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The role of place image dimensions in residents' support for tourism development

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Abstract: Understanding residents' perceptions of tourism impacts and their level of support for its development is considered vital for the sustainable development of tourism. Despite the plethora of factors examined as determinants of residents' attitudes toward tourism, the role of residents' place image has been under-examined. This study developed a model examining the relationships between residents' place image dimensions, perceived tourism impacts and support for development. Findings suggest that two (physical appearance, social environment) out of the four place image dimensions identified in this study exercise a significant effect on residents' attitudes toward tourism. The theoretical and practical implications to the formation of planning and development programs for tourism are discussed.

Keywords: Support for tourism development, Residents' place image, Perceived tourism impacts, Residents' attitudes toward tourism, Place image dimensions

1. Introduction

The constant development of tourism at new or established destinations generates numerous positive and negative economic, socio-cultural and environmental impacts affecting the daily life of an increasing number of host communities. Considering the potential changes inflicted by tourism in the host community, researchers advocate that managers, planners and local authorities should actively solicit and carefully assess the views of local residents as part of tourism's planning process (Nunkoo and Ramkissoon, 2012). This process is deemed vital for the sustainable development of tourism as well as for the success of the industry in the long run (Tovar and Lockwood, 2008), especially as tourism projects are likely to hinder or stop if residents do not support their development and express a negative stance toward tourists and tourism (Gursoy et al., 2010). In this context, a plethora of studies highlighted the importance of perceived

tourism impacts and explored the various factors that affect residents' perceptions of the impacts of tourism and their support for tourism development (e.g., Lee, 2013; Nunkoo and Ramkissoon, 2012; Stylidis and Terzidou, 2014).

Despite the abundance of factors examined in the past, the effect of residents' place image, namely, the image that residents hold of the place they reside, on their attitude and behavior toward tourism has been under-examined. Only a limited amount of research (e.g., Ramkissoon and Nunkoo, 2011; Schroeder, 1996) has explored how residents' place image affects their support for tourism development and even fewer (Ramkissoon and Nunkoo, 2011) have delineated the role of place image dimensions in this process. These studies confirmed the influential role of place image on residents' attitudes towards tourism. Similarly, studies in environmental psychology assert that individuals' behavior and experiences are influenced by the way people perceive their environment/place (Devine-Wright and Howes, 2010).

The lack of research on the link between residents' place image and support for tourism can be attributed to the general dearth of attention paid to the perspective of residents in the context of place image. In fact, most place image research in general and tourism image research in particular has focused on the demand side, aiming to understand and satisfy investors' and tourists' images of the destination (Chen and Phou, 2013; Stepchenkova and Li, 2013). Only a few studies explored the image local communities have of their area (see Alhemoud and Armstrong, 1996; Henkel et al., 2006; Schroeder, 1996). Harrill (2004, p.264) stressed the need for additional research 'that focuses not only on the demand side of the industry- how to attract tourists to the city or region- but the supply side as well'. Thus, the current understating of residents' place image and its impact on their attitudes towards tourism is limited.

The present study seeks to address the aforementioned gap, namely to investigate the effect of residents' place image on their attitude towards tourism development. Specifically, the proposed model examines the relationships between residents' place image dimensions, the perceived impacts of tourism and residents' support for tourism development. While often ignored in tourism development literature, residents' image is

of contribution to understanding the manner in which residents' support (or objection) for tourism is constructed, specifically as it highlights the relations between tourism and residents' everyday experience of their place, with the latter being highly impacted by tourism development. The current investigation also offers practical implications to community-effective and sustainable tourism planning and to the design of internal marketing campaigns aiming to enhance residents' involvement and support.

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2. Residents' Support for Tourism Development

Social Exchange Theory (SET) has been the dominant theoretical framework employed by numerous studies to explain residents' attitudes toward tourism development (e.g., Nunkoo and Ramkissoon, 2012; Prayag et al., 2013). In the context of tourism, Ap (1992, p.669) states that residents' attitude to tourism is built upon their evaluation of tourism as a process of social exchange, that is, residents evaluate tourism 'in terms of expected benefits or costs obtained in return for the services they supply'. Residents will engage in an exchange as long as they make 'profit', i.e. expect to gain more benefits than costs from tourism. As such, it is assumed that the more positive the potential impacts are perceived to be, the more residents are likely to be supportive of tourism development (Gursoy, et al., 2010; Stylidis and Terzidou, 2014).

Drawing on SET, studies examined the relationship between the perceived impacts of tourism and residents' support for tourism development. For example, Jurowski et al. (1997), Yoon et al. (2001) and Stylidis and Terzidou (2014) classified impacts as economic, socio-cultural, and environmental, and found that all of them exercise an influence on residents' support for tourism development. In terms of the economic impacts, tourism is considered to affect employment, revenue for the community, development of infrastructure, and the prices of goods/services and land/housing (e.g., Dyer et al., 2007; Terzidou et al., 2008; Vargas-Sanchez et al., 2009). The impacts of tourism on the socio-cultural context involve cultural exchange, increased availability of shopping and recreation facilities, preservation/destruction of local culture and services, and an increase in social problems (e.g., Byrd et al., 2009; McDowall and Choi, 2010). Finally, tourism is usually considered responsible for environmental pollution, crowding, noise, and traffic congestion (e.g., Latkova and Vogt, 2012; Vargas-Sanchez et al., 2009). In sum, studies (e.g., McGehee and Andereck, 2004; Nunkoo and Ramkissoon, 2012; Vargas-Sanchez et al., 2009) have found that the more favorably/positively the impacts of tourism are perceived by the host population, the higher the support for tourism development and reversely, the less favorable the impacts the less supportive for tourism development the resident will be. Based on the social exchange theory and the preceding discussion, the current study hypothesized that:

H1: A positive relationship exists between the perceived impacts of tourism and residents' support for tourism development

Apart from the link between the perceived tourism impacts and residents' support for tourism, an investigation into the factors that shape this relationship is considered an important area of inquiry (McGehee and Andereck, 2004; Nunkoo and Ramkisson, 2010). A plethora of factors, in particular, have been identified, ranging from residents' economic dependency to destination's stage of development (e.g., Lee, 2013; Vargas-Sanchez et al., 2009). Nevertheless, a factor that has been overlooked so far but may enhance our understanding of residents' support is that of residents' place image.

2.1 The role of residents' place image

The notion of place image, namely the sum of beliefs, ideas and impressions people hold of a place (Kotler et al., 1993), has been well examined in several disciplines including geography, marketing and environmental psychology. Studies in environmental psychology have long acknowledged the significance of place image in understanding residents' attitudes and behaviors toward planned development projects (e.g., Carrus et al., 2005; Devine-Wright and Howes, 2010). For example, Green (1999) supports that place image is frequently used as a criterion in assessing perceptual impacts of development on communities during the city planning decision making process. Similarly, Habe (1989) note the importance planners assign to community image compatibility for assessing residents' perceptions of prospective development impacts. Thus, understanding residents' place image is crucial for developing plans that will preserve, maintain and revitalize a place.

In the tourism context, studies paid only limited attention to the issue of residents' place image, in their attempts to clarify the formation of perceived tourism impacts and support for its development. Few studies have supported the idea that residents hold images of their own place/region and that those with more favorable images tend to spread positive word-of-mouth (Hsu et al., 2004; Schroeder, 1996), indirectly demonstrating their support for tourism. Other researchers further argued that residents' place image affects their behavior and attitude, including perception of tourism impacts and support for its development (Ramkissoon and Nunkoo, 2011; Schroeder, 1996). Schroeder (1996), in particular, reported that residents with more favorable images of North Dakota displayed greater disposition towards state funding for tourism development and promotion (support for tourism) and were more likely to recommend the destination to others. Schroeder's (1996) study though

neglected the mediating role of perceived tourism impacts between residents' place image and support for tourism.

This omission was later addressed by Ramkissoon and Nunkoo (2011), who examined the link between various residents' place image dimensions (i.e., government services, social, transport, and shopping attributes), their attitudes toward overall tourism impacts and support for its development. Their findings suggest, first that residents with more positive images of a place are more likely to perceive the impacts of tourism favorably; and second that image dimensions exercise different effects on residents' perceptions of tourism. Social attributes, for instance, exercised the strongest positive effect whereas transport attributes the weakest positive effect on overall tourism impacts. Despite its contribution, the Ramkissoon and Nunkoo (2011) study underemphasized the role of a place as a recreational setting, namely they ignored attributes such as nightlife and restaurants, which are considered in the current study. Additionally, these researchers investigated the perceived tourism impacts as an observed variable (single item: overall tourism impacts), neglecting the different domains of impacts revealed in the tourism literature. The contribution of the model proposed in this study lies a) in the examination of the perceived tourism impacts as a latent variable with three indicators, namely economic, socio-cultural and environmental impacts; b) the use of place image dimensions that cover various facets of a place, including its recreational side for residents.

Overall, the empirical findings in the literature support the importance of assessing the link between residents' place image and perceived tourism impacts. Subsequently, one more hypothesis was formulated:

H2: A positive relationship exists between residents' place image dimensions and the perceived impacts of tourism

This hypothesis suggests that the more favorable the residents' place image dimensions, the more positively residents will perceive the impacts of tourism and the more supportive for tourism development they will be.

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3. Research Methodology

3.1 Study location

The city of Kavala, in Greece, was chosen as the study setting, due to a lack of research on urban destinations which are in the initial stages of tourism development (Vargas-Sanchez et al., 2009). Kavala (population 55,325) has a history that dates back to the 7th century B.C. Nowadays it is considered the starting point of Christianity in Europe, where the first Christian European was ever baptized (Lydia), and thus a focal point for religious tourists. Moreover, the ruins of the ancient city and theatre of Philippi constitute important national and international heritage monuments. Kavala offers a variety of tourism activities; scenic beaches and resorts, cultural monuments and festivals, world heritage sites (Philippi and Imaret), thermal and mud baths, religious tourism sites, and adventure/nature tourism.

3.2 Sampling strategy and data collection

Given that structural equation modeling (SEM) is the data analysis method employed in this study, a sample of at least 200 cases was required (Hair et al., 2010). The sample was selected with the use of multi-stage cluster sampling. In the first stage of sampling design a list containing all the street names was prepared (retrieved from the Greek Post Office), and ten streets were randomly selected for each one of the five districts (McGeehee and Andereck, 2004). To select houses or apartments within the 50 selected streets, the researcher, beginning in randomly selected locations, approached every *3nd* house to participate in the study (see Woosnam and Norman, 2010), until the designated number of ten questionnaires were collected from each particular street. This sampling technique ensured the random selection of residents from different districts and thus provided a balanced composition of respondents (Nunkoo and Gursoy, 2012).

Data were collected during October-November 2009 with structured self-administered questionnaires that were hand-delivered by the researcher to 500 households in the addresses randomly selected. The interviewer waited on-site for the respondent to complete the questionnaire. The sample included adults (over the age of 18), who are permanent resident of Kavala (residing for more than one year). From each household approached, only one person was allowed to participate in the study, as people from the same household often hold similar views, a fact that may bias the results (Andriotis, 2005). The response rate stood on 77% and 481 usable questionnaires were retained for data analysis.

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3.3 Research instrument

The questionnaire contained three sections. The first section measured *Residents' place image* by asking participants to indicate whether Kavala possesses certain attributes. To form a comprehensive residents' place image measure, attention was given to attributes drawn from destination image and city image literature (i.e., friendly residents, shopping), excluding those which may not be suitable to the context of Kavala (e.g., ski facilities) (Baloglu and McCleary, 1999; Beerli and Martin, 2004; Echtner and Ritchie, 1993; Green, 1999; Merrilees et al., 2009). In the next stage, to enhance the validity of the items used in the questionnaire, a panel of ten Kavala residents, randomly selected, was utilized (Echtner and Ritchie, 1993; Lin et al., 2007). Kavala residents were asked to assess the meaningfulness of the initially selected attributes, as well as suggesting any key attributes missing from the list. This process yielded a final list of 14 attributes for the measurement of the place image construct (see Table 1). A Likert-type scale ranging from (1) 'strongly disagree' to (5) 'strongly agree' was used, as it has been consistently documented as meaningful in measuring destination image (e.g., Lin et al., 2007).

The second section of the questionnaire aimed to capture the latent construct *Perceived tourism impacts* through three items (economic, socio-cultural, environmental). Perceived economic impacts was measured by the average score of five items (standard of living, employment opportunities, infrastructure development, revenue in the economy, price of land/housing) based on studies such as Lee et al. (2007), McDowall and Choi (2010), Nunkoo and Ramkissoon (2010). Perceived socio-cultural impacts was estimated by the mean score of six items (availability of recreational facilities, quality of local services, cultural activities, cultural exchange, community spirit, crime) based on Dyer et al. (2007), Vargas-Sanchez et al. (2009), and Terzidou et al. (2008). Perceived environmental impacts was evaluated by the mean score of four items (pollution, traffic, noise, crowding) drawn from studies such as Dyer et al. (2007) and Vargas-Sanchez et al. (2009). The scale ranged from (1) 'negative' to (5) 'positive' (Jurowski et al., 1997; Tovar and Lockwood, 2008; Yoon et al., 2001).

The analysis draws on three composite variables (economic, socio-cultural, environmental) to estimate the latent construct *Perceived tourism impacts*, rather than the original 15 items

presented above, as the focus of this study is on the relationships between residents' place image, perceived tourism impacts and support for tourism development and not on the role of every tourism impact per se. Additionally, the parceling approach is commonly applied to mitigate potential multicolinearity among indicators and to lessen model complexity, which can undermine the model's goodness of fit and predictive validity (Hair et al., 2010; Chen & Phou, 2013). Following, therefore, previous studies (see Chi and Qu, 2008; Lin et al., 2007), the arithmetic means of the three multi-item tourism impact subscales (economic, socio-cultural, environmental) were computed and used as indicators of the latent construct *Perceived tourism impacts*. The internal consistency of the three composite variables was established using the Cronbach's alpha value, which was reported to be quite robust: 0.83 for the socio-cultural, 0.84 for the environmental and 0.86 for the economic impacts, well above the recommended cut-off level of 0.7 (Hair et al., 2010). The parceling approach, however, is not without its drawbacks, as it is further discussed in the limitations section. Finally, *Support for tourism development* was evaluated by three statements drawn from studies conducted by Perdue et al. (1990), McGehee and Andereck (2004) and Nepal (2008). The responses were measured on a Likert scale ranging from (1) 'strongly disagree' to (5) 'strongly agree'.

The questionnaire was originally written in English and then translated into Greek for the residents of Kavala by a professional translator, following the principles of blind translation-back-translation method (Brislin, 1976). A group of six tourism experts who reside in Kavala (tourism academics, hotel owners and representatives of the tourism organization) confirmed the face validity and suitability of the questions. Prior to the main data collection, a pilot test was conducted with 65 residents of Kavala who were randomly selected in order to ensure the suitability of the research instrument. A few wording problems were corrected without any other substantial changes.

3.4 Data analysis

The data analysis was conducted in two stages. In the first stage, an exploratory factor analysis (EFA) was used to derive the dimensions underpinning place image (Chen and Tsai, 2007; Chi and Qu, 2008). Conducting an EFA on the 14 place image items was considered necessary for two main reasons: a) the residents' place image scale has not been well established in the relevant academic literature. Limited knowledge is thus available with regards to its underlying dimensions; and b) the measurement of place image is diverse and

complex as it is greatly related to the nature of the place under investigation (Beerli and Martin, 2004; Chen et al., 2013). However, conducting both exploratory and confirmatory factor analysis on the same data set is considered problematic (Kline, 2011). Following therefore DeVellis (2003) and Hair et al. (2010) the usable responses (n = 481) were randomly divided (via SPSS 20) into two subsamples: one subsample for the EFA (subsample 1, n = 160) and one subsample for the CFA (subsample 2, n = 321) (see Dyer et al., 2007; Wang and Hsu, 2010), with the EFA being conducted on the smaller sample as it is less rigorous than CFA. In the second stage, the relationships between a) place image dimensions as revealed on the EFA; b) the perceived impacts of tourism; and c) support for tourism development were empirically tested using SEM.

Multivariate normality was assessed by inspecting Mardia's coefficient (39.085, CR: 12.394), which provided an indication of non-normality in the data. A further investigation revealed that the elimination of four cases with observations furthest from the centroid (Mahalanobis distance) would reduce the Mardia's coefficient to 32.495 (CR: 10.240). Such departures from normality, however, are common in social sciences (Chou & Bentler, 1995; de Vaus, 2002), and when the sample size is large (i.e., over 200) are not considered a serious burden (Hair et al., 2010). In terms of the impact of non-normality on SEM's estimation technique, researchers who tested each technique's robustness with averagely non-normal data, support the use of the Maximum Likelihood (ML) method, as it is quite robust against the violation of normality (e.g., Chou & Bentler, 1995; Raykov & Marcoulides, 2006). Accordingly, the ML method was used in this study.

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4. Study Findings

4.1 Profile of the respondents

In the sample (n = 481), the distribution of male (47%, n = 225) and female (53%, n = 254) was almost equal. Residents aged over 65 years were the largest group (21.4%, n = 103), those aged between 25 - 34 accounted for 19% (n = 89), whereas the 18 - 24 was the smallest age group accounting for 12.1% (n = 58) of the respondents. In terms of income, 35.4% (n = 163) reported earnings between 10,000€ - 19,999€, whereas only 10.6% (n = 49) of participants stated that they had earned more than 40,000€.

4.2 Descriptive statistics

From the mean scores presented in the Appendix it can be noted that, overall residents of Kavala tend to positively appraise the economic and socio-cultural impacts of tourism (mean scores over 3), whereas they consider tourism to have a negative effect on the environment (mean score lower then 3). Generally residents are supportive of further tourism development (overall mean score of 3.92) and hold a somewhat positive image of Kavala (overall mean score over 3). In particular, residents appreciate the city's appearance and environment, whereas the entertainment opportunities and community services offered are perceived in a less positive manner.

4.3 Modeling process and model evaluation

4.3.1 EFA residents' place image

To discern the number of factors underpinning residents' place image, an EFA was conducted. The EFA commenced with the KMO measure of sample adequacy and the Bartlett's test of sphericity to examine the factorability of the data. The KMO stands on 0.77 and Bartlett's test of sphericity was significant (602.77, *p value* < .001), indicating that the correlations between items are sufficiently large (Tabachnick and Fidell, 2013). A principal component analysis with oblique rotation (promax) was applied given the likelihood of interdependence among the operational attributes. The eligibility of the factor solutions was determined based on two criteria, namely, eigenvalues greater than 1.0, and inspection of the scree plot (Tabachnick and Fidell, 2013).

The EFA revealed four factors with the total variance explained of 58.66%, suggesting a satisfactory factor solution. Three criteria were used to determine factor viability: i) only

items with factor loadings higher than 0.5 were retained (Hair et al., 2010; Tabachnick and Fidell, 2013); ii) no item which double-loaded onto multiple factors, with coefficients greater than 0.40 was retained (Woosnam and Norman, 2010); and iii) internal consistency was examined. Cronbach alpha values of the four factors identified exceeded the recommended benchmark ($\alpha > 0.60$) (Peterson, 1994) (see Table 1).

[Table 1. Here]

The factors were named after the variety of items they included: Factor 1 was labeled as 'Community Services', comprising four items (i.e., effective local services, effective local government). Factor 2 was named 'Physical Appearance' (i.e., attractive scenery, nice architecture). Factor 3 was termed 'Social Environment' and had three items (safe, friendly, clean). Factor 4 was identified as 'Entertainment Services' and it contained three items (i.e., good restaurants, nightlife).

Based on the above, the proposed model is presented in Figure 1. The model contributes to understanding how residents' perceptions of impacts and support for tourism development are formed, what the role of place image dimensions is in this process, and finally, it assists tourism developers and planners in the formation of development and marketing plans that will be in line with the destination attributes and the image that the host population holds.

[Figure 1. Here]

4.3.2 Measurement model

As suggested by Anderson and Gerbing (1988), a CFA of the measurement model was conducted next (using subsample 2) in order to test the validity (convergent, discriminant) and reliability (construct) of the measurement items. The fit indices of the CFA model were as follows: $\chi^2_{(155)} = 292.6$ ($p < 0.001$), CMIN/DF = 1.89, with values of 3 to 1 indicating a good fit (Tabachnick and Fidell, 2013), GFI = 0.92 and CFI = 0.94 are both over 0.90 (Kline, 2011), and RMSEA = 0.05, with values lower than 0.08 reflecting a well-fitting model (Hair et al. 2010). Overall, the model-of-fit measures presented lend credence to the measurement model.

Nevertheless, one item (environmental impacts) had a factor loading below the minimum criterion of .40 and accordingly was eliminated from further analysis. It seems that as Kavala is an urban destination in the early stages of tourism development, the environmental impacts of tourism are not so readily apparent (Dyer et al., 2007; Vargas-Sanchez et al., 2009). This resulted in re-specification of the measurement model (Hair et al., 2010). The revised measurement model was then re-estimated and results demonstrated a good fit to the data: $\chi^2_{(137)} = 255.2$ ($p < 0.001$), CMIN/DF = 1.86, GFI = 0.93, CFI = 0.95, and RMSEA = 0.05. With the measurement model being accepted, each construct was evaluated next.

Convergent validity is assessed by examining the magnitude and significance of the paths between a latent variable and its indicators (Hair et al., 2010). As seen on Table 2, all standardized loadings were over the proposed minimum level of 0.5 and the *t value* associated with each loading was significant at the 0.01 level (Tabachnick and Fidell, 2013). Additionally, all the *construct reliability* values were higher than the recommended cut-off level of 0.70 (Hair et al., 2010). Therefore, all indicators were significantly and strongly related to their specified constructs, verifying their posited relationships (see Figure 2).

[Table 2. Here]

Another tool used as an indicator of convergent validity is the Average Variance Extracted (AVE) reflecting 'the amount of variance that is captured by the construct in relation to the amount of variance due to measurement error' (Fornell and Larcker, 1981, p.45). In this study, all AVE scores were close to or above the recommended level of 0.5 (Fornell and Larcker, 1981). In terms of *discriminant validity*, the AVE estimates of each construct were greater than their inter-construct squared correlation estimates, indicating a satisfactory level of discriminant validity (Hair et al., 2010). Given the good fit of the measurement model, the structural model was examined next.

[Figure 2. Here]

4.3.3 Structural model and competing models

The overall fit of the structural model was: $\chi^2_{(142)} = 316.2$ ($p < .001$). The χ^2 is significant, but CMIN/DF = 2.23, GFI = 0.91, CFI = 0.93, and RMSEA = 0.06. Generally, all fit indices are

well within the accepted ranges (noted above) and it can be concluded that the fit of the hypothesized structural model is good. Given that the χ^2 value indicates that the theoretical model (M_t) could be improved, a series of competing models, which acted as alternative explanations, were examined to identify the best fitting one (see Chi and Qu, 2008; Gursoy et al., 2010). First, the constrained model (M_c) was examined, as it is the closest one to the theoretical model, considering that one or more parameters estimated in the theoretical model are commonly fixed at zero (Gursoy et al., 2010). In the constrained model, two of the proposed paths, namely the path from community services to perceived tourism impacts and the path from the entertainment services to the perceived tourism impacts were fixed at zero, on the grounds that their relationship was found to be insignificant in this study (see next section). The other competing model tested was the unconstrained model (M_u), in which, one or more parameters constrained in the theoretical model are estimated (Hair et al., 2010). In the unconstrained model, one additional path (correlation) in comparison to the theoretical model was estimated, namely from physical appearance to entertainment services. This relationship can be theoretically justified as these two components of place image were expected to correlate.

Sequential chi-square difference tests (SCDTs) were conducted post hoc to assess the competing models' fit (Anderson and Gerbing, 1988). The findings indicate that a significant difference in chi-square value exists between the theoretical and the constrained model ($\Delta\chi^2 = 7.1$, $\Delta df = 2$, $p < 0.05$), namely the theoretical model had a lower chi-square value. Similarly, the chi-square difference test between the unconstrained model and the theoretical model revealed a significant result ($\Delta\chi^2 = 33.3$, $\Delta df = 1$, $p < 0.001$). As such, the unconstrained model was selected to be used in this study as being more parsimonious than the theoretical model. However, applying model changes based solely on modification indices is not recommended by researchers, because 'doing so would be inconsistent with the theoretical basis of SEM' (Hair et al., 2010, p.712). The decision to accept the unconstrained model was therefore principally based on theoretical grounds and not only on statistical parsimony. Figure 3 presents the accepted unconstrained model.

[Figure 3. Here]

The fit indices of the unconstrained model were: $\chi^2_{(141)} = 282.9$ ($p < .001$). The χ^2 is

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significant, but CMIN/DF = 2.00, GFI = 0.92, CFI = 0.94, and RMSEA = 0.056. Overall, all fit indices of the unconstrained model are well within the accepted ranges and have been improved in comparison to the theoretical model. Additionally, all path estimates were in the expected direction (Table 3). The critical values together with the estimated magnitude of the paths were used to support or reject the hypotheses of the study. As seen on Table 3, both hypotheses have been supported. Namely, place image dimensions (i.e., the physical appearance and social environment) exercise a significant positive effect on the perceived impacts of tourism (H2), which in turn also positively affect residents' support for tourism development (H1).

[Table 3. Here]

5. Discussion and Conclusion

This study aimed to enhance current understanding of residents' responses to tourism, by highlighting the role of residents' place image dimensions in formulating their perceptions of tourism impacts and support for its development. The supported hypotheses provided evidence for the relationship between two of the dimensions of residents' place image with residents' support for tourism development. The study therefore responds to the call of Harrill (2004) and Vargas-Sanchez et al. (2009) for identifying new intrinsic variables that condition the attitude of the individual toward tourism.

The findings revealed that perception of tourism impacts exercised a significant positive effect on residents' support for tourism development (H1). This is in line with SET and previous studies, which reported that more favorable perceptions of impacts lead to higher levels of support (e.g., Gursoy et al., 2010; McGehee and Andereck, 2004). The positive effect of perceived tourism impacts on support reflects the general perception and use of tourism as a tool for economic development and empowerment of the local community (Byrd et al., 2009; McDowall and Choi, 2010). Findings also revealed that the dimensions of residents' place image were determinants of the perceived impacts of tourism (H2). The physical appearance and social environment, in particular, exercised a significant positive effect on perceived tourism impacts, whereas the relationship between community services and entertainment services with the perceived impacts was in the expected direction but not significant. Therefore, apart from the direct link between place image and support noted by Schroeder (1996), this relationship is mediated also through the perceived impacts of tourism. In sum, residents who hold a positive place image perceive the potential impacts of tourism more positively than those who hold a less positive or even negative image of Kavala.

Similar to Ramkissoon and Nunkoo (2011), the social environment dimension exercised the strongest positive effect (in magnitude) on perceived tourism impacts. However, Ramkissoon and Nunkoo's (2011) study ignored the physical appearance of a place, which was reported here as the second most influential dimension affecting the formation of residents' perceptions toward tourism. Both social environment and physical appearance were the most favorably perceived place image dimensions (Appendix), considered as the strengths of Kavala's image. Physical appearance has been reported in the past to be valued by both residents (e.g., Schroeder, 1996) and tourists (e.g., Chi and Qu, 2008; Lin et al., 2007), as an

aesthetically appealing environment contributes to a more pleasant life (Florida et al., 2011). Social environment is also considered a significant ingredient of place image (e.g., Chen and Tsai, 2007; Chi and Qu, 2008). In the case of Kavala, this can be attributed to the collectivist culture of the city, with studies suggesting that residents in small communities tend to display stronger levels of solidarity and homogeneity than their counterparts in metropolitan cities (Theodori and Luloff, 2000).

Community and entertainment services, on the other hand, were not reported to exercise a significant effect on perceived tourism impacts. This finding contradicts Ramkissoon and Nunkoo (2011) who reported a significant relationship between community services and residents' perception of tourism impacts. Kavala residents do not seem to appreciate the community services provided, potentially due to the higher taxation imposed by the local government to curb the economic recession in Greece, which has raised residents' demand for better community services in return. Entertainment opportunities offered in the city, such as nightlife and shopping facilities, also under-scored. Therefore, place attributes and dimensions that are perceived more favorably lead to more positive perceptions of tourism impacts and subsequently to greater support for tourism development. These results suggest that the way people interpret and respond to change (i.e., tourism impacts) is shaped by the way they perceive the place they live in (see also Devine-Wright and Howes, 2010).

This is in line with studies conducted in environmental psychology, which reported that residents who hold more positive place images use different criteria for evaluating development in their area (Mesch and Manor, 1998). Mesch and Manor (1998), for instance, reported that more positive evaluations of the physical and social environment are related to higher attachment with the place. This in turn affects attitudes and behavior, such as environmental responsibility and support for protected park areas (see also Carrus et al., 2005; Stedman, 2002). Additionally, residents' place image can significantly affect the acceptance or rejection of proposed development projects, as two studies have found (Bonaiuto et al., 2002; Carrus et al., 2005). In the tourism literature too, residents who hold more favorable images exhibit higher tolerance levels for development impacts (Kyle et al., 2004).

As Devine-Wright and Howes (2010) support, conflicts may emerge when places are impacted by developments that do not 'fit' with the place's image, as in the case of 'natural' areas impacted by plans interpreted by locals as 'industrial'. In the current study, residents perceive Kavala as an attractive place with strong social ties, which has potentials for further developing as a tourist destination and hold a pro-tourism attitude. Therefore, findings potentially suggest that the development of tourism in Kavala is compatible ('fit') with the image of the city. When tourism is compatible with the place's image, it highlights its distinctiveness, contributes to residents' civic pride, attachment and identity and leads to higher levels of support for development (Carrus et al., 2005; Devine-Wright and Howes, 2010). Therefore, apart from the effect of tourism on the social, economic and spatial characteristics of many places, these same characteristics of places also affect the opportunities and patterns of tourism development (Dredge, 2001), with an understanding of this relationship producing knowledge crucial for formulating policies.

Overall, the current study contributes to tourism theory by providing reference to an aspect ignored in the current literature, namely residents' place image dimensions, which were found to condition the attitude of residents toward tourism. This knowledge is considered crucial for understanding why there are varying levels of support within the same community as well as for the theoretical advancement of the topic (Gursoy et al., 2010; Ko and Stewart, 2002). The study also provides further evidence to support residents' role in place image research and subsequently advances their position in the planning process of tourism, being in line with the community responsive approach (Murphy, 1985).

5.1 Managerial implications

The current study offers several insights for the practice of tourism development and planning. First, the study contributes to local planning by assisting planners to focus on urban developments that will aim to conserve, enhance and be compatible (fit) with the place's image, as well as contribute to the hosts' quality of life. Urban planners suggest that local governments must consider residents' benefits from potential policies, as policies aimed to induce tourism businesses, for instance, to the city, may have detrimental effects on residents' life, such as increased traffic congestion, crime and pollution (Howie et al., 2010). The link between image dimensions, impacts and support, in particular, can have important policy implications, indicating that the development of tourism should not be approached as a goal

but as a tool for the development of the community (Ko and Stewart, 2002; Nunkoo and Ramkissoon, 2010). Residents' place image, in particular, should be used in conjunction with the perceived impacts in the planning process of tourism as a compass for drawing the direction of the development toward the benefit of the host community.

Development plans that address the negative aspects of the place, or contribute towards enhancing the positive elements of the city's image serve this scope and are expected to be perceived more positively in terms of their impacts, thus gaining residents' support. Considering, for example, the image of Kavala, local authorities, planners and developers could employ tourism to improve the elements that are perceived less favorably (such as government and entertainment services), thereby achieving an improvement in the image of the city. A framework, for instance, that will monitor the improvement in community services should be implemented. Moreover, tourism development can be used to enhance the socio-cultural milieu, i.e. offering more festivals and events, which will improve the entertainment services image and positively affect residents' perception of tourism impacts and their support for tourism development. Finally, using internal marketing campaigns, such developments should be further advertised by highlighting the positive aspects of the city's image and the potential contribution of tourism development, gaining greater support for it.

5.2 Limitations and future research directions

The current study, like any other study, faced some limitations and thus offers directions for future research. First, the model was tested in relation to a single destination, fact which limits the generalizability of the findings to other destinations. As each destination has its own mixture of elements and characteristics, residents' opinion may vary from one place to the other and research should be replicated in different contexts. Second, the model explored the effect of various residents' place image dimensions, excluding others factors such as residents' attachment to the community (e.g., Choi and Murray, 2010; Lee, 2013). Additional factors should therefore be considered in future research. Third, treating the composite variables as interval scales constitutes another limitation of this study and a potential threat to its validity. Finally, future research should also consider if the way the impacts of tourism are perceived enhances or disrupts the image of the place.

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Table 1. Exploratory factor analysis of resident's' place image

Factors/ Items	Factor loading	Eigenvalue	% of variance explaine	Cronbach's alpha
F1 Community services		**4.08**	**29.17**	**0.70**
Good job opportunities	0.87			
Effective local government	0.63			
Good public transportation	0.58			
Effective local services	0.56			
F2 Physical appearance		**1.94**	**13.84**	**0.70**
Pleasant weather	0.76			
Attractive scenery	0.75			
Interesting historic sites	0.67			
Nice architecture	0.67			
F3 Social environment		**1.19**	**8.49**	**0.65**
Safe place to live	0.72			
Clean	0.72			
Friendly locals	0.69			
F4 Entertainment services		**1.01**	**7.16**	**0.60**
Good restaurants	0.84			
Good nightlife	0.70			
Good place for shopping	0.51			

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Table 2. Measurement model

Constructs/ indicators	Item loadings	t-value	Construct reliability	AVE
F1 Community services			.75	.43
Good job opportunities	.60	10.51*		
Effective local services	.72	13.19*		
Effective local government	.73	13.35*		
Good public transportation	.55	9.49*		
F2 Physical appearance			.77	.46
Attractive scenery	.74	13.82*		
Pleasant weather	.68	12.34*		
Interesting historic sites	.69	12.60*		
Nice architecture	.60	10.62*		
F3 Social environment			.70	.44
Safe place to live	.68	11.74*		
Friendly locals	.74	12.97*		
Clean	.56	9.58*		
F4 Entertainment services			.71	.45
Good restaurants	.53	9.09*		
Good nightlife	.78	13.92*		
Good place for shopping	.68	11.95*		
Perceived Tourism Impacts			.75	.60
Economic	.77	14.64*		
Socio-cultural	.78	14.88*		
Support for tourism development			.93	.81
Public finance for tourism promotion	.90	20.45*		
Further tourism development	.91	20.77*		
Increase in the number of tourists	.89	20.16*		

** p<0 .001*

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Table 3. Estimated standardized coefficients

Hypothesized Relationship				Stand. Estimates	t-values
H1:	Perceived impacts	->	Support for tourism	.76	11.53*
H2a:	Community services	->	Perceived impacts	.09	0.93
H2b:	Physical appearance	->	Perceived impacts	.23	3.17*
H2c:	Social environment	->	Perceived impacts	.40	4.06*
H2d:	Entertainment services	->	Perceived impacts	.15	1.56

** p<0 .05*

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Figure 1. The proposed theoretical model

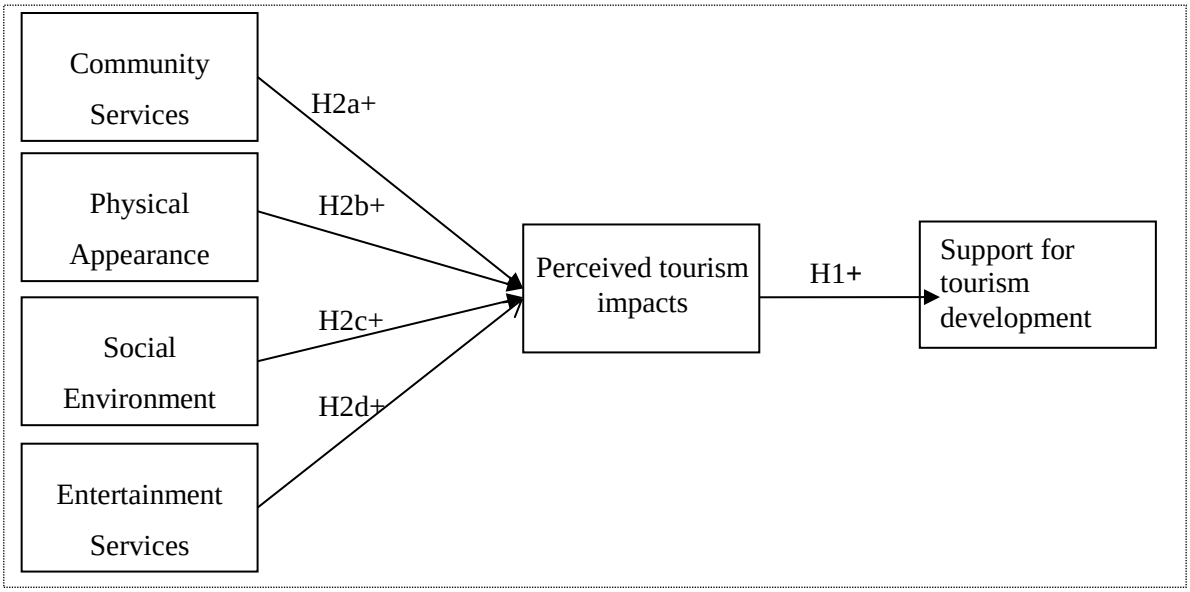

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Figure 2. CFA model

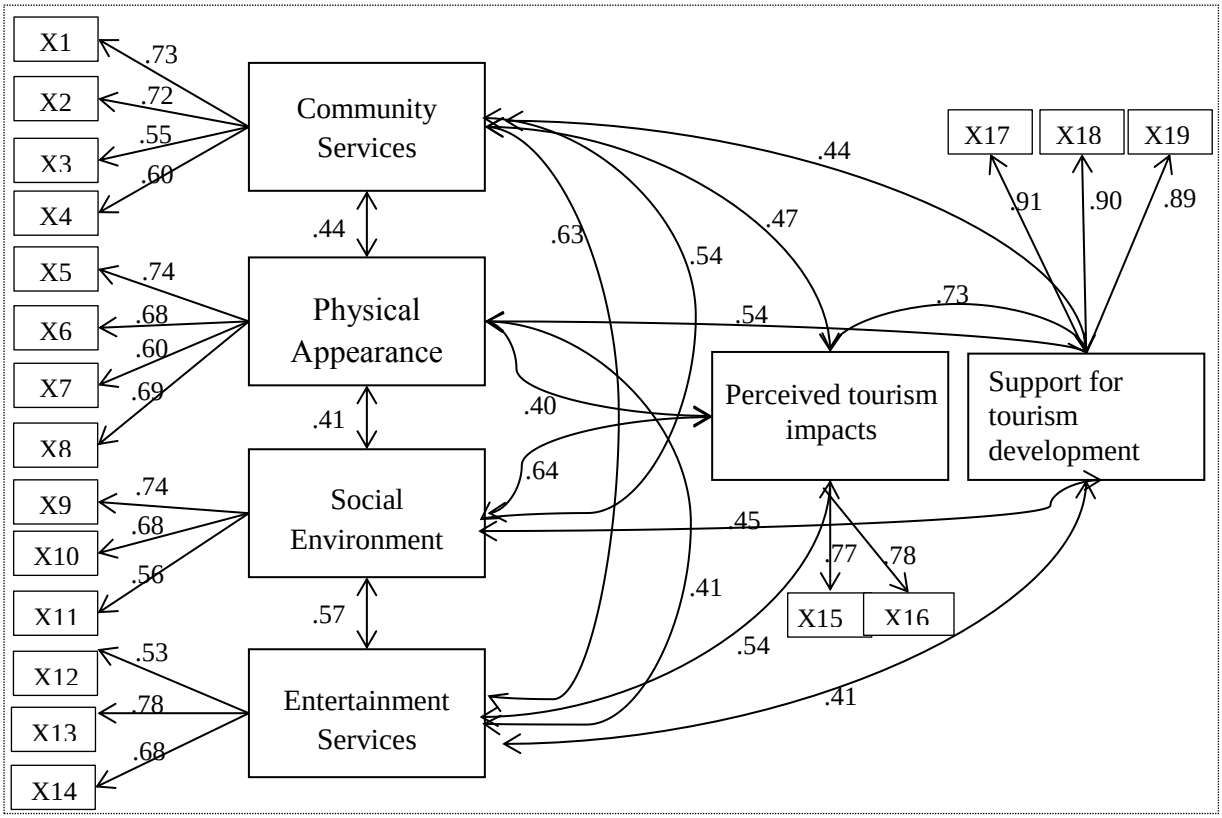

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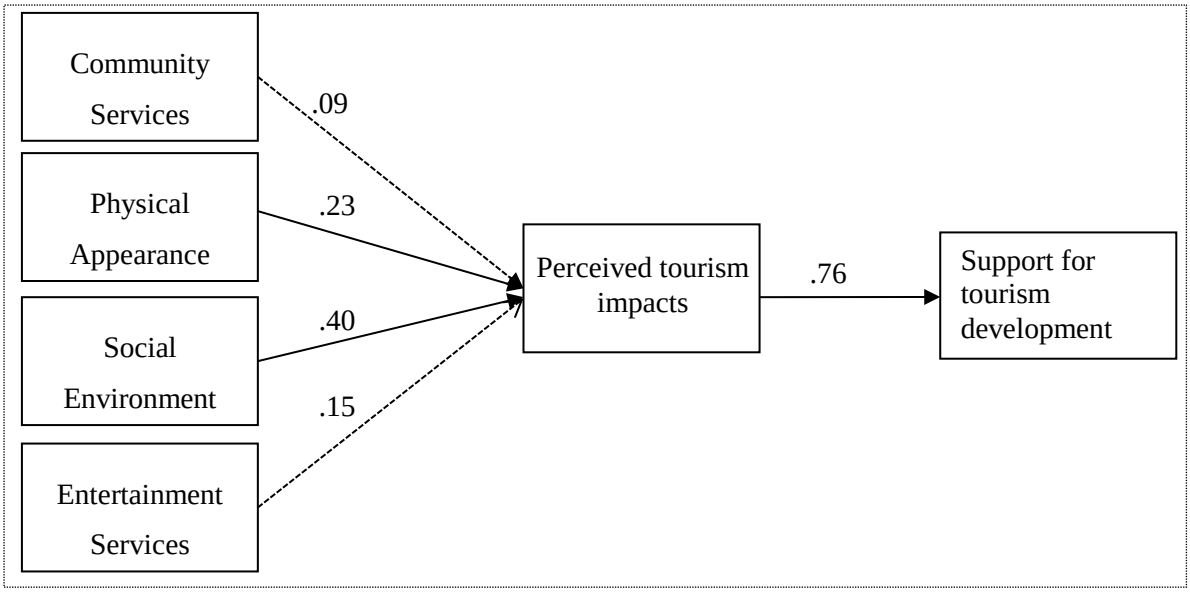
Figure 3. Structural Model



Dashed lines indicate non-significant relationships

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Appendix. Descriptive statistics

	Mean	Std. Deviation
Residents' place image	**3.29**	
Community services	2.69	
Good job opportunities	2.17	1.10
Effective local government	2.64	1.07
Good public transportation	2.86	1.27
Effective local services	3.08	1.07
Physical appearance	3.85	
Pleasant weather	3.95	1.04
Attractive scenery	4.46	0.80
Interesting historic sites	3.57	1.07
Nice architecture	3.40	1.13
Social environment	3.46	
Safe place to live	3.85	0.98
Clean	3.55	1.05
Friendly locals	2.97	1.22
Entertainment services	2.96	
Good restaurants/food	3.59	1.04
Good nightlife	2.56	1.23
Good place for shopping	2.74	1.25
Perceived tourism impacts	**3.11**	
Economic impacts	3.40	0.85
Socio-cultural impacts	3.31	0.77
Environmental impacts	2.63	0.86
Support for tourism development	**3.92**	
Further tourism development	4.04	1.13
Public funding for tourism promotion	3.91	1.24
Increase in the volume of tourists	3.83	1.27