Examining the effect of novelty seeking, satisfaction, and destination image on tourists' return pattern: A two factor, non-linear latent growth model

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ABSTRACT

With many destinations relying on repeat business, intention to revisit has become an important research topic. As revisit intention changes over time, this paper proposes the use of a latent growth curve to model the developmental trajectory of return behavior. The proposed model was tested in two steps in AMOS 16.0 using SEM methodologies to investigate the effects of novelty seeking, destination image and overall satisfaction levels across intent to revisit trajectories using data collected among French, English, and German travelers. Findings indicate that both novelty seeking and low satisfaction among travelers temper immediate intent to return. Conversely, a positive image of the destination enhances both immediate and future intentions to return.

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1. Introduction

With many destinations relying heavily on repeat vacationers to induce visit flow (Gitelson & Crompton, 1984), understanding revisit intent has become important to practitioners and academics alike. A thorough comprehension of revisit intent is particularly important for established travel destinations, where the scope for encouraging further “virgin demand” is limited (Darnell & Johnson, 2001). In recent years, many studies have investigated what causes travelers to make repeat visits. Such studies have identified several antecedents of return intention, including satisfaction (Baker & Crompton, 2000; Kozak, 2001; Petrick, Morais, & Norman, 2001; Yoon & Uysal, 2005; Yuksel, 2001), perceived quality (Baker & Crompton, 2000; Chen & Gursoy, 2001; Frochot & Hughes, 2000; Yuksel, 2001), past vacation experience (Alegre & Cladera, 2006; Chen & Gursoy, 2001; Kozak, 2001; Petrick et al., 2001), destination image (Bigne, Sanchez, & Sanchez, 2001; Milman & Pizam, 1995; Ross, 1993), and cultural difference (Chen & Gursoy, 2001; Reisinger & Turner, 1998).

In the majority of existing studies, the use of intentions to predict actual revisit behavior is directed by the theory of reasoned action (TRA) or the theory of planned behavior (TPB). These viewpoints explain behavioral intentions by representing motivational components of a specific behavior, subsequently denoting the degree of conscious effort that a person will exert in order to perform that behavior (Ajzen, 1991; Fishbein, 1967). In other words, they presume that intention to perform a behavior is the proximal cause of such behavior (Shim, Eastlick, Lotz, & Warrington, 2001). Other studies have examined the relationship between behavioral intention and actual behavior (Quelette & Wood, 1998). Using meta-analytic techniques Sheppard, Hartwick, and Warshaw (1988) reported a mean correlation of 0.53 between behavioral intention and actual behavior, while, in a similar study, Van den Putte (1991) found a mean correlation of 0.62 between the same variables. Both studies indicate that behavior can be reasonably predicted from intention and thus it is generally agreed that understanding behavioral intention is critical in predicting future behavior.

Despite several studies on repeat-visit intention, few researchers have to date addressed the issue of repeat visitation patterns. Feng and Jang (2007) explored the effects of tourists’ novelty seeking and destination satisfaction on revisit intention. Examining three-time interludes within the same model, the authors concluded that satisfaction is a direct antecedent of short-term visits, whereas novelty seeking is a significant antecedent of mid-term revisits. Furthermore, Feng and Jang (2007) determined that short-term, mid-term, and long-term revisit intentions are interrelated. Bigne, Sanchez, and Andreu (2009) considered the effects of variety seeking, satisfaction, and several other antecedents on destination revisit intention. They measured intention at two points in time, the short-run (defined as the next holiday trip) and the long-run (the intention to return to the destination in the
distant future). They tested two models for short- and long-run revisit intentions and found the opposite results of Feng and Jang (2007). Indeed, Bigne et al. (2009) found the propensity for variety seeking was a main determinant of a tourist’s intent to return to the same destination for the next holiday. In contrast, the strongest antecedent of revisit intention in the long-term was satisfaction. Although results from both studies offer some insights into the factors affecting tourist revisits at different time stages, the models used in both papers are limited in that they are static and do not incorporate change as a measurable variable. Incorporating change—namely, revisits over time—could be a useful tool for understanding the appropriate time interval for future revisit behaviors.

To address this research gap, the present study uses a latent growth model, which draws upon a set of repeated measures for revisit intention to estimate a developmental trajectory of returns over time. The trajectory is latent in that it was not observed directly, but rather inferred from repeated, observed measures. This technique describes the development trajectory for returns, but also estimates the impact of different predictors (in this case, the destination’s image, visitors’ satisfaction, and visitors’ propensity to seek novel experiences) on its parameters. Such insight could be useful to further verify the effects of various predictors, in particular satisfaction and novelty seeking, on immediate and future intentions to return. This study’s latent growth model was conducted in two steps in AMOS 16.0 using Structural Equation Modeling (SEM). As such, the current study serves a dual purpose. Foremost, it develops insights into a technique to assess change in return intention over time. Furthermore, it explores the effects of possible predictors on revisit behavior patterns to understand individual differences in travel choice over time. The paper begins with a literature review on revisit intent and its determinants. Next, we propose and test a latent growth model using consumer data to explain intention to return. After presenting the findings, this paper provides implications for both industry practitioners and academia. Finally, avenues for further research are proposed.

2. Literature review and conceptual framework for study

2.1. Revisit intention

An avant-garde study of destination revisit intention dates back to the exploratory work of Gyte and Phelps (1989), who noted that British travelers to Spain show a resurgent intention to return in the future. These early results were refined by Baloglu and Erickson (1998) in their investigation of international repeat visits to Mediterranean destinations, which found that most travelers to a destination are likely to switch to another destination for subsequent trips; but that many do hope to return to their initial destination at some time in the future.

A number of researchers have used tourist typologies to better understand visitor intentions over time. Oppermann (1999) discussed the dynamic typology of travelers as a function of multiple visits, identifying three types of visitors—somewhat loyal (infrequent), loyal (at least every third year), and very loyal (annual and biannual)—Oppermann (2000) subsequently further extended his typology to cover the entire population by introducing other traveler types, such as non-purchasers (unaware of the destination), unstable purchasers (switching destinations regularly), and disloyal purchasers (never coming back). Inspired by these findings, Feng and Jang (2004) proposed a trichotomous segmentation centered on tourists’ temporal destination revisit intention (TDRI): (1) immediate and future intentions to return. This study (2004) notion of deferred repeaters, the model assumes that revisit intention will be at its lowest level the year immediately following a trip to a destination. Building on the concept of RFM, it is also hypothesized that return intention will increase after the first year following the trip and then steadily decrease until the intention completely vanishes.

2.2. Novelty seeking

Keaveney (1995) and Reichheld (1996) determined that certain customers switch products even when satisfied with the results provided. Studies on switching behavior for general products can be explained by the variety-seeking theory (McAlister, 1982). In the tourism context, variety seeking has been replaced by novelty seeking, which has been found to be particularly important in relation to tourist destinations (Crompton, 1979; Dann, 1981; Feng & Jang, 2004; Scott, 1996; Uysal & Hagan, 1993). Novelty-seeking theory provides a stronger theoretical foundation in explaining destination choice behavior (Babu & Bibin, 2004; Bello & Etzel, 1985; Zuckerman, 1971). Novelty seeking theory provides a stronger theoretical foundation in explaining destination choice behavior (Babu & Bibin, 2004; Bello & Etzel, 1985; Zuckerman, 1971).

Variety and novelty seeking share the same conceptual foundation—namely that consumers seek optimal levels of stimulation in their choice of behavior (Hebb & Thompson, 1954). Novelty is often defined as the degree of contrast between present perception and past experience, making it the opposite of familiarity (Pearson,
1970). Faison (1977) defined novel travel as a trip characterized by new and unfamiliar experiences that differ from prior life experiences. McIntosh, Goeldner, and Ritchie (1995) suggested various categories of novelty sources, ranging from the discovery of innovative physical places to the gaining of prestige and attention from others. It is widely accepted that novelty seeking plays an important role in tourist decision-making (Petrick, 2002). The search for novelty is often seen as an innate quality in travelers (Cohen, 1979; Lee & Crompton, 1992). Indeed, travelers seeking a high degree of novelty rarely return to previously visited destinations, whereas those seeking a high degree of familiarity (or a low degree of novelty) tend to return to the same places often. Hence, novelty seeking is expected to have a diminishing effect on tourist revisit intention.

Hypothesis 1a. A higher level of novelty seeking among travelers will result in lower immediate intention to revisit.

Hypothesis 1b. A higher level of novelty seeking among travelers will result in lower intention to revisit in the future.

2.3. Destination image

Destination image is defined as an individual’s mental representation of knowledge, feelings and overall perception of a particular destination (Fakeye & Crompton, 1991). Various authors have studied the effect of image on destination choice (e.g., Crompton & Ankomah, 1993; Gartner, 1989; Goodall, 1988). Some have argued that destinations with more positive images are more likely to be included and selected in the decision-making process (Milman & Pizam, 1995). Destination image has also been found to influence tourists’ behavioral intention. For example, Court and Lupton (1997) found that a positive image of a destination positively affected traveler intention to revisit that location in the future.

Destination image also positively influences perceived quality and satisfaction. Studies have shown that a favorable image leads to greater tourist satisfaction (Lee, Lee, & Lee, 2005). In turn, the evaluation of the destination experience influences the tourists’ image of the destination (Echtner & Ritchie, 1991; Fakeye & Crompton, 1991; Kozak & Rimmington, 2000). Kotler, Bowen, and Makens (1996) established the following sequence between image and satisfaction: image → quality → satisfaction. In other words, image affects how customers perceive quality, with a more positive image corresponding to a higher perceived quality. Perceived quality in turn determines the consumer’s satisfaction.

Some authors have suggested a difference between service quality and customer satisfaction in the tourism context. First, the expectations referred to in each case differ. Oliver (1997) pointed out that service quality judgments are more specific (about particular attributes or key aspects of destination) while customer satisfaction judgments are more holistic (about global experience at destination). Oliver also linked cognitive judgments with service quality and affective judgments with customer satisfaction. Anderson, Fornell, and Lehmann (1994) incorporate another distinction—that in order to determine consumer satisfaction, a customer must make a purchase, although a purchase is not necessary to evaluate quality.

Pizam and Ellis (1999) suggested that beyond the generic features that distinguish services from physical goods (such as intangibility, inseparability, heterogeneity, and perishability), further differences exist between tourism and other services. Tourists’ experience involves an assortment of constituents (such as accommodation, restaurants, and attractions) and while tourists may evaluate each element separately, dissatisfaction with one component leads to an overall negative evaluation of the destination as a whole. Thus, in tourism, a destination image is holistic, described as an overall impression greater than the sum of its parts (Oxenfeldt, 1974). Consequently, this study focuses on an overall evaluation of destination image rather than analyzing the individual components of the destination image construct. It also assumes that both quality and satisfaction refer to the tourists’ overall evaluation of their holiday experience. As such, both aspects are based on post-purchase judgments of the stay. Based on this understanding, the quality covariate is deliberately omitted from the current model, which instead concentrates on the impact of image on the satisfaction construct.

Hypothesis 2a. A more favorable destination image will result in higher overall satisfaction.

Hypothesis 2b. A more favorable destination image will result in higher intention to revisit in the future.

2.4. Overall satisfaction

The link between satisfaction and post-purchase behavior has been well established, with a number of studies confirming a significant positive relationship between customer satisfaction and loyalty/retention (e.g., Anderson & Sullivan, 1990; Cronin, Brady, & Hult, 2000; Taylor & Baker, 1994) as well as an affirmative relationship between satisfaction and repeat-visit intention (e.g., Bramwell, 1998; Kozak, 2001; Yoon & Uysal, 2005; Yuksel, 2001).

In prior studies, the most common methods used to assess satisfaction are the expectation/disconfirmation paradigm (Oliver, 1980); equity theory (Oliver & Swan, 1989); norm models (LaTour & Peat, 1979); and perceived overall performance (Tse & Wilton, 1988). According to the expectation/disconfirmation paradigm, before a purchase is made, consumers develop expectations about a product. After the purchase, consumers compare actual performance to these expectations. If actual performance is better than the expectation, positive disconfirmation (i.e., satisfaction) results and vice versa. In Oliver and Swan’s (1989) equity theory, satisfaction occurs when customers receive benefits or value based on what they actually spend in terms of price, time, and effort. Meanwhile, LaTour and Peat’s (1979) norm theory uses a “comparison standard” through which consumers compare a product they have purchased with other products. For example, tourists might compare their current travel destination with other destinations they have visited in the past. Finally, in Tse and Wilton’s (1988) perceived overall performance model, consumer dissatisfaction is a function only of actual performance and is unrelated to consumer expectations. In other words, actual performance and initial expectations are considered independently.

With respect to the tourism literature, the disconfirmation paradigm has been widely used to assess visitors’ satisfaction (Petrick et al., 2001), although the use of the disconfirmation paradigm to assess tourists’ satisfaction has been thoroughly questioned. According to Barsky (1992), one problem is that—although expectations have been generally accepted as affecting satisfaction—no conclusive evidence indicates that they directly lead to satisfaction or dissatisfaction. For example, according to the disconfirmation paradigm, as expectations decrease, the probability of being satisfied increases; in other words, if a consumer expects and receives poor performance, he or she will be satisfied, which is not the case in reality (LaTour & Peat, 1979). Another problem specific to tourism is that tourists’ product attributes are ambiguous in their character and consequently hard to evaluate, particularly when contrasted with some initial
standards set to begin prior to experiencing the product—in this case, visiting the destination (Barsky, 1992; Williams, 1989).

As a result, several studies have suggested the use of a single, global measure of tourists’ satisfaction as suggested by Tse and Wilton (1988) as a better measure of future purchase intentions than the use of disconfirming expectations (Vaske, Donnelly, Heberlein, & Shelby, 1986; Williams, 1989). In the tourism industry, Kozak and Rimmington (2000) cited various empirical and conceptual articles in which overall performance/actual experience is used to determine customer satisfaction. Therefore, the current paper will measure satisfaction through a single overall dimension.

**Hypothesis 3a.** A higher level of overall satisfaction will result in higher immediate intention to revisit.

**Hypothesis 3b.** A higher level of overall satisfaction will result in higher intention to revisit in the future.

3. The proposed hypothetical model

Fig. 1 depicts the latent growth curve model. The hypothesized causal relationships between the different variables are apparent: image → satisfaction → initial status; image → satisfaction → shape factor; novelty → initial status; novelty → shape factor. Initial status and shape factor are, respectively, the intercept and slope of the growth curve over time.

4. Research methodology

Data was collected using an online questionnaire administered in February 2009 to French, English, and German travelers aged 18 years and older. Survey participants were chosen randomly from panels of respondents that represent each country’s aggregate demographics. Well-established destinations represent the ideal ground to test repeat visitations. Moreover, because destinations close to a traveler’s residence might cause spurious repeat visits (Yim & Kannan, 1999), a screening question selected only respondents who had taken a flight of at least two hours to a sun destination during the seven months prior to the survey. In addition, because the survey was conducted in February and used a sun, sea, and sand destination as the most reasonable established tourist location for the current inquiry, the survey asked respondents to refer back to the previous seven months (i.e., back to July 2007).

Given our survey timeframe (February), seven months represented the ideal time to visit that type of destination and thus this timing was designed to help improve response rates. Respondents who did not pass the screening question were eliminated from the analysis. In total, 634 questionnaires were delivered to generate a final sample of 450 usable surveys (150 from each nationality). This response rate thus exceeded the minimum sample size threshold required when constructing structural equation models (Schumacker & Lomax, 2004) and resulting in an average response rate of 71%.

The questionnaire was developed based on prior studies. As discussed earlier, both satisfaction and destination image were operationalized using a single variable respectively. Novelty seeking, on the other hand, was operationalize using nine questions based on McIntosh et al.’s (1995) travel stimuli theory in an effort to capture the different aspects of the experience (Lee & Crompton, 1992). As with Feng and Jang (2004), intention to return was measured over four time periods corresponding to immediate, short, mid-, and long-term respectively. All questions were measured using a 7-point scale ranging from 1 (very low) to 7 (very high).

Prior to being administered, the questionnaire was pilot tested using 30 postgraduate students studying at a major European business school to help refine its validity and content. A reliability analysis was performed for the novelty-seeking construct, resulting in a Cronbach’s $\alpha$ of 0.624, which is considered satisfactory for exploratory studies (Nunally & Breinstein, 1994). Furthermore, since the literature suggested no commonly accepted definition of short-, medium- and long-term (Ajzen, 1991; Eagly & Chaiken, 1993; Feng & Jang, 2007), the results of the pilot study were also used to calibrate the time periods for revisit intent presented in the final questionnaire. Several iterations with different time lags were proposed and tested on the same pilot group. Analysis of the results suggested that year 1, year 3, year 5, and year 10 provide the clearest distinction between immediate, short, mid- and long-term in the minds of respondents. A full list of the survey questions is presented in Table 1.

5. Analysis of results

Latent growth structural equation modeling, using AMOS 16.0 (Ferrer, Hamagami, & McArdle, 2004; Schumacker & Lomax, 2004), was implemented to test the set of hypotheses for the effects of

![Fig. 1. Full latent growth model of prediction of change in intentions to revisit over four periods.](image-url)
destination image, satisfaction, and novelty seeking on the occurrence and development of revisit intentions over the four time periods studied. The latent growth model was analyzed in two steps (Kline, 2004). The first step required analyzing a change model that involves just the repeated measure variable—namely, revisits intention. Given an acceptable change model, the second step incorporated covariates to the model to predict change over time.

5.1. Change model

The basic model of change in travelers’ return intentions is presented in Fig. 2. This model has three essential characteristics. First, each annual measurement is represented as an indicator of the underlying dimensions of the research variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Label</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novelty seeking</td>
<td>NS1, NS2, NS3, NS4, NS5, NS6, NS7, NS8, NS9</td>
<td>1 – very unimportant to 7 – very important</td>
</tr>
<tr>
<td>Destination image</td>
<td>How would you describe the image that you had of that destination before the experience?</td>
<td></td>
</tr>
<tr>
<td>Overall satisfaction</td>
<td>How would you describe the overall quality of your stay in that destination?</td>
<td></td>
</tr>
<tr>
<td>Revisit intention</td>
<td>How interested are you in returning in 1 year? Y1, How interested are you in returning in 3 years? Y3, How interested are you in returning in 5 years? Y5, How interested are you in returning in 10 years? Y10</td>
<td></td>
</tr>
</tbody>
</table>

Second, the model has a mean structure in which the constant (represented by the Δ in the graph) has direct effects on the exogenous IS and shape factors. This specification includes the means of these factors as free model parameters. The mean of the IS factor is the average-reported intention to revisit next year adjusted for measurement error. In contrast, the variance for the IS factor reflects the range of individual differences around the average intention level of immediate revisit. Likewise, the mean of the shape construct reflects the average amount of year-to-year change in average intention to revisit, also adjusted for measurement errors. The variance of the slope construct provides information about the range of individual differences in the rate of change in revisit intention over time.

Finally, the IS and slope constructs are specified to covary. The estimate of this covariance indicates the degree to which immediate return intention predicts rate of increase in subsequent returns. A negative estimated covariance indicates that travelers with an already high immediate intention to return show a lower rate of increase in returns over time whereas a positive estimated covariance would indicate just the opposite.

5.1.1. Covariance structure analysis

The change model was fitted to the raw data (see Table 2 for descriptive statistics) using the ML method of AMOS 16.0. The initial values of selected fit indexes were not favorable and lead to the rejection of the hypothesis of close approximate fit (RMSEA ≤ 0.05). Inspecting the solution indicated that the residual variance of e3 was not significant at the 90 percent confidence level (p-value = 0.621), suggesting that travelers have relatively comparable high intention to return after the first year. Furthermore, the only significant modification index was for the prospective association between e5 and e10 (χ² = 11.783), suggesting that—as time passes—current levels of intention to return can be predicted from previous levels of intention. In other words, a traveler with high intention to return in year 5 will also have a high intention to return in year 10, and vice versa. Based on these results, the change model was respecified so that the e3 residual variance was trimmed (i.e., fixed to zero) and error correlation between e5 and e10 was freely estimated, thereby allowing the model to approximate the actual trajectory of return intentions over time (Duncan, Duncan, & Stoolmiller, 1994).

Fig. 2. Hypothesized latent growth model of change in intentions to revisit over four periods with mean structure. The mean structure consists of the direct effects of the constant Δ on latent growth factors.
added. Values of selected fit indexes for the respecified model generally suggested an adequate overall fit compared to the original model: $\chi^2_M = 6.509, p = 0.089, NFI = 0.995, CFI = 0.997$, and RMSEA = 0.051, with PCLOSE = 0.405.

In addition, the freely estimated regression weights for the endogenous variables (e.g., indicators Y5 and Y10) of the respecified model on the two factors and as reported on the upper part of Table 3 were highly significant ($p$-values < 0.05). The estimated covariance between the latent growth factors was $-0.834$, while the corresponding estimated factors correlation was $-0.410$. These results indicate that higher initial levels of latent predictor subsequently rates of annual increase in intention to revisit (and vice versa). Thus, the final model of change in the level of return intention over the four time periods studied was identical to the original model (Fig. 2), except for a measurement error correlation between e5 and e10, as discussed above.

5.1.2. Mean structure analysis

The mean structure parameter estimates for the final change model are reported in the lower part of Table 3. The direct effects of the constant on the latent growth factors are means. The estimated mean of the IS factor is 3.542, which is close to the observed average level of return intention at year one (3.56; see Table 2). The two values are not identical because the former is adjusted for measurement error. The estimated mean of the shape factor is 1.547, indicating the average annual change (adjusted for measurement error) in return intention. The estimated variances of the IS and shape factors are, respectively, 2.478 and 1.671, each being statistically significant at the 0.01 level. These results suggest that respondents are not homogeneous in their initial level or rate of change of intent to revisit.

The indicator means are not model parameters. However, the unstandardized total effects of the constant on the indicators are predicted means that can be compared with the observed means. For example, applying the tracing rule (see Fig. 2) shows that the total effect of the constant on the first measurement of return intention is the sum of the indirect effects ($\Delta \rightarrow IS, IS \rightarrow Y1$). Using the results from Table 3, this total effect is estimated as follows:

Total effect of $\Delta$ on $Y1 = 3.542(1) + 1.547(0) = 3.542$

The other predicted means for return intention for years three, five, and ten are calculated following the same logic, resulting in 5.089, 4.493, and 3.770, respectively. Each of these predicted means is very similar to the corresponding observed means for years three, five, and ten (see Table 2). Thus, the final change model closely reproduces both the observed covariances and means, indicating that it is a good model to represent the change in return intention over time.

5.2. Structural model

After validating the change model, predictors were added to the first model by including them in the mean structure and regressing the latent growth factors on these predictors. The latent growth model (LGM) for predicting change in return intent over the four periods studied is presented in Fig. 3. Note that the constant has direct effects on the predictors (e.g., $\Delta \rightarrow$ image, $\Delta \rightarrow$ satisfaction, and $\Delta \rightarrow$ novelty). Furthermore, satisfaction and novelty are specified to have direct effects on both latent growth factors, IS and shape, which makes these latter factors endogenous so that each...
now has a disturbance. These disturbances are specified as correlated. This pattern parallels similar results for the final change model previously described herein (see Fig. 2) and reflects the assumption that initial level and increases in revisits share omitted causes beyond the originally specified predictors. In addition, image is specified to have a direct impact on the slope factor.

5.2.1. Covariance structure analysis

The prediction model in Fig. 3 was fitted to the data, using AMOS 16.0. Estimating the model converged to an admissible solution. However, the fit index values of the theoretical model were not significant. Inspecting the solution indicates that novelty and satisfaction failed to have a significant direct impact on the shape factor, with regression weights of −0.51 and 0.026 and p-values of 0.436 and 0.628, respectively. The solution further revealed a direct path—which was not hypothesized—from the novelty construct to satisfaction. In addition, the correlation between predictors (e.g., image and novelty) was estimated to be non-significant (i.e., about zero and p-value = 0.099). Finally, correlation residuals of the novelty constructs were substantially high for a total of 15 within-test correlations. Considering that these scores are from one test, such measurement error correlations may reflect common method variance.

As a result the full-growth-model in Fig. 3 was respecified (see Fig. 4) so that: 1) the direct effects of novelty and satisfaction on the slope factor were excluded from the analysis; 2) in return novelty predictor was linked to the satisfaction variable through a direct path; 3) the correlation between image and novelty predictors was dropped; and 4) the measurement errors for the novelty construct were allowed to covary for a total of 15 within-test correlations. This respecified model was re-estimated using the same dataset; the analysis subsequently converged to an admissible solution, and values of selected indexes were: \( \chi^2 = 225.68, d.f. = 81, p = 0.000, \) NFI = 0.953, CFI = 0.969 and RMSEA = 0.063 with a PCLOSE = 0.014. The last of these results is critical as the value of the PCLOSE based on RMSEA is somewhat low (<0.05), suggesting that the hypothesis of close approximate fit in the population seems doubtful. Nonetheless, measures of incremental and parsimonious fit (CFI and NFI, respectively) as well as other measures of fit (as shown in Table 4) demonstrated good conformance with the data, such that the overall fit of the respecified model is deemed to be at least acceptable.

5.2.2. Results of hypotheses testing

Referring to the covariance structure of the full-growth-model (reported in the upper part of Table 5), all path coefficients estimates are significant at the 99 percent confidence level. In particular, the direct effect of novelty on IS (−0.461) supports hypothesis H1a—that a higher level of novelty seeking among travelers will result in a lower immediate intent to revisit. Image has a direct effect on satisfaction (coefficient = 0.263), which supports hypothesis H2a (that a more favorable destination image will result in a higher overall satisfaction). The unstandardized coefficient for the direct effect of image on slope (coefficient = 0.097 and p-value = 0.10) indicates that the rate of increase in revisits over time is generally greater when the traveler has a more positive perception of a destination, thereby supporting hypothesis H2b. The estimate for the unstandardized direct effect of satisfaction on IS is 0.259, which supports hypothesis H3a, suggesting that a higher level of satisfaction will result in a higher initial level of revisits. Finally, the novelty covariate was found to have a direct positive effect (unstandardized coefficient = 0.295) on satisfaction, although this relationship was not hypothesized in the current study.

As theoretical considerations should guide the new specification of the model (Diamantopoulos, 1994; Long, 1983), this relationship could subsequently be justified by the fact that travelers with a higher level of novelty seeking show higher levels of involvement when visiting a destination; as a result, they obtain a superior level of satisfaction from their visit to that destination (Crouch, Perdue, Timmermans, & Uysal, 2004). The results of the hypothesis testing, including the new assumption, are summarized in Table 6.  

![Fig. 3. Hypothesized full latent growth model predicting change in intentions to revisit over four periods, with a mean structure consisting of the direct effects of the constant \( \Delta \) on both latent growth factors and predictors.](image-url)
In addition, the estimated disturbance correlation is negative (−0.482), which indicates that the higher immediate levels of revisits are associated with lower rates of increase in returns over time through omitted causes.

Finally, Table 7 reports the direct and indirect effects of all variables on the growth factors. Satisfaction demonstrated a direct effect on immediate return intention (total direct effect of 0.259), while destination image had indirect effect (through satisfaction) on immediate intention to return (total indirect effect of 0.068). Finally novelty seeking had both direct and indirect effects (also on immediate return intentions) with a total indirect effect of 0.068. This indicates that novelty seeking and satisfaction are the two most important variables influencing visitors’ immediate return intentions. In contrast, image is the only factor affecting future returns, and thus the latent growth factors are estimated as follows:

Slope factor mean equals 1.022 + 0.097(5.402) = 1.546

Following the same reasoning:

IS factor mean equals 4.443 + 0.259(2.838) + 0.263(5.402) + 0.295(5.206) − 0.461(5.206) = 3.544

These results are more or less similar to those for the final change model (see Table 3) and can be interpreted in the same way. The predicted means on the return intention calculated for years one, three, five, and ten (using the tracing rule) are, respectively, 3.544, 5.090, 4.492, and 3.770. These values are similar to the corresponding observed means for the same periods. Thus, it can be concluded that—despite the critical RMSEA index value—the predicted means for revisit intentions are similar to the corresponding observed means for years one to ten. As such, the full model fairly reproduces the observed covariances and means and thus adequately represents the change in return intention over time.

5.2.4. Reliability analysis

Finally, the reliability and internal consistency of the measurement factor was by calculating Cronbach’s alpha. The reliability
The novelty construct shows a Cronbach’s alpha coefficient of 0.933, which is well above the cut-off criterion of 0.7 recommended by Nunally (1978). Furthermore, the analysis shows that the index cannot be improved by deleting any of the underlying items.

### 6. Conclusions, discussion, and implications

In the tourism literature, some studies have considered temporal issues in researching revisit intention. These studies have investigated discrepancies in the effects of different antecedents on destination revisit intention measured at different time points. These studies remained static, however, because the cross-sectional nature of each empirical study does not incorporate change as a measurable variable; namely, revisits over time. The present work contributes to the literature as it used a longitudinal approach (drawing on a four-wave longitudinal dataset corresponding to the repeated measure for revisit intention) to validate a general development trajectory (growth model) for returns. This latter method proved to be a useful tool to help understand the time evolution of return intentions and the appropriate time interval for future revisit behaviors. The present work also contributes to the literature by further verifying the effect of various predictors, in particular satisfaction and novelty seeking on immediate and future intentions to return by investigating their impact on the parameters of the return trajectory. This contribution highlighted some discrepancies in the effects of novelty seeking and satisfaction on return intentions.

### Table 5

<table>
<thead>
<tr>
<th>Covariance structure</th>
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<tbody>
<tr>
<td>Estimated regression weights</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Satisfaction ← image</td>
</tr>
<tr>
<td>Satisfaction ← novelty</td>
</tr>
<tr>
<td>IS ← satisfaction</td>
</tr>
<tr>
<td>Slope ← image</td>
</tr>
<tr>
<td>Y5 ← slope</td>
</tr>
<tr>
<td>Y10 ← slope</td>
</tr>
<tr>
<td>NS1: different culture ← novelty</td>
</tr>
<tr>
<td>NS2: local crafts ← novelty</td>
</tr>
<tr>
<td>NS3: local cuisine ← novelty</td>
</tr>
<tr>
<td>NS4: new friends ← novelty</td>
</tr>
<tr>
<td>NS5: ethnic settings ← novelty</td>
</tr>
<tr>
<td>NS6: native groups ← novelty</td>
</tr>
<tr>
<td>NS7: different places ← novelty</td>
</tr>
<tr>
<td>NS8: variety of things ← novelty</td>
</tr>
<tr>
<td>NS9: prestige ← novelty</td>
</tr>
</tbody>
</table>

### Table 6

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Testing result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a Novelty seeking ← IS</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b Novelty seeking ← shape factor</td>
<td>Not supported</td>
</tr>
<tr>
<td>H2a Destination image ← satisfaction</td>
<td>Supported</td>
</tr>
<tr>
<td>H2b Destination image ← shape factor</td>
<td>Supported</td>
</tr>
<tr>
<td>H3a Satisfaction ← IS</td>
<td>Supported</td>
</tr>
<tr>
<td>H3b Satisfaction ← shape factor</td>
<td>Not supported</td>
</tr>
<tr>
<td>Hnew Novelty seeking ← satisfaction</td>
<td>Suggested</td>
</tr>
</tbody>
</table>

### Table 7

<table>
<thead>
<tr>
<th>Path</th>
<th>Direct effect</th>
<th>Indirect effect</th>
<th>Total effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image ← satisfaction</td>
<td>0.263</td>
<td></td>
<td>0.263</td>
</tr>
<tr>
<td>Novelty ← satisfaction</td>
<td>0.295</td>
<td></td>
<td>0.295</td>
</tr>
<tr>
<td>Satisfaction ← IS</td>
<td>0.259</td>
<td></td>
<td>0.259</td>
</tr>
<tr>
<td>Image ← IS</td>
<td></td>
<td>0.068*</td>
<td>0.068</td>
</tr>
<tr>
<td>Novelty ← IS</td>
<td>-0.461</td>
<td>0.077*</td>
<td>-0.385</td>
</tr>
<tr>
<td>Image ← shape factor</td>
<td>0.097</td>
<td></td>
<td>0.097</td>
</tr>
</tbody>
</table>

*Represents significant effects at the 0.05 level.
satisfaction on revisit intentions in the short- and long-term from previous studies.

Moreover, this study's findings have significant managerial implications for destination managers and marketers. In today's increasingly competitive travel market, marketers are having greater difficulty attracting travelers. Tourists have many options to satisfy their travel needs; thus, it is important that destinations examine tourists' intent to revisit, rather than just actual visits. It is also important for managers and marketers to understand how the revisit intent changes over time. This information can identify the predictors behind those changes and help destination managers develop appropriate action plans to impact tourists' temporally-changing return behavior positively. Examining the intention to revisit a destination from a time perspective is thus helpful for both theoretical and practical reasons.

In particular, this study confirmed that satisfaction has a significant, positive, and direct impact on immediate revisit intention. The current findings indicate that the short-term or immediate impact of satisfaction on returns is consistent with previous studies that emphasize the role of customer satisfaction on repeat travel behavior. The study, however, also highlights the less efficient impact of satisfaction in attracting return travelers over time. Comparisons to results from other studies that examined temporal issues of revisit intention, it reveals similar results to those obtained by Feng and Jang (2007), who found that satisfaction had a significant influence on return intention in the short-term (immediate return intentions). Bigne et al. (2009), however, found support to the contrary; that is, satisfaction had a significant effect on the intent to return in the long-run. Results from the present study thus suggest that the direct effect of satisfaction may not be significant in developing long-term business unless satisfaction can be provided continuously. Nevertheless, because satisfaction directly affects a traveler's intention to return, measuring and improving satisfaction can help proprietors increase repeat visits—at least in the short-term. Moreover, this study assumes that satisfaction refers to the overall travel experience. Private and public agents, providers of accommodations, transportation providers, tourism information offices, local inhabitants, and natural and artificial resources all intervene in the travelers' experience. This multiplicity of actors suggests that destination managers should coordinate and cooperate among all actors to produce a tourism experience that results in high overall visitor satisfaction.

Further, this paper demonstrates that novelty seeking negatively affects immediate revisits. Nevertheless, immediate intent to revisit is negatively correlated with future revisits; thus, a lower level of immediate intent to revisit is associated with a greater increase in intent to return over time. Comparing this study's findings with those of Bigne et al. (2009) reveals some discrepancies. Bigne et al. (2009) found that tourists with a higher propensity to seek variety in their holiday destinations show a lower intent to return not only in the next trip (immediately), but also in the distant future. The current study, however, showed that a higher level of novelty seeking among travelers leads to lower immediate intent to revisit, but a greater intent to revisit in the future. The study's results also contradict those of Feng and Jang (2007), who found that a greater level of novelty seeking among travelers causes a lower intent to return in the mid-term and long-term, but does not affect immediate or short-term revisits.

This result suggests that novelty seekers are a category of travelers to which marketers should appeal to over time. Destination managers should develop and advertise new features to ensure long-term attraction and encourage such travelers to return to their destination. These results also support previous studies suggesting that although customer satisfaction leads to greater loyalty and return visits, satisfaction may not be enough to explain the intent to revisit (Mittal & Lasar, 1998; Oliver, 1999). Some tourists seek variety and prefer visiting new destinations no matter how positive their experience at a previously visited destination. In such cases, satisfaction is irrelevant in terms of intention to return.

The structural relationship analysis carried out in this study indicates that destination image, which directly and indirectly influences behavioral intentions, appears to have the most important effect on behavioral intentions—a finding consistent with previous studies (e.g., Bigne et al., 2001; Chen & Tsai, 2007; Chi & Qu, 2008). In particular, destination image was hypothesized to impact immediate revisits through satisfaction and directly influence future (or deferred) return intentions. Again, the current results show divergence with Bigne et al.'s (2009) results, who found that destination image impacts future returns through satisfaction, while image has no significant influence on intention to return for the next holiday. The current results suggest that improving a destination's image is a critical way to generate future revisits, even if a traveler was dissatisfied or had a poor experience. A positive image can suggest that the traveler's poor experience was a rare exception. Hence, endeavors to build or improve a destination's image may facilitate revisiting behavior, thus helping a destination's success and tourism development. Therefore, destination managers should act on the endogenous elements underlying the destination's image, such as advertising, promotional instruments, and new attractions as a means of improving the destination's image.

7. Limitations and further research

As with all research, the current study has several limitations. Firstly tourists' satisfaction was measured using a single measurement item, which may be a simplistic approach. Using multiple dimensions would be more appropriate and generate more robust findings. Thus, future studies should consider utilizing a model that integrates a multi-variable approach to measuring satisfaction. Technically speaking, using multi-dimensional latent factors for both constructs (i.e., image and satisfaction) should help reduce measurement error and improve the model's overall significance. Destination image was also measured using a single measurement element. Similarly using a multi-scale attribute measurement in this case would provide destination managers with more specific data to help refine destination image and attractiveness. Lastly, an inherent problem in analyzing tourism revisit sequences is the issue of the length of time between revisit periods. Although one may automatically assume such periods to be one year, multiple trips within a single year are also possible, as are trips every other year. The current study tried to minimize such bias through sample choice, by limiting the survey to respondents at least two hours flight away from the destination, thereby helping to reduce extreme revisit behaviors. However alternative approaches to addressing this issue should be explored to arrive at an optimum solution.

Additional work could be undertaken to discern why novelty-seeking travelers were found to have higher level of satisfaction. Although not clear from the data, a possible explanation might be that novelty seekers show a higher degree of involvement when visiting a destination and as a result achieve higher level of satisfaction. However further investigation is needed to investigate and validate this theory. Future research could follow Kozak's (2001) observation that satisfaction with a destination can facilitate both destination image and destination satisfaction. These extant findings could lead to future research on secondary destination decisions as they relate to a tourist's intent to revisit. In addition, although the results of the current study are
specific to sun destinations, the research could be repeated for other kinds of destinations (e.g. mass, niche, peripheral) to test model invariance — in particular the effect of the image across different types of travel destinations at different stages of development. Finally, the study could also be repeated for each nationality separately in order to test for model invariance among different countries to identify cultural diversity in intention to return.

Appendix A. Supplementary data

Supplementary data associated with this article can be found in the online version, at doi:10.1016/j.jtourmain.2010.08.004

References


