An examination of the effects of motivation and satisfaction on destination loyalty: a structural model

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Abstract

This study offers an integrated approach to understanding tourist motivation and attempts to extend the theoretical and empirical evidence on the causal relationships among the push and pull motivations, satisfaction, and destination loyalty. The research model investigates the relevant relationships among the constructs by using a structural equation modeling approach. Consequently, destination managers should establish a higher tourist satisfaction level to create positive post-purchase tourist behavior, in order to improve and sustain destination competitiveness.

Keywords: Tourist motivation; Satisfaction; Destination loyalty; Structural equation modeling

1. Introduction

In an increasingly saturated marketplace, the success of marketing destinations should be guided by a thorough analysis of tourist motivation and its interplay with tourist satisfaction and loyalty. A review of tourism literature reveals an abundance of studies on motivation and satisfaction, but destination loyalty has not been thoroughly investigated. Primarily, the tourism studies to date have addressed and examined the constructs of motivation and satisfaction independently. The causal relationships with travel motivation, satisfaction, and destination loyalty have been only conceptually or superficially discussed. Additionally, conceptual clarification, distinctions, and logical linkages among the constructs have been lacking.

A review of the literature on motivation reveals that people travel because they are “pushed” into making travel decisions by internal, psychological forces, and “pulled” by the external forces of the destination attributes (Crompton, 1979; Dann, 1977; Uysal & Jurowski, 1994). Accordingly, satisfaction with travel experiences, based on these push and pull forces, contributes to destination loyalty. The degree of tourists’ loyalty to a destination is reflected in their intentions to revisit the destination and in their recommendations to others (Oppermann, 2000). Thus, information about tourists’ loyalty is important to destination marketers and managers.

This study offers an integrated approach to understanding tourist motivation and attempts to extend the theoretical and empirical evidence on the causal relationships among the push and pull motivations, satisfaction, and destination loyalty. A research model is proposed and tested in the study. The model investigates the relevant relationships among the constructs by using a structural equation modeling approach. In order to provide a theoretical background for the proposed model, the authors first review tourist motivation literature and discuss the concepts of push and pull motivations, and then provide a discussion of tourist satisfaction and destination loyalty. It is hoped that the results derived from the model will serve as the basis for the development of destination marketing strategies.

One expected advantage of an improved understanding of these causal relationships is that a solid psychological process or mechanism in the development of loyalty could be demonstrated. Obviously, tourists
have their own internal and external reasons for traveling (McGehee, Loker-Murphy, & Uysal, 1996). However, only one motivation force or both could have positive or negative relationships with travel satisfaction. It would be of interest to discuss if external sources of motivation have more effect on the level of satisfaction than do internal sources. Travel satisfaction has been generally used as an assessment tool for the evaluation of travel experiences (Bramwell, 1998; Ross & Iso-Ahola, 1991). Tourists’ positive experiences of service, products, and other resources provided by tourism destinations could produce repeat visits as well as positive word-of-mouth effects to potential tourists such as friends and/or relatives (Bramwell, 1998; Oppermann, 2000; Postma & Jenkins, 1997). Recommendations by previous visits can be taken as the most reliable information sources for potential tourists. Recommendations to other people (word-of-mouth) are one of the most often sought types of information for people interested in traveling. This systematic examination of causal relationships among the constructs could facilitate a clearer understanding of the nature of behavior and intentions. Even if the constructs have been widely applied in studies related to tourists, there are still research challenges in the sense of discovering and investigating the causal relationships among the constructs of push and pull motivation, satisfaction, and destination loyalty.

2. The proposed hypothetical model

Fig. 1 depicts the hypothetical causal model. Each component of the model was selected on the basis of the literature review. Previous studies reveal that customer loyalty is influenced by customers’ satisfaction (Bitner, 1990; Dick & Basu, 1994; Oliver, 1999), and satisfaction is affected by travel motivation (Mannell & Iso-Ahola, 1987; Ross & Iso-Ahola, 1991; Fielding, Pearce, & Hughes, 1992). The hypothesized causal relationships between satisfaction and destination loyalty is referred to as tourism destination loyalty theory. In this study, as most of the tourist motivation studies have dealt with push (internal forces) and pull motivation (external forces), the hypothetical model breaks down motivation into two constructs: push travel motivation, and pull travel motivation. Subsequently, the model examines the structural, causal relationships among the push and pull tourist motivations, satisfaction, and destination loyalty. Hypothetically, motivation influences tourist satisfaction with travel experiences, which then affects destination loyalty. The theoretical underpinning of this model is discussed in the following section.

3. Theoretical overview of constructs

3.1. Motivation

Motivation has been referred to as psychological/biological needs and wants, including integral forces that arouse, direct, and integrate a person’s behavior and activity (Dann, 1981; Pearce, 1982; Uysal & Hagan, 1993). Since a paradigm of tourism is always related to human beings and to human nature, it is a complex proposition to investigate why people travel and what they want to enjoy. Many disciplines have been utilized to explain phenomena and characteristics related to motivation. In psychology and sociology, the definition of motivation is directed toward emotional and cognitive motives (Ajzen & Fishbein, 1977) or internal and external motives (Gnoth, 1997). An internal motive is associated with drives, feelings, and instincts. An external motive involves mental representations such as knowledge or beliefs. From an anthropological point of view, tourists are motivated to escape the routine of everyday life, seeking authentic experiences (MacCannell, 1977). From socio-psychological points of view, motivation is classified into seeking and avoidance dimensions (Iso-Ahola, 1982).

In tourism research, this motivation concept can be classified into two forces, which indicate that people travel because they are pushed and pulled to do so by “some forces” or factors (Dann, 1977, 1981). According to Uysal and Hagan (1993), these forces describe how individuals are pushed by motivation variables into making travel decisions and how they are pulled or attracted by destination attributes. In other words, the push motivations are related to the tourists’ desire, while pull motivations are associated with the attributes of the destination choices (Cha, McCleary, & Uysal, 1995; Crompton, 1979; Dann, 1981; Oh, Uysal, & Weaver, 1995). Push motivations are more related to internal or emotional aspects. Pull motivations, on the other hand, are connected to external, situational, or cognitive aspects.

Push motivations can be seen as the desire for escape, rest and relaxation, prestige, health and fitness, adventure and social interaction, family togetherness, and excitement (Crompton, 1979). Tourists may travel to escape routine and search for authentic experiences. Pull
motivations are those that are inspired by a destination’s attractiveness, such as beaches, recreation facilities, cultural attractions, entertainment, natural scenery, shopping, and parks. These destination attributes may stimulate and reinforce inherent push motivations (McGehee et al., 1996). Several studies have been conducted using these perspectives (Iso-Ahola, 1982; Pyo, Mihalik, & Uysal, 1989; Yuan & McDonald, 1990).

Iso-Ahola (1982) argued that individuals perceive a leisure activity as a potential satisfaction-producer for two major reasons. The activity may provide certain intrinsic rewards, such as a feeling of mastery and competence, and it may provide an escape from the routine environment. Similarly, Kippendorf (1987) found that tourists are motivated by “going away from rather than going toward something” and that tourist motivation is self-oriented.

In the above major studies, it is generally accepted that push and pull motivations have been primarily utilized in studies of tourist behavior. The discoveries and issues undoubtedly play a useful role in attempting to understand a wide variety of different needs and wants that can motivate and influence tourist behavior. Nevertheless, the results and effects of the motivation studies of tourist behavior require more than an understanding of their needs and wants.

In tourism destination management, maximizing travel satisfaction is crucial for a successful business. The evaluation of the physical products of destination (instrumental performance) as well as the psychological interpretation of a destination product (expressive attributes) are necessary for human actions (Swan & Combs, 1976; Uysal & Noe, 2003), which could be represented as travel satisfaction and destination loyalty. Since the expressive is more related to emotion, whereas instrumental performance is more cognitively oriented, expressive experiences truly motivate and contribute to satisfaction. Instrumental performance includes maintenance attributes which, if absent, could create dissatisfaction. Both concepts can be examined within the context of a tourism system representing two major components of the market place, namely, demand (tourist) and supply (tourism attractions). It has been suggested that the instrumental and expressive attributes work in combination to produce overall satisfaction (Jurowski, Cumbow, Uysal, & Noe, 1996; Uysal & Noe, 2003).

4. Satisfaction construct

Undoubtedly, satisfaction has been playing an important role in planning marketable tourism products and services. Tourist satisfaction is important to successful destination marketing because it influences the choice of destination, the consumption of products and services, and the decision to return (Kozak & Rimmington, 2000). Some researchers have also looked at comparison of standards used in service quality and satisfaction and provided different measures of service quality and satisfaction (Ekinci, Riley, & Chen, 2001; Liljander, 1994). An understanding of satisfaction must be a basic parameter used to evaluate the performance of destination products and services (Noe & Uysal, 1997; Schofield, 2000). Among the tourism literature, an assessment of tourist satisfaction has been attempted using various perspectives and theories. Most of the studies conducted to evaluate consumer satisfaction have utilized models of expectation/disconfirmation (Chon, 1989; Francken & Van Raaij, 1981; Oliver, 1980), equity (Fisk & Young, 1985; Oliver & Swan, 1989), norm (Cadotte, Woodruff, & Jenkins, 1987), and perceived overall performance (Tse & Wilton, 1988).

The following section presents the models that are commonly used for assessing consumer satisfaction. First of all, according to the expectation-disconfirmation model contributed by Oliver (1980), consumers develop expectations about a product before purchasing. Subsequently, they compare actual performance with those expectations. If the actual performance is better than their expectations, this leads to positive disconfirmation, which means that the consumer is highly satisfied and will be more willing to purchase the product again. If the actual performance is worse than expectations, this leads to negative disconfirmation, which means that the consumer is unsatisfied and will likely look for alternative products for the next purchase. Chon (1989) found that tourist satisfaction is based on the goodness of fit between his/her expectation about the destination and the perceived evaluative outcome of the experience at the destination area, which is simply the result of a comparison between his/her previous images of the destination and what he/she actually sees, feels, and achieves at the destination.

Oliver and Swan (1989) were interested in equity theory. Consumer satisfaction can be seen as a relationship between the costs of what the consumer spends and the rewards (benefits) he/she anticipates. Here, price, benefits, time, and effort are major factors in determining satisfaction (Heskett, Sasser, & Schlesinger, 1997). Thus, it can be said that if tourists receive benefits or value based on their time, effort, and money for travel, the destination is worthwhile.

Latour and Peat (1979) suggested the norm theory. Norms serve as reference points for judging the product, and dissatisfaction comes into play as a result of disconfirmation relative to these norms. Several authors replaced ‘norm’ with ‘ideal standard’ in the literature (Sirgy, 1984). Francken and van Raaij (1981) hypothesized that leisure satisfaction is determined by the consumers’ perceived disparity between the preferred...
and actual leisure experiences, as well as the perceptions of barriers (both internal and external) that prevented the consumer from achieving the desired experience. This theory uses some form of “comparison standard”. Consumers compare a product they have purchased with other products. Tourists can compare current travel destinations with other alternative destinations or places visited in the past. The difference between present and past experiences can be a norm used to evaluate tourist satisfaction. Therefore, comparing current travel destinations with other, similar places that they may have visited can assess the satisfaction of tourists.

Tse and Wilton (1988) developed a perceived performance model. According to this model, consumer dissatisfaction is only a function of the actual performance, regardless of consumers’ expectations. In other words, the actual performance and initial expectations should be considered independently, rather than comparing performance with past experiences. Therefore, in this model, tourists’ evaluation of their satisfaction with travel experiences is considered, regardless of their expectations. This model is effective when tourists do not know what they want to enjoy and experience and do not have any knowledge about their destination circumstances, and only their actual experiences are evaluated to assess tourist satisfaction.

In summary, as seen in the above discussion, the evaluation of tourist satisfaction needs to be considered in multiple dimensions. Tourists may have varying motivations for visiting particular destinations, and also may have different satisfaction levels and standards. Therefore, a model that integrates the approaches used by previous models may be most effective in assessing tourist satisfaction.

5. Destination loyalty

Repeat purchases or recommendations to other people are most usually referred to as consumer loyalty in the marketing literature. The concept and degree of loyalty is one of the critical indicators used to measure the success of marketing strategy (Flavian, Martinez, & Polo, 2001). Similarly, travel destinations can be considered as products, and tourists may revisit or recommend travel destinations to other potential tourists such as friends or relatives. However, the study of the usefulness of the concept of loyalty and its applications to tourism products or services has been limited, even though loyalty has been thought of as one of the major driving forces in the competitive market (Dimanche & Havitz, 1994).

In the last decade, tourism or leisure researchers have incorporated the concept of consumer loyalty into tourism products, destinations, or leisure/recreation activities (Backman & Crompton, 1991; Baloglu, 2001; Iwasaki & Havitz, 1998; Lee, Backman, & Backman, 1997; Mazanec, 2000; Pritchard & Howard, 1997; Selin, Howard, & Cable, 1988). Generally, loyalty has been measured in one of the following ways: (1) the behavioral approach, (2) the attitudinal approach, and (3) the composite approach (Jacoby & Chestnut, 1978).

The behavioral approach is related to consumers' brand loyalty and has been operationally characterized as sequence purchase, proportion of patronage, or probability of purchase. It has been debated that the measurement of this approach lacks a conceptual standpoint, and produces only the static outcome of a dynamic process (Dick & Basu, 1994). This loyalty measurement does not attempt to explain the factors that affect customer loyalty. Namely, tourist loyalty to the products or destinations may not be enough to explain why and how they are willing to revisit or recommend these to other potential tourists.

In the attitudinal approach, based on consumer brand preferences or intention to buy, consumer loyalty is an attempt on the part of consumers to go beyond overt behavior and express their loyalty in terms of psychological commitment or statement of preference. Tourists may have a favorable attitude toward a particular product or destination, and express their intention to purchase the product or visit the destination. Thus, loyalty measures consumers’ strength of affection toward a brand or product, as well as explains an additional portion of unexplained variance that behavioral approaches do not address (Backman & Crompton, 1991).

Lastly, the composite or combination approach is an integration of the behavioral and attitudinal approaches (Backman & Crompton, 1991). It has been argued that customers who purchase and have loyalty to particular brands must have a positive attitude toward those brands. However, this approach has limitations in that not all the weighting or quantified scores may apply to both the behavioral and attitudinal factors, and they may have differing measurements. Even some researchers have discounted only the behavioral or attitudinal approach, and have suggested integrating the two (Backman & Crompton, 1991; Iwaskaki & Havitz, 1998). Thus, the reviewed literature suggests that a full understanding of loyalty need to consider both motivation and satisfaction constructs simultaneously.

6. Study site and sample

The data for this study were collected by a self-administered questionnaire method in Northern Cyprus, located on the Mediterranean Sea. Northern Cyprus offers archeological and historical sites with natural beauty and warm sandy beaches. The pre-tested
questionnaire was initially developed in two languages: English and Turkish. A total of five hundred questionnaires were distributed to the tourists staying in the most well known hotels in Northern Cyprus.

7. Questionnaire design and research variables

In order to measure tourist motivation, this study utilizes pull and push motivation variables. The push motivation construct that is related to internal motivations consists of 24 items, while the pull motivation construct that is associated with external forces includes 28 items. Both of the motivation variables were developed on the basis of a review of the related literature and were modified to apply to the research site and target population. A four point Likert-type scale was used as the response format for the motivation variables, with assigned values ranging from 1 being “Not at all important,” to 4 being “Very important.”

Four different questions were developed to apply consumer satisfaction theories into actual satisfaction with travel experiences in Northern Cyprus. These are: (1) how does Northern Cyprus, in general, rate compared to what you expected? (1 = much worse than I expected, and 5 = much better than I expected); (2) Was this visit worth your time and effort? (1 = definitely not worth it, and 5 definitely well worth it); (3) Overall, how satisfied were you with your holiday in Northern Cyprus? (1 = not at all satisfied, and 4 = very satisfied); and (4) how would you rate Northern Cyprus as a vacation destination compared to other similar places (islands/countries) that you may have visited? (1 = much worse, and 5 = much better).

Three indicators measured tourist destination loyalty as the ultimate dependent construct. These are two indicators related to revisitation and one indicator pertaining to recommendation to friends and relatives. The revisitation questions were as follows: (1) In the next two years, how likely is it that you will take another vacation to Northern Cyprus? (1 = Not likely at all, and 4 = Very likely); and (2) Please describe your overall feelings about your visit? (1 = this visit was very poor, and I will not come again and 3 = this visit was so good that I will come again). The recommendation question was as follows: (1) will you suggest Northern Cyprus to your friends/relatives as a vacation destination to visit? (1 = Not likely, and 3 = definitely).

8. Data analysis and results

The properties of the four research constructs (two exogenous—(1) push and (2) pull travel motivation; and two endogenous—(1) tourist satisfaction and (1) destination loyalty) in the proposed model were tested with a LISREL procedure of structural equation modeling (SEM) (Joreskog & Sorbom, 1996), and the Maximum Likelihood (ML) method of estimation and the two-stage testing process were adopted. Correlation matrices and standard deviations were used to test a hypothesized model in structural equation modeling. Finally, completely standardized solutions were utilized in reporting the results. SEM is designed to evaluate how well a proposed conceptual model that contains observed indicators and hypothetical constructs explains or fits the collected data (Bollen, 1989a, b; Hoyle, 1995; Yoon, Gursoy, & Chen, 2001). It also provides the ability to measure or specify the causal relationships among sets of unobserved (latent) variables, while describing the amount of un-explained variance (Davies, Goode, Mazanec, & Moutinho, 1999; Turner & Reisinger, 2001). Clearly, the hypothesized model in this study was designed to measure causal relationships among the unobserved constructs that were set up on the basis of prior empirical research and theory. The SEM procedure was an appropriate solution for this proposed hypothetical model.

Out of 500 questionnaires distributed, a total of 148 usable questionnaires were collected, yielding a 29.6% response rate. Missing values, outliers, and distribution of all measured variables were examined to purify the data and reduce systematic errors. Serious missing values were not found, and those missing observations were managed by a listwise procedure.

Prior to LISREL analyses, an exploratory factor analysis (EFA) was performed only for purposes of reducing the number of variables in both push and pull travel motivation constructs. The underlying factors derived from EFA were represented as correlations among sets of many interrelated variables (Hair, Anderson, Tatham, & Black, 1998). Using varimax rotation, the latent root criterion of 1.0 was used for factor inclusion, and a factor loading of 0.40 was used as the benchmark to include items in a factor. Then, the included items within a factor were calculated to create a composite factor. All of these procedures were performed using SPSS 10. Subsequently, these composite factors were treated as indicators to measure a construct. This procedure may help to decrease multicollinearity or error variance correlations among indicators in the confirmatory factor analysis of the measurement model. Such errors should be avoided as much as possible in structural equation modeling procedures (Bollen, 1989a).

The results of EFA analyses determined significantly correlated factors, including eight push travel motivations, and ten pull travel motivations (Tables 1 and 2). These factor analyses were acceptable because at least two significant loadings for any one factor were loaded, as well as all of the variables that were included in the factors. Thus, there was no chance of losing
any information in measuring travel motivation constructs.
From reviewing the mean scores of the composite indicators, it was found that ‘safety & fun (M = 3.41),’ ‘escape (M = 3.13),’ ‘knowledge & education (M = 3.07),’ and ‘achievement (M = 3.00)’ were perceived respectively as important factors in push travel motivation. ‘Cleanness & shopping (M = 3.49),’ ‘reliable weather & safety (M = 3.35),’ ‘different culture (M = 3.28),’ and ‘water activities (M = 3.07)’ were considered as important factors in pull travel motivation. Consequently, these push and pull travel motivations were employed in LISREL procedures.

9. Measurement model

First, a confirmatory factor analysis (CFA) of the measurement model specifying the posited relationships of the observed indicators to the latent constructs, with all constructs allowed to be inter-correlated freely, was tested. According to Anderson and Gerbing (1988), confirmatory measurement models should be evaluated and re-specified before measurement and structural equation models are examined simultaneously. Thus, before testing the measurement model overall, each construct in the model was analyzed separately.
Since an item having a coefficient alpha below 0.30 is unacceptable, it is recommended that it be deleted from further analysis (Joreskog, 1993). Consequently, one indicator in terms of the push travel motivation construct was removed. Then, the chi-square was not significant (Chi-square = 19.12, p < 0.12), but other fit indices indicated an acceptable fit with the data (GFI = 0.96, CFI = 0.91, NFI = 0.81). In the pull travel motivation construct, four indicators were removed and the result of Chi-square was 9.15 (p < 0.42). Other fit indices exhibited an acceptable level (GFI = 0.98, CFI = 1.00, NFI = 0.94).
A total of 12 indicators for exogenous variables and 7 indicators of endogenous variables (4 from satisfaction and 3 from destination loyalty) were used in the

Table 1
The results of EFA (push motivations)

<table>
<thead>
<tr>
<th>Push factors</th>
<th>Factor loading</th>
<th>Explained variance</th>
<th>Composite mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Exciting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being physically active</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting people of opposite sex</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finding thrills and excitement</td>
<td>0.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rediscovering myself</td>
<td>0.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 2: Knowledge/education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experiencing new/different lifestyles</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trying new food</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visiting historical places</td>
<td>0.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting new people</td>
<td>0.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being free to act how I feel</td>
<td>0.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 3: Relaxation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doing nothing at all</td>
<td>0.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting a change from a busy job</td>
<td>0.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 4: Achievement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Going places friends have not been</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talking about the trip</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rediscovering past good times</td>
<td>0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 5: Family togetherness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visiting places my family came from</td>
<td>0.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visiting friends and relatives</td>
<td>0.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being together as a family</td>
<td>0.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 6: Escape</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting away from the demands at home</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experiencing a simpler lifestyle</td>
<td>0.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 7: Safety/fun</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling safe and secure</td>
<td>0.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being entertained and having fun</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adventure of reduced air fares</td>
<td>0.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 8: Away from home and seeing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling at home away from home</td>
<td>0.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeing as much as possible</td>
<td>0.69</td>
<td></td>
<td></td>
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</tbody>
</table>

Total variance explained: 70.40

1 = Not at all important, 4 = Very important. Kaiser-Meyer-Olkin measure of sampling adequacy = 0.52. Bartlett’s test of sphericity p < 0.000.
measurement model. In testing the measurement model, it was modified so that it came to represent the theoretical causal model of interest in this study. Indicators having less than 0.30 of coefficient alpha were deleted, and this theoretical model was evaluated and revised until a theoretically meaningful as well as statistically acceptable model was achieved. In particular, one of the indicators of destination loyalty on exogenous variables was highly correlated with one indicator in the pull motivation construct. Thus, after examining the model fits of the overall measurement model that excludes the correlated indicator, one indicator was deleted because the model without this indicator produced better-fit indices. The fit of the indicators to the construct and construct reliability and validity were tested. Here, basically, reliability refers to the consistency of measurement, while validity refers to the extent to which an instrument measures what it is intended to measure (Hatcher, 1994).

As shown in Table 2, six indicators of exogenous variables for travel motivation, three indicators for tourist satisfaction, and two indicators for destination loyalty are identified. The results of the measurement model with four constructs and 11 indicators were derived from confirmatory factor analysis (CFA). This measurement model described the nature of the relationship between latent constructs and the manifest indicators that measured those latent constructs. Three types of overall model fit measures were utilized in this study: absolute fit measures (AFM), incremental fit measures (IFM), and parsimonious fit measures (PFM). An absolute fit index was used to directly evaluate how

### Table 2
The results of EFA (pull motivations)

<table>
<thead>
<tr>
<th>Pull factors</th>
<th>Factor loading</th>
<th>Explained variance</th>
<th>Composite mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Modern atmospheres &amp; activities</td>
<td>Modern cities 0.86, Exotic atmosphere 0.65, Casino and gambling 0.58, Live theaters/concerts 0.53, First class hotels 0.52</td>
<td>9.74</td>
<td>2.52</td>
</tr>
<tr>
<td>Factor 2: Wide space &amp; activities</td>
<td>Budget accommodation 0.76, Wide spaces to get away from crowds 0.68, Variety of activities to see 0.57</td>
<td>7.66</td>
<td>3.05</td>
</tr>
<tr>
<td>Factor 3: Small size &amp; reliable weather</td>
<td>Manageable size 0.73, Reliable weather 0.70, Personal safety 0.63</td>
<td>7.47</td>
<td>3.35</td>
</tr>
<tr>
<td>Factor 4: Natural scenery</td>
<td>Outstanding scenery 0.83, Mountainous areas 0.71</td>
<td>7.00</td>
<td>2.94</td>
</tr>
<tr>
<td>Factor 5: Inexpensive restaurants -0.83, Tennis 0.68</td>
<td>6.96</td>
<td>2.55</td>
<td></td>
</tr>
<tr>
<td>Factor 6: Different culture</td>
<td>Quality beach 0.82, Interesting and friendly local people 0.52, Different culture 0.41, Historic old cities 0.41</td>
<td>6.78</td>
<td>3.28</td>
</tr>
<tr>
<td>Factor 7: Cleaness &amp; shopping</td>
<td>Cleanness 0.74, Shopping 0.72, Reliance/privacy 0.48</td>
<td>6.58</td>
<td>3.49</td>
</tr>
<tr>
<td>Factor 8: Night life &amp; local cuisine</td>
<td>Night life and entertainment 0.79, Local cuisine 0.40</td>
<td>6.52</td>
<td>3.00</td>
</tr>
<tr>
<td>Factor 9: Interesting town &amp; village</td>
<td>Interesting town/village 0.80, High quality restaurants 0.69</td>
<td>6.00</td>
<td>2.84</td>
</tr>
<tr>
<td>Factor 10: Water activities</td>
<td>Seaside 0.82, Water sports 0.51</td>
<td>5.46</td>
<td>3.07</td>
</tr>
<tr>
<td>Total variance explained</td>
<td></td>
<td></td>
<td>70.10</td>
</tr>
</tbody>
</table>

1 = Not at all important, 4 = Very important. Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.52. Bartlett’s Test of Sphericity p < 0.000.
The priori theoretical model fits the sample data, and an incremental fit index assessed the proportionate fit by comparing a target model with a more restricted, nested baseline model (Hu & Bentler, 1995). A parsimonious fit measure was used to diagnose whether model fit has been achieved by over-fitting the data with too many coefficients. In this study, all three types of goodness of fit indices indicated that the overall measurement model was acceptable in that the proposed model fit the collected data with a sample size of 148. 

\[
\chi^2 (36) = 43.87, \quad p = 0.17, \quad \text{goodness-of-fit index (GFI)} = 0.95, \quad \text{root mean square residual (RMSR)} = 0.03, \quad \text{root mean square error of approximation (RMSEA)} = 0.03, \quad \text{adjusted goodness-of-fit (AGFI)} = 0.91, \quad \text{nonnormed fit index (NNFI)} = 0.96, \quad \text{parsimonious normed fit index (PNFI)} = 0.59, \quad \text{comparative fit index (CFI)} = 0.97, \quad \text{incremental fit index (IFI)} = 0.979, \quad \text{and relative fit index (RFI)} = 0.85 \quad \text{(Table 4).}
\]

After assessing the overall model, the psychometric properties of each latent construct were evaluated separately through examining the completely standardized loading, error variance, the construct reliability, and the variance extracted. As seen in Table 3, the t-value associated with each of the standardized loadings exceeded the critical level (2.58, \( p < 0.05 \)). The construct reliability of all five constructs was close, and exceeded the recommended level of 0.70 (0.69, 0.88, 0.70, and 0.87). Thus, it can be said that the psychometric properties of each respective latent construct, especially for the purpose of this research, are acceptable.

### 10. Structural equation model

Having assessed the measurement model, an initial theoretical model was examined with two gamma paths and one beta path. Since the chi-square is heavily influenced by the sample size (Bollen & Long, 1993), other goodness-of-fit indices are suggested to help the model evaluation (Bentler, 1990; Joreskog & Sorbom, 1996). The review of the initial theoretical model indicated that the chi-square value (60.82 with 38 of DF) was not significant, but other fit indices indicated a quite acceptable level (GFI = 0.93, RMSR = 0.05, ARTICLE IN PRESS

### Table 3
Overall CFA for the modified measurement model (N = 148)

<table>
<thead>
<tr>
<th>Construct &amp; indicators</th>
<th>Completely standardized loading (t-value)</th>
<th>Construct &amp; indicator reliability</th>
<th>Variance extracted &amp; error variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Push travel motivation (EX)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relaxation (F3)</td>
<td>0.43 (4.67)</td>
<td>0.69</td>
<td>0.44</td>
</tr>
<tr>
<td>Family togetherness (F5)</td>
<td>0.59 (6.37)</td>
<td>0.34</td>
<td>0.50</td>
</tr>
<tr>
<td>Safety &amp; fun (F7)</td>
<td>0.58 (6.36)</td>
<td>0.34</td>
<td>0.25</td>
</tr>
<tr>
<td>Pull travel motivation (EX)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small size &amp; reliable weather (F3)</td>
<td>0.87 (10.48)</td>
<td>0.88</td>
<td>0.73</td>
</tr>
<tr>
<td>Cleaness &amp; shopping (F7)</td>
<td>0.38 (4.40)</td>
<td>0.14</td>
<td>0.19</td>
</tr>
<tr>
<td>Night life &amp; local cuisine (F8)</td>
<td>0.73 (8.81)</td>
<td>0.54</td>
<td>0.28</td>
</tr>
<tr>
<td>Tourists’ satisfaction (ED)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expectation-satisfaction</td>
<td>0.73 (9.05)</td>
<td>0.70</td>
<td>0.44</td>
</tr>
<tr>
<td>Worth visiting</td>
<td>0.71 (8.77)</td>
<td>0.50</td>
<td>0.68</td>
</tr>
<tr>
<td>Comparison with other places</td>
<td>0.65 (7.97)</td>
<td>0.43</td>
<td>0.69</td>
</tr>
<tr>
<td>Destination loyalty (ED)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommendations to friends/relatives</td>
<td>0.79 (9.71)</td>
<td>0.79</td>
<td>0.78</td>
</tr>
<tr>
<td>Overall feeling to revisit</td>
<td>0.70 (8.63)</td>
<td>0.50</td>
<td>0.16</td>
</tr>
</tbody>
</table>

EX = Exogenous variable, ED = endogenous variable.

### Table 4
Goodness-of-fit indices for the modified measurement model (N = 148)

<table>
<thead>
<tr>
<th>Absolute fit measures</th>
<th>Incremental fit measures</th>
<th>Parsimonious fit measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \chi^2 )</td>
<td>GFI</td>
<td>RMSR</td>
</tr>
<tr>
<td>(36) 43.87</td>
<td>0.95</td>
<td>0.03</td>
</tr>
<tr>
<td>( p = 0.17 )</td>
<td>55df.</td>
<td></td>
</tr>
</tbody>
</table>

\( \chi^2 \) = Chi-square; GFI = goodness-of-fit index; RMSR = root mean square residual; RMSEA = root mean square error of approximation; AGFI = adjusted goodness-of-fit; NNFI = nonnormed fit index; PNFI = parsimonious normed fit index; CFI = comparative fit index; IFI = incremental fit index; RFI = relative fit index.
AGFI = 0.88, NNFI = 0.90, PNFI = 0.60, CFI = 0.93, and IFI = 0.94). Thus, the theoretical model might be under-identified so that it could be improved. By examining the modification indices, a direct gamma path from push travel motivation to destination loyalty was identified, although this relationship was not expected in this study. According to this suggested modification, a new path was added to see whether or not the revised model fits the observed data.

As presented in Table 5, the revised model that estimated with three gamma paths and one beta path from four latent constructs, showed a non-significance result of the chi-square test ($\chi^2 (37) = 43.85$, $p = 0.20$). The results of goodness of fit indices exhibited a similar pattern to those for the initial theoretical model, as well as indicated better fits for all measures (GFI = 0.95, RMSR = 0.03, AGFI = 0.91, NNFI = 0.96, PNFI = 0.61, CFI = 0.97, and IFI = 0.97). Consequently, the review of the squared multiple correlations of the revised structural model explained 12% of the variance in tourist satisfaction, as well as showing a variance of 24% in destination loyalty.

Having assessed the revised model, sequential chi-square difference tests (SCDTs) were performed as post hoc tests to provide successive fit information (Anderson & Gerbing, 1988). The results of three chi-square difference tests are shown in Table 6. Two chi-square tests performed to show a difference between the measurement and theoretical models, as well as the theoretical and the revised model, are significant at the 0.05 level. The chi-square test of a difference between the revised model and the measurement model revealed a non-significant result ($\chi^2 (1) = 0.02$, $p > 0.05$), suggesting that the revised model is not different from the measurement model. As a result, the revised model was accepted as a parsimonious model (Hull, Lehn, & Tedlie, 1991), as well as the best model to use in testing the proposed hypothetical model in this study.

11. Findings of the construct relationships

The hypothesized structural causal model was tested by structural equation modeling (SEM), which included a test of the overall model as well as individual tests of the relationships among the latent constructs. As presented in Fig. 2, the results offered support for the relationship between satisfaction and destination loyalty at a significant level of 0.05. Consequently, tourist destination loyalty is positively affected by tourist satisfaction with their experiences, as indicated by the completely standardized coefficient of 0.79 and a $t$-value of 6.48. Interestingly, satisfaction was found to be negatively influenced by the pull travel motivation (completely standardized coefficient = –0.54 and $t$-value = –2.17), which was conversely proposed in order to test. However, another relationship, that tourist satisfaction is affected by the push travel motivation, was not supported by the data, indicated by the completely standardized coefficient score of 0.41 and a $t$-value of 1.54. Finally, the new proposed path relationship from the push travel motivation to destination loyalty shows a significant result, indicated by the completely standardized coefficient of 0.41 as well as a $t$-value of 0.425. Thus, travel push motivation has a positively direct relationship with destination loyalty.

12. Discussion and implications

The empirical results of this study provide tenable evidence that the proposed structural equation model designed to consider push and pull motivations,
satisfaction, and destination loyalty simultaneously is acceptable. Even though in the literature, the individual constructs and concepts have received considerable attention from tourism scholars and practitioners, the conceptual model and empirical studies pertaining to causal relationships among those constructs have not been examined. It is believed that this study has a substantial capability for generating more precise applications related to destination behavior, especially concerning motivation, satisfaction, and destination loyalty.

The major findings of this study have significant managerial implications for Northern Cyprus. First of all, the exploratory factor analyses showed that tourists pursue eight different push motivations and have ten different pull motivations. Thus, it is suggested that destination marketers consider the practical implications of these motivation variables, because they can be fundamental factors in increasing satisfaction with destination services and products as well as enhancing destination loyalty.

Second, the confirmatory factor analyses revealed that even if each construct retains its original characteristics, the push and pull constructs are largely reduced in the number of reliable and appropriate items that can be used to measure these constructs. Additionally, it is hard to determine solid measurement indicators for its constructs. Even though these findings result from a single, empirical investigation, tourism scholars and practitioners should be aware that there is a need to have further studies to develop more effective measurement scales to assess such constructs. This suggests that since tourists may be differently motivated and react differently, consistent measurement scales and constructs should be explored and refined. This study indicates that destination managers should give attention to tourists’ relaxation, family togetherness, and safety & fun in order to appeal to tourists’ internal motives to travel.

The unique measurements and discriminant validity of satisfaction and destination loyalty have been confirmed. Thus, it can be said that the two concepts are distinct and independent from each other. It also can be suggested that an integrated and/or simultaneous approach for measuring tourist satisfaction is desirable with the items of “expectation-disconfirmation”, “worthwhile to visit”, and “norm comparison”. Finally, this study supports the idea that the general theory of consumer loyalty can apply to tourist loyalty to tourism destinations. Thus, destination managers can estimate tourists’ post purchase-behavior and consider this information in their decision-making.

The findings of testing of the proposed model have implications for the success of marketing destinations. In order to improve satisfaction with travel experiences, destination managers must consider the pull motivations, which are related to external sources, including destination attributes. The appropriate destination attractions and activities should be allocated and delivered to tourists in order to enhance destination competitiveness. Also, destination managers should consider the role of push motivations and their positive relationship to destination loyalty. This indicates that tourists’ internal sources of motivation affect their destination loyalty, which includes revisiting destinations and recommending them to others. Thus, destination managers should focus more on tourists’ emotional feelings to increase destination loyalty. Finally, it can be intuitively assumed that if tourists are satisfied with their travel experiences, they are willing to revisit destinations and recommend them to other people. This study provides empirical evidence supporting this statement, in that there is a highly significant relationship between the two constructs. In other words, satisfaction is found to directly affect destination loyalty in a positive direction. Also, satisfaction is determined to be a mediating construct between travel motivation and destination loyalty. Consequently, destination managers...
should establish a higher tourist satisfaction level to create positive post-purchase tourist behavior, in order to improve and sustain destination competitiveness.

13. Concluding comments

It can be concluded that tourism destination loyalty has causal relationships with motivation and satisfaction. Additionally, the push motivation separately from the pull motivation determines the destination loyalty. In the literature, although it has been acknowledged that tourist destination loyalty is important, little has been done to investigate its measurement, or its structural relationships with motivation and satisfaction. This study revealed and confirmed the existence of the critical relationship between push/pull motivations and destination loyalty. This finding suggests that it would be worthwhile for destination managers to make greater investments in their tourism destination resources, in order to continue to enhance experiences.

Finally, there are several issues associated with this study’s limitations that should be discussed to provide a guide for future research. The study’s model was tested in a specific setting—Northern Cyprus, in the Mediterranean region. The generalization of the model is suggested, with the replication of this study in other settings that have different destination attributes. This can provide opportunities to evaluate the extent and direction of motivation as visitors relate degrees of satisfaction to destination loyalty. An application of the model to other settings will help produce reliable indicators and further validate the constructs, thus, producing a more robust and stable model.

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References


