of distance to the beach was negative and significant such that farther distance to the beach leads to reduced choice probabilities of the destination, whereas the linear effects of things to see and do and destination from home to the destination were insignificant. In the Australian data, the linear effects of both ‘distance to the beach’ and ‘distance from home to the destination’ were negative and significant, while the effect of the former was stronger than that of the latter. Thus, farther distance to the beach leads to reduced choice probabilities of the destination, and so does farther distance from home to the destination. The linear effect of things to see and do was insignificant. Overall, these results are consistent with those of model 1 and therefore confirm the robustness of the findings.

4. Motivations, importance, and likelihood for taking short break drive holidays

Table 3 summarizes the sample means for holiday motivation questions, perceived importance, and likelihood to take a short break. Overall, participants expressed strong importance of taking a short break (6.13) and a strong desire to take a short break in the next 12 months (5.87). Of the travel motivations, the strongest ones were mainly about relaxation, both mentally (6.11) and physically (5.96). Other dimensions of the motivations were relatively weak, such as develop and build friendships (4.33), challenge abilities (4.32), and increase knowledge (4.50). We factor analyzed the 13 motivational items using a principal components analysis with varimax rotation. The number of factors was set to four in the factor analysis, of which the results conformed to dimensions of the Ryan and Glendon’s (1998) four-dimensional scale. The rotated factor solution is provided in Table 2. This shows the highest loading (all greater than 0.5) of the items shared the same factors, in line with the patterns of Ryan and Glendon (1998). Internal reliability tests also exhibited adequate scale consistency (Cronbach’s alpha range from 0.73 to 0.88 for the four dimensions). Therefore, factor scores for each participant for the four dimensions of motivations were computed, namely, social, relaxation, intellectual, and mastery. The individual factor scores of holiday motivations, along with the importance and likelihood to take a short break, as well as demographics, were input into the latent class analysis.

4.3. Latent class choice model

We then conducted a latent class choice model to (1) identify unobserved different segments (classes) that are comprised of individuals who share similar preferences in selecting short break destinations; (2) at the same time, describe each segment by observable characteristics (i.e., demographics, motivations, importance, and likelihood for taking holidays). Specifically, since choices were elicited by different attribute levels of the destinations, attributes were estimated in the latent model as predictors within each segment where concomitant (or external or descriptor) variables (i.e., observable characteristics) were also estimated for their association with the segment memberships (Kamakura et al., 1994). Thus, the latent class model consists of two separate functions. First, the probability of an alternative $j$ being selected by individual $i$ in a choice task $t$ conditional on the respondent being in class $c$ is specified as:

$$P_{ijc}(j) = \frac{\exp(U_{ijc})}{\sum_{k=1}^{K} \exp(U_{ijk})}$$

(1)

where the random utility $U$ is a function of the know attributes $k$ of the
1. New Zealand data

![Partworth Utilities Chart]

2. Australian data

![Partworth Utilities Chart]

Fig. 2. Estimates of the partworth utilities for attributes.

choice alternative $j$:

$$U_{ijc} = \beta_{0ijc} + \sum_{k=1}^{K} \beta_{ikc} x_{ijk} + \epsilon_{ijc}$$ (2)

$\beta_{0ijc}$ denotes an intercept indicating the base utility of choosing one of the $J$ alternatives rather than the “None” option, $\beta_{ikc}$ represents the individual’s parameter of an attribute level $k$ featured by $j$ in class $c$; $x_{ijk}$ is the attribute level, and $\epsilon_{ijc}$ is an error term that follows a logistic distribution.

Second, while attributes are entered in the model as predictors for the choices, concomitant variables are separately estimated as independent variables in a multinominal logit model for class membership as the dependent variable. The probability of individual $i$ being in class $c$ is given by:

$$\theta_{ic} = \frac{\exp(\gamma_{ic} z_i)}{\sum_{c=1}^{C} \exp(\gamma_{ic} z_i)}$$ (3)

where $\gamma_{ic}$ denotes the parameters to be estimated for the set of concomitant variables $z_i$ for class $c$. By combining the individual’s function of choice probabilities (1) with the function of characteristics (3), the probability for individual $i$ in class $c$ is expressed as:

$$P_i = \sum_{c=1}^{C} \theta_{ic} \left( \prod_{t=1}^{T} P_{it|c} \right)$$ (4)

A log likelihood function is specified to estimate the parameters for both functions using maximum likelihood estimation. The estimation
provides different solutions for the numbers of classes for comparison. Roeder et al. (1999) suggest the solution with the lowest Bayesian information criterion (BIC) value as desirable since it statistically optimizes the overall model fit with the least numbers for parameters.

The latent class model was estimated for parameters in maximum likelihood estimation using the Latent GOLD Software, 2020.1 (Latent GOLD, 2020), based on destination attributes and individual characteristics. The attributes, distance to the beach, things to see and do, and distance from home to the destination, were assumed to be linear and thus estimated as a single variable, while crowding and accommodation were assumed to be non-linear and thus estimated as dummy variables where uncrowded and caravan park served as the comparison base (see Table 1), respectively. After comparing models with different numbers of classes, the model with four latent classes that has the lowest BIC (see Table 5) was deemed optimal. Parameter estimates of the 4-class model are presented in Table 6. For comparison and facilitating the interpretation of attribute parameters, the results of the 1-class model (which is a conditional logit model) are also displayed.

Results of the single-class model show that ‘crowdedness’ has a negative and significant effect, such that being crowded decreases the attractiveness and choice probability of a destination. The effect of ‘distance to the beach’ is also negative and significant, showing that farther distance to the beach leads to reduced choice probabilities of the destination. The attributes ‘things to see and do’ and ‘distance from home to the destination’ do not have significant effects. In terms of ‘accommodation type,’ hotel and apartment are preferred over caravan park, which is preferred over hostel.

In the four-class model, the four latent classes range from 9% to 40% in size. The sample’s descriptive statistics of the destination attributes and concomitant variables are presented in Table 7 to profile each of the latent classes. The first class is the largest in the sample (40%). ‘Crowded, distance to the beach,’ and ‘distance from home to the destination’ have negative and significant effects on the choice probabilities of a destination. Despite the negative effects, this class is the least sensitive to ‘crowdedness’ and ‘distance to the beach,’ and it is the only class concerned with distance from home to the destination. Hotel, apartment, and hostel are preferred over caravan park as the accommodation. This class is the youngest and has an income level above the national average. Country has a positive and significant effect on the class membership, indicating that Australians are more likely to belong to this class. They score the highest on motivational factors of social, intellectual, and mastery but score the lowest on relaxation (all effects are significant, with the social effect being positive and the rest effects being negative). This class thus is labeled as ‘young fun lovers.’

Class two represents 28% of the sample. Both ‘crowdedness’ and ‘distance to the beach’ have the strongest negative effects on their choice probabilities of a destination, indicating their desperate crowd avoidance and interest in the beach. They also display a strong desire to stay in a hotel or apartment rather than caravan park, and this desire is even stronger than that of class one. However, they do not have a preference between hostel and caravan park. Compared to other classes, this segment contains fewer married or partnered but more separated or divorced or widowed people and more older people (the average age is the oldest among all classes). They score low on social motivation and importance of taking a break each year, while they score the highest on relaxation motivation for holidays. Other demographic and motivational factors do not show any significant effects in predicting this class. This class is labeled as ‘older relaxation seekers.’

Class three makes up 23% of the sample. ‘Crowdedness’ and ‘distance to the beach’ have moderate negative effects on their choice probabilities of a destination. They, however, demonstrate the strongest preferences for both hotel and apartment and the weakest preferences for hostel and caravan park. The only significant predictor of this class is the income level, which has the largest proportion of people with an income higher than the national average in this class. This class has a balanced profile for the rest of demographic and motivational characteristics. This class thus is labeled as ‘affluent quality seekers.’

Finally, class four is the smallest in the sample (9%). This segment is also highly sensitive to ‘crowdedness’ but is less negatively influenced by ‘distance to the beach’ compared with class two and class four when they choose a destination. Opposite to other classes, people in this class demonstrate an overwhelming preference for caravan park over all other accommodation types. Income and country have negative and significant effects on the class membership, such that people with lower income and living in New Zealand are more likely to belong to this class. Age has a positive and significant effect in predicting this class. However, the average age of the class is not as old as that of class one. Social motivation does not show an effect, relaxation motivation shows positive and significant effects, and both intellectual and mastery motivations show negative and significant effects on class membership. Hence it can be concluded that this class is keen on relaxation for holidays (even though they do not score as high as class two in relaxation) but is reluctant to take holidays for the purpose of intellectual or mastery. They can be labeled “middle-aged lower-income caravan fans for relaxation.”

In summary, the four segments differ distinctively in their sensitivity to various destination attributes, and their preferences toward destinations are closely related to individual characteristics. All segments prefer uncrowded destinations and demonstrate different degrees of crowd avoidance. Likewise, all segments generally prefer a destination that is ‘close to the beach,’ although preferences vary in degrees across different segments. Class one is the only segment concerned with ‘distance from home to the destination’ such that long distance decreases the attractiveness of a destination to them. Conversely, segments demonstrate completely different or even opposite patterns for their preferences for the types of accommodation due to their personal characteristics, as shown in Table 7. Social, intellectual and mastery are the most important while relaxation is the least important motivation for class one, which is the youngest segment; class two, which is the oldest segment, has the strongest motivation for relaxation but the weakest motivation for social; class three has a relatively high average income and does not seem to be driven by certain holiday motivations; class four

| Latent class model performances, | Number of classes | Log likelihood | BIC | Number of parameters | R² |
|---------------------------------|------------------|---------------|-----|----------------------|----|
| 1                               | –2321.42         | 6531.71       | 8   | 0.13                 |
| 2                               | –3015.78         | 6220.95       | 31  | 0.22                 |
| 3                               | –2920.90         | 6171.70       | 54  | 0.27                 |
| 4                               | –2845.47         | 6161.36       | 77  | 0.32                 |
| 5                               | –2777.28         | 6165.48       | 100 | 0.37                 |
| 6                               | –2759.60         | 6202.63       | 123 | 0.38                 |
| 7                               | –2706.86         | 6305.66       | 146 | 0.39                 |
| 8                               | –2673.74         | 6379.94       | 169 | 0.40                 |
5. Conclusion

5.1. Contributions to the literature

This study forms part of a two-decade-long project investigation into short break drive destination preferences, which has been underpinned by the proposition that travelers’ perceptions of a destination might differ according to the travel situation. Specifically, we contribute to the paucity of literature related to short break holiday destination attractiveness. Previous reviews of a large sample of 418 destination image publications identified only 10 (2.4%) with an interest in short breaks. In this study, we examined the importance Australian and New Zealand consumers attach to attributes of destinations in the context of a domestic short break drive holiday. The identification of those few attributes that determine domestic short break drive destination choice remains an important gap in knowledge. From previous surveys in this project distributed to New Zealand and Australian consumers, dating back to 2000, we selected five attributes that had been consistently rated as most important in both countries. We tested the potential determinance of these five attributes using conjoint analysis with data from two samples in New Zealand and Australia. The results revealed that for a domestic short break drive holiday, ‘type of accommodation’ and ‘uncrowdedness’ are likely to determine destination choice for participants in both countries.

There are two possible explanations for these findings. Firstly, for a short break holiday by car, ‘type of accommodation’ will likely be the biggest single cost item for many travelers. While ‘suitable accommodation’ has consistently been one of the two most important attributes in the repeat surveys in this project, a point of difference with this present study is that we examined what types of accommodation are preferred. While there were differences in accommodation preferences across the repeat surveys in this project, a point of difference with this present study is that we examined what types of accommodation are preferred.

Table 6
Parameter estimates of the latent class model.

| Attribute | Class 1 | Class 2 | Class 3 | Class 4 | Overall |
|-----------|---------|---------|---------|---------|---------|
| Intercept | 2.175   | 0.737   | 0.803   | 0.462   | 0.334   |
| Gender: female (and other) | -0.253 | 0.368   | 0.294   | 0.211   | 0.307   |
| Age | -0.050 | 0.000   | 0.017   | 0.051   | 0.010   |
| Income: AUD$78K (or NZ$52K) and up | 0.748 | 0.015   | -0.064  | 0.198   | 0.002   |
| Number of children | 0.151 | 0.475   | -0.234  | 0.261   | 0.131   |
| Education | 0.075 | 0.644   | 0.053   | 0.690   | 0.041   |
| Marital status | 0.425 | 0.248   | 0.118   | 0.645   | 0.390   |
| Single | -0.320 | 0.232   | 0.294   | 0.167   | 0.165   |
| Married/Permanent live-in partner | -0.106 | 0.640   | -0.412  | 0.016   | 0.226   |
| Distance to the beach | 1.373 | 0.916   | 0.966   | 1.158   |
| Distance from home to the destination | 1.838 | 1.927   | 1.862   | 2.329   |

Table 7
Sample description by class.

| Attribute level selected | Class 1 | Class 2 | Class 3 | Class 4 |
|--------------------------|---------|---------|---------|---------|
| Select ‘None’ option | 8.5%    | 63.3%   | 32.4%   | 7.2%    |
| Crowded | 32.0%   | 4.4%    | 27.8%   | 18.1%   |
| Distance to the beach | 1.373   | 0.916   | 0.966   | 1.158   |
| Distance from home to the destination | 1.838 | 1.927   | 1.862   | 2.329   |

* For simplicity, the gender group “other” (0.7%) was merged to the “female” group.

A relatively low average income and is keen on relaxation motivation but reluctant to intellectual and mastery motivations.

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different segments, the most preferred ‘type of accommodation’ were hotels and apartments. Secondly, given data collection took place during the COVID-19 pandemic, it might be that a strong desire to avoid crowdedness at a short break drive destination is relevant to the social distancing practices that have evolved during the pandemic.

Providing further theoretical insight based on our findings, we find that our results align with and address calls for biological epistemology and theorizing in tourism research (Rock et al., 2020). Specifically, the concept of the “behavioral immune system” from evolutionary psychology aligns with preferences for uncrowded environments with superior sanitation facilities. We furthermore extend this body of literature by considering variability in terms of age-based tourist segments.

We used latent class analyses to identify four different potential market segments for this travel context. From our literature review, we could not find any previous studies that had attempted to segment the short break drive market. It is suggested that DMOs could work with stakeholders to develop promotional and VRM initiatives to target the segments suitable to their offering.

5.2. Managerial implications

The findings suggest opportunities for smaller destination communities that offer suitable accommodation but feature relatively less visitor arrivals and are therefore perceived to be less crowded. However, for all types of destinations, there are two key advantages of the domestic short break drive market for regional tourism organizations. First, the intangible nature of tourism experiences means that a destination’s image is as important as its tangible features (Hunt, 1975). However, for destinations within a comfortable drive of major population hubs, such as Brisbane and Auckland in this study, there is a greater likelihood of previous visitation than from more distant and domestic and international markets and, therefore, higher levels of familiarity. This means less risk in destination decision making since previous surveys in this project have indicated an increased likelihood of future visitation for a short break by car for those destinations the consumers have previously visited. Second, this travel context offers greater opportunities for destination stakeholders to encourage repeat visits since previous studies have shown Brisbane and Auckland survey participants take, on average, three short break holidays per year. Therefore, it would make sense for destinations to develop initiatives to keep in touch with previous visitors through visitor relationship marketing (VRM), although there has been little if any research reported about this type of strategy. VRM would be more efficient than trying to reach consumers through traditional broadcast media in markets crowded with the noise of competing destinations and substitute product categories. Given the importance of ‘type of accommodation,’ the most effective VRM initiatives would most likely be through accommodation businesses rather than destination marketers who rarely gain access to visitors’ personal contact details.

6. Limitations and opportunities for future research

A limitation of this study is that data was only collected in New Zealand and Australia, and consequently, the results of this study might or might not have practical implications for stakeholders of destinations in other parts of the world where the importance of domestic drive tourism increased during COVID-19. For example, research in the USA found that 41% of Americans stated their first trip on the other side of the pandemic would be by car within 100 miles (Wang, 2020). Another limitation is that the study relied on participants’ stated preferences. Moreover, it is important to note that data was collected at different points in time for the Auckland and Brisbane sample. The New Zealand data was collected in the month prior to that country’s international border closure, while the Australian data was collected four months after the international border closure. This imposes limitations for cross-sample comparisons and comparisons across time points, given the two potential sources of variability. Future research aimed at making direct comparisons across events and locations would need to ensure a more controlled sampling approach. For future research, it would also be of value to conduct longitudinal studies to examine the extent to which there is congruence between stated preferences and actual travel and to understand the degree to which changes brought on by the pandemic are permanent or fleeting.¹

It has long been proposed that the attractiveness of a destination might vary according to the travel situation (Gertner, 2010; Hu & Ritchie, 1993; Snepenger & Milner, 1990). That is, the same individual’s perceptions of and preferences for a destination might be different across travel situations such as a short break, honeymoon, or family summer vacation, for example. However, other than a study of short and long stay visitors to Switzerland (Mussalam and Tajeddini, 2016), there has been a lack of research to test this proposition. Future research opportunities exist to assist DMOs in understanding how market perceptions of their destination might vary across different travel contexts. In particular, due to the increased importance of domestic drive tourism during COVID-19 and the relative lack of studies investigating short break holidays, more research is needed into this travel context. Specifically, research investigating short break planning horizons and opportunities for VRM would be of practical value, as would testing our findings in other settings to examine the generalisability for destinations outside New Zealand and Australia that have an interest in short break drive tourism.

Declaration of competing interest

All authors declare that they have no conflict of interests.

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