Factors Influencing Perceived Crowding of Tourists and Sustainable Tourism Destination Management

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Abstract: Studies on tourists crowding are developed to explore the perception of crowding, and these studies indicate crowding influence on sustainable development of tourist destinations. This study aims to reveal the influential factors of tourists' perceived crowding. We obtained data from interviewing over 400 tourists and five senior tourism officials in Xi'an, China. This study firstly applies factor analysis to identify the constructed variables of tourists' motivations from the principle component analysis. It then examines the correlation between nationality and perceived crowding. Consequently, a multiple regression is used to identify the connection between motivations and perceived crowding. The results of the study indicate nationality and motivation as two significant influential factors to perceived crowding management. This study also shows that management in tourist destinations would benefit from provision of the authentic travel experience integrated with zoning the travel destination.

Keywords: perceived crowding; nationality; motivation; tourism destination

1. Introduction

Perceived crowding is defined as visitors' crowded feeling in a particular place. Perceived crowding is caused by people blocking others' views, space being narrowed by new arrivals and other associated negative effects or emotions [1–3]. For travellers, there are various factors that motivate them to visit specific spots, and their crowded feelings can be enhanced when their motivations get disturbed by other factors.

Xi'an, located in Northwest China, enjoys a history of more than 5000 years and served as the capital of 11 Chinese dynasties. Now, Xi'an is an important historic and cultural tourism destination that is famous for its museums, cultural attractions, and historical sites (e.g., the Terracotta Warriors, Drum Tower and the Shaanxi History Museum). Tourism is one of the backbone industries in Xi'an. In 2014, 1.4 million inbound tourists visited Xi'an and spent 1.17 billion US dollars. Domestic tourists numbered 119 million with an associated spending of 13.4 billion US dollars [4]. The increasing tourism population in Xi'an has caused some negative impacts such as the conflicts between tourists with different cultural backgrounds or between tourists and locals, as well as environmental issues including contamination and noise pollution [5,6]. These impacts could be regarded as disturbances in motivation for tourists. Their crowded feeling would further lead to perceived crowding.

Tourists to Xi'an are often of different culture backgrounds and nationalities [4]. The majority of tourists include Chinese tourists, European and North American tourists and Japanese tourists [4]. In the field of crowding-related research, nationality has been proved as a factor that impact on tourists'

perception of crowding [7,8]. Moreover, cross-cultural research indicates that tourists of different culture backgrounds and nationalities have different motivations [9–11]. As a result, nationality is an influential factor to both travel motivation and perceived crowding.

Developing a sustainable tourism has become a major challenge for tourist destinations in China. The concept of sustainable tourism incorporates environmental, social-cultural and economic perspectives [12,13]. It is important to control perceived crowding to achieve the tourists' satisfaction and a sustainable tourism industry. Tourism crowding management is important in terms of controlling the number of tourists and distributing tourists, with the hope of lessening perceived crowding.

However, little research has been directed specifically to the study of tourists' motivations and perceived crowding in China on a cross-cultural background. Understanding the different motivations and nationalities between tourists and the level of perceived crowding would provide more accurate assessments for managing and developing sustainable tourism in Xi'an. We conducted this research as a cross-cultural study in Xi'an, China, with the purpose of investigating the different motivations and nationalities of tourists and their perceptions of crowding whereby we discovered the relationships between culture, nationality, tourists' motivations and perceived crowding. These relationships will be helpful in understanding the psychological effects of crowding on tourists and offer suggestions for future tourism management.

2. Literature Review

The literature review examines the definitions of perceived crowding and in particular summarizes and discusses key influential factors for perceived crowding. Since a visitor's national, cultural background and motivation can be the key influences on perceived crowding, this section provides an overview on the literature about nationality-motivation, nationality-perceived crowding, and motivation-perceived crowding. Finally, based on the literature review, the research model is built and the research objectives are clarified.

2.1. Perceived Crowding

Perceived crowding is a commonly used term derived from an individual's subjective evaluation of setting density in specific environments [14–17]. People perceive crowding when the usage of environmental and social resources surpasses the carrying capacity of an area [18–21]. In other words, perceived crowding can be regarded as tourists' subjective feelings toward their travel experiences. Perceived crowding can also be regarded as an implicit destination image—for example, tourists have the image of crowded harbour traffic, and the associated throng [22–24]. Hence the sustainable development of tourist destinations must figure out how a visitor evaluates crowds at the destination. If tourists consider a destination as crowded, they would experience negative psychological impacts at the destination, and vice versa. To solve this problem, special management methods can be applied to control crowding issues, and the level of crowding can also be used as an indicator of effective management practices [20,21].

Crowding and perceived crowding is not a static concept because of many social psychological factors involved. Perceived crowding usually includes individual influences and environmental influences [25]. The individual influences are composed of personal characteristics (age and education level) as well as personality traits (e.g., attitudes, preferences, motivations, experiences, and expectations), while the environmental influences are comprised of social environmental influences (e.g., features of others, similarity of tourists encountered, conduct of others, size and type of touring parties) along with physical environment influences (e.g., environmental conditions and visiting seasons). In the field of research concerning perceived crowding, most of the previous research concentrated on the relationships between acceptance, tolerance/preference and crowding concerning recreational settings in the US and Europe. In this research, the relationships between tourists' nationality, motivation and perceived crowding in a well-known Chinese tourist destination, Xi'an, will be explained in detail.

2.2. Nationality, Motivation and Perceived Crowding

In the field of cross-cultural research, culture or nationality is a special factor which indicates elements including values, perceptions, beliefs, motivations and behaviours. In other words, tourists and their characteristics can be identified on the basis of nationalities. For example, tourists from different cultures and nationalities prefer different visiting and shopping activities [26]. Therefore, culture or nationality is a key factor to understanding both motivation and perception of crowding.

Many scholars have suggested that tourists with different cultural backgrounds/nationalities have diversified travelling motivations [8–10]. Relying on an analysis of thirty-two motivational items, Lee [27] put forward six motivations as different among four groups of tourists (Koreans, Japanese, Americans and Europeans): including cultural exploration, family togetherness, escaping from the pressure, novelty seeking, event attractions, and group socialization. Kim and Lee [9] scrutinized influences of various motivations (prestige/status, family togetherness, and novelty seeking) on Anglo-American and Japanese tourists, and discovered that Japanese tourists are more motivated by prestige/status and family togetherness while Anglo-American tourists are more motivated by novelty seeking. Kozak [10] reported the similarities and differences of travel motivations between British and German tourists. British tourists are more likely to be motivated by pleasure seeking whereas the German tourists are more susceptible to relaxation. Additionally, Kim and Prideaux [11] pointed out the motivational differences among tourists from five regions including America, Australia, Mainland China, Hong Kong, and Japan. The results reveal that tourists from both Mainland China and Hong Kong were more likely to be motivated by "enjoying various tourist resources" and "escaping from everyday routine" than other groups; Japanese tourists were least likely to be motivated by "enjoying various tourist resources" and "culture and history"; American and Australian tourists were more likely to be motivated by "socialization" than Japanese and Chinese tourists, while Japanese and Chinese tourists were more likely to be motivated by "social status" than American and Australian tourists.

The studies on the relationship between culture/nationality and perceived crowding reveal that individuals with similar cultural or ethnic backgrounds tend to perceive the environment in similar patterns. For instance, Asians and Africans are more tolerable to noise and crowding than Europeans and Americans [28–30]. This tendency coincides with the fact that Asian and African tourists, representing a group with collectivism, choose travelling activities and make decisions largely dependent on group's consideration while Europeans and Americans, fitting more within a framework of individualism, focus mostly on their personal needs. In other words, Europeans and Americans are arguably less tolerant and more sensitive to crowding compared with Asians and Africans. The research results are consistent with the dimension of individualism or collectivism. The collectivism evaluates the group as the most important unit, whereas the individualism judges the individual as the most important unit [31,32]. However, another study by Jin and Pearce [5,33] concluded that Europeans and Americans are more tolerant to others' disturbance than Chinese because European and American tourists are more experienced in coping with crowding. This finding indicates that tourists' personality traits, such as individualism and collectivism, can influence their social perception. Furthermore, Yagi and Pearce [7] indicate that tourists from different nationalities perceive the others they encounter differently. According to this study, Japanese prefer to encounter Caucasians, whereas Westerners prefer encountering both Caucasians and Asians.

In summary, these studies demonstrated that differences do exist in motivation and perceived crowding between national groups. As Chinese outbound tourism is developing quickly, it is of significant importance to understand the differences of motivation and perceived crowding between Chinese tourists and tourists from other major markets such as Japan, America and Europe.

2.3. Motivation and Perceived Crowding

In tourism research, motivation has become a critical topic that facilitates understanding of tourists' psychology [33–35]. The social interference theory argues that crowding occurs when the

density interferes with visitor's activities. Travellers are usually driven to destinations by different motivations (e.g., enjoying solitude, and relieving stress), and perceived crowding happens when their motivations are upset by the excessive density [36,37].

Expectancy theory has also been adopted to explain the relationship between expectation/ motivation and crowding. People usually travel with particular expectations such as enjoying inner peace or socializing [38]. Previous research demonstrated that the individual's expectation is a factor affecting the relationship between encounters and perceived crowding. Particularly, the expectancy theory predicts that when tourists encounter more people than they expected, the perceived crowding will increase. Inversely, when people encounter no more tourists than their expectation, they are likely to experience a relatively low level of perceived crowding [39,40]. For example, Wickham and Kerstetter [41] found that tourists who expect to go shopping, attend concerts, or go to festivals are more likely to prefer crowding, in contrast to tourists who had the expectation of solitary activities and avoiding of crowds. Kim and In [42] reported that their respondents view the presence of other people positively, probably because the respondents had the expectation of being in a crowd, which is consistent with their motivation for attending festivals—socializing. The normative theory is the most useful theory in studying perceived crowding [43–45]. This theory applies norms/standards to explain the relationship between the actual use levels and perceived crowding. It is regarded that tourists feel crowded when the reported encounters exceed their norms while tourists feel not at all crowded when the reported encounters is less than their norms. The evaluative dimensions that can be used to assess tourists' norms include acceptability, preference, desirability, tolerance, ideal and favourableness, etc. [46,47]. In this study, the researcher did not create a relationship between motivation and perceived crowding rather than a relationship between norms and perceived crowding. Although how tourists' norms and motivations affect their feeling in crowded situations have been examined, little research regarding influence of motivation on perceived crowding have been conducted. Hence this research is dedicated to fill this little gap.

Furthermore, the normative approach was not used in this research. The normative approach can provide tourists accurate numbers or pictures of encounters for tourists in order to achieve their direct impression of situations. This method is helpful when researchers try to use different evaluative dimensions such as tolerance, acceptability and preference. However, sometimes tourists are hard to identify the differences between acceptability, tolerance and preference by themselves. In this research, the method does not require distinguishing different evaluative dimensions, so the researcher directly collected data of tourists' motivation rather than using the numbers or pictures. Tourists would not be confused by the different evaluative dimensions.

2.4. Crowding Management

The management practices in monitoring and controlling crowding include destination zoning, economic strategies, and operational strategies. Destination zoning contributes to crowd dispersal, conflict control, and particular areas preservation. For instance, some ecologically vulnerable zones only permit authorized scientific teams to enter, and limit the car access. Some mild development areas and buffer zones, where tourists facilities are provided, allow car to access and park [48,49]. Therefore, management objectives for each zone can apply various indicators and quality standards. In order to realize sustainable destination development, an appropriate quality standard and a socially acceptable standard of quality must be developed.

Economic measures for crowding management are comprised of pricing and tourist tax [49]. Pricing and tourist tax include entrance tickets, and fines or charges for discouraged behaviours and activities. Pricing measures, aiming to control tourist flow, usually drop the prices for tickets as well as accommodations during low season and raise the prices at peak travel season. Organizational measures are composed of queuing, reserving systems, information management, education, market control, targeting tourists and other incentive schemes [49]. Tourists dislike long-time-waiting. They tend to perceive crowding when they feel they have been waiting for a long time [50]. To lessen this

kind of feeling, methods to distract tourists' attention from waiting can be helpful (e.g., providing tourists with live performances, visual information, or other entertainments), which can make tourists less aware of the long duration [51]. In addition, tourists may feel uncomfortable if the waiting area is hot, cold, noisy or crowded [52]. It is necessary to provide shelter, drinking fountains and toilet near waiting areas. A reserving system can also be beneficial for shortening waiting time. Thus, the perception of crowding can be controlled [53].

Visitor's education level can also take effect in the tourists' awareness, attitudes, behaviours, and planning. Therefore, it is important to make efforts in education so as to improve the efficiency of message delivery, which contributes to controlling tourist flow and crowding as well as to satisfying tourists' needs. Moreover, awareness of an audience's needs and characteristics is regarded as an important factor in choosing educational content and improving the efficiency of communication [54].

Market control aims to target and control market segments [55]. For example, in Venice, Italy, the measurement of crowding was based on preferring overnight tourists to excursionists with the purpose of limiting the number of tourists [56]. That is because the huge number of excursionists in Venice (especially during peak season) caused environmental and social problems rather than benefiting the local economy.

In sum, tourists with different motivations may show different perceptions of crowding. However, few studies have tested the relationship between motivation and perceived crowding in Chinese tourism destinations. Due to the rapid growth of tourism in Xi'an and its important role in Chinese tourism, this study was designed to find out the influences of nationality on motivation and perceived crowding as well as the influences of motivation on perceived crowding. This study is to find particular crowding management required by the sensitive market and minimize the tourists' crowded feeling.

3. Data and Method

3.1. Data Collection

This research utilizes both quantitative and qualitative data: a structured questionnaire survey was conducted to collect data from tourists in Xi'an between August 2011 and February 2012, and in-depth interviews were carried out with five senior tourism administration officers. The questionnaire survey was conducted at the popular attractions such as the Terracotta Warriors and shopping streets like the Eastern Street in Xi'an. Tourists who visited Xi'an throughout these 7 months were selected. Approximately 60% of questionnaires were collected during the peak season between August and October 2011 and 40% of questionnaires were collected during the low season between November 2011 and February 2012. When reading the Table 1, the results of the "Pearson Chi-Square" row show that $\chi(1) = 0.486$, $p = 0.483$. Therefore, there is no statistically significant association between sub-groups of tourists in the low season and the peak season. The target respondents include tourists from China, Europe and North America (Western tourists) and Japan which are the biggest three markets in Xi'an. However, the target tourists varied according to gender, age, income, and education level. The close-ended questions were primarily designed to gather information on respondents' personal characteristics, motivations, and perceived crowding. A random sample was collected. The approximate response rate was 84%. There is no particular characteristics of the tourists who gave non-response. From the 520 questionnaires collected in Xi'an, 438 questionnaires were obtained from tourists who stayed in Xi'an for at least one night. The semi-structured interviews with administrative officers, who work in the Xi'an Municipal Tourism Administration or tourism attractions, lasted for 30 min to over 60 min. Totally, it took one month to collect the qualitative data. These open-ended questions were used to obtain feedback from those administrative officers with regards to whether crowding occurred in Xi'an and how the possible crowding-related issues are controlled. Interviews were conducted and recorded in Chinese. Then interviews were transcribed and translated in English.

Table 1. Comparing the sub-groups of tourists in the low season and the peak season.

	Value	df	Asymp. *Sig.* (2-Sided)	Exact *Sig.* (2-Sided)	Exact *Sig.* (1-Sided)
Pearson Chi-Square	0.486 [a]	1	0.483		
Continuity Correction	0.225	1	0.582		
Likelihood Ration	0.486	1	0.483		
Fisher's Exact Test				0.582	0.312
Linear-by-Linear Association	0.480	1	0.612		
N of Valid Cases	438				

Note: [a] Zero cells (0.0%) have expected count less than 5. The minimum expected count is 38.56; "df" represents degree of freedom; "Asymp. *Sig.* (2-Sided)" stands for 2-sided asymptotic significance; "Exact *Sig.* (2-Sided)" means two tailed exact significance; "Exact *Sig.* (1-Sided)" is one tailed exact significance.

3.2. Measurement

The design of the questionnaire was based on the literature about nationality, motivation and perceived crowding [14–17,20–25]. The respondents evaluated the importance of 23 motivation factors during their trips [9,10,22] by answering Likert-type scale questions that used numbers from 1 (not at all important) to 5 (very important) to indicate the relatively importance of motivational factors. The respondents were also asked to rate their perceptions of crowding during their entire trips in Xi'an by answering a 10-point scale question that use 1 point, 4 point, 6 point and 10 point to indicate "not at all crowded", "slightly crowded", "moderately crowded", and "extremely crowded" respectively [57,58].

3.3. Data Analysis

Data were analysed in seven stages. First, a descriptive analysis was taken to explore the overall sample profile, identifying that the respondents were varied with their demographic characteristics. Second, a principal component analysis with a varimax rotation was applied for the motivation analysis [59,60]. This kind of analysis was applied for another time in order to underlie motive dimensions [20]. In this study, factor analysis helped to identify the constructed variables of motivation. The Kaiser-Meyer-Olkin (KMO) measurement was conducted to test the adequacy of the sample size: the value of this measurement ranges from 0 to 1, and a higher value represents a better basis on which to proceed. Eigen values equal to or above 1.0 were considered. The factor loading above 0.40 was used to explain the factor [61,62]; the percentage of variance that explained the results was at least 61.2% [63]. A reliable measure, the Cronbach's coefficient alpha, was calculated to examine the internal consistency of items with each dimension. A criterion of 0.70 for the coefficient alpha can be used to identify the reliability [63].

Third, a one-way ANOVA was taken to identify the specific relationship between nationality and motivation (the clustered dimensions). Fourth, a one-sample *t* test was applied, testing whether the mean degree of perceived crowding significantly differs from a hypothesized value of 6. The degree of crowding 6 represents moderate crowding [58]. If the mean degree of crowding in this study is significantly higher than 6, it means there is crowding. Then, at the fifth stage, the one-way ANOVA was conducted again to test the relationship between nationality and perceived crowding. Particularly, in the one-way ANOVA measurement, a Turkey post hoc test was completed to compare each group, since the sample sizes of the independent variables are equal [64,65]. After that, in the sixth stage, multiple regression analysis was used to examine the relationships among nationality, motivations and perceived crowding, so as to indicate whether motivation and nationality impact crowding. Finally, the content analysis with coding was utilized to analyze the qualitative data gained from interviews. The results of the interviews help to complement the quantitative research results in crowding and provide suggestions to crowding management in Xi'an.

4. Results

4.1. Sample Profile

Table 2 displays the demographic profile of the respondents. The proportion of respondents from three national groups of Chinese, Japanese and Westerners were nearly equal. For the Japanese tourists, the proportion of males was higher than that of females while the proportion of males for Westerners was lower than that of females. According to the survey by OECD [66], female participation in the labour force in Japan is 63%, which is far lower than in other rich countries. When women have their first child, only 30% of them stop working for a decade or more in America, compared with 70% in Japan. Lower participation in the labour force means lower income which prohibits them from travelling all over the world. In addition Japanese women tend to have lower status than women in Western countries because they are subjected to Confucianism, which may directly threatens women's rights in Japan. For Chinese tourists, the number of males and the number of females were close. The major respondents from China and Japan were aged between 36 and 55 years. Most Chinese tourists earned less than $40,000 US dollars per year. However, the majority of Japanese and Westerners had a personal income of between $40,000 and $80,000 US dollars per year. Most Chinese and Japanese respondents had an associate's degree, whereas most Western tourists held a Bachelor degree or higher.

Table 2. Generalized socio-demographic profile of tourists surveyed in Xi'an ($N = n_1 + n_2 + n_3 = 438$).

Socio-Demographic Variables	Chinese (n_1 = 155) (%)	Japanese (n_2 = 145) (%)	Westerners (Europeans and North Americans) (n_3 = 138) (%)
Gender			
Male	47.1	64.1	31.9
Female	52.9	35.9	68.1
Age			
18–35	34.2	14.5	38.4
36–55	55.5	49.0	31.2
55+	10.3	36.5	30.4
Personal income			
<US-$40,000	81.9	36.6	31.9
US-$40,000–80,000	14.8	50.3	43.5
>US-$80,000	3.3	13.1	24.6
Educational level			
High school or below	11.0	7.6	18.1
College	85.2	86.2	16.7
Bachelor or above	3.8	6.2	65.2

4.2. Principal Component Analysis

The principal component analysis was applied to rate 23 motivation factors identified in the measurement process. The results are presented in Table 3. It has produced five factors with Eigen values greater than 1. The percentage of variance explained by the solution is 66.4%, which is higher than 61.2%. Factor scores are calculated as regression scores through SPSS. The factor loadings of all selected items were above 0.4. The value of the Kaiser-Meyer-Olkin measurement yielded 0.869, which indicates a satisfying sample size. All factors resulted in a Cronbach's coefficient alpha score higher than 0.7, meaning consistency among the items in each factor is reliable.

Factor 1 represented most of the variance as 26.7% and the Cronbach's coefficient alpha score is 0.701. This factor included seven items that consisted of: (1) interest in history and culture; (2) broadening knowledge; (3) experiencing the local Chinese history and culture; (4) discovering new places and things; (5) visiting a must-see attraction; (6) experiencing the local environment; and (7) self-educating. These seven items could be labelled as the self-development/novelty (host-site involvement) factor. This factor reflects a tourist's intrinsic desire to experience the unique local

environment and culture. Such cultural experience is regarded as a novelty and an opportunity for personal development.

Table 3. Factor analysis of tourists' motivations in Xi'an.

Factor	Mean	Factor Loading	Eigen-Value	Variance Explained	Cronbach's Alpha Score
Self-development/Novelty (host-site involvement)	3.52		6.149	26.7	0.701
Interests in history and culture	3.54	0.782			
Broaden knowledge	3.62	0.769			
Experience the local Chinese history and culture	3.42	0.677			
Discover new places and things	3.61	0.619			
Visit a must-see attraction (e.g., the Terracotta Worries, Mt. Hua)	4.01	0.522			
Experience the local environment	3.58	0.507			
Learn more about myself, find myself, educate myself about the world	2.89	0.505			
Kinship/relax	2.84		2.094	11.4	0.706
Visit friends or relatives	2.83	0.720			
Have a good time with friends or relatives	2.72	0.631			
Relax physically and mentally	3.02	0.585			
Make new friends	2.81	0.576			
Enhancement of abilities	2.80	0.570			
Proximity	2.91		1.690	11.2	0.707
Attend a festival or fair	2.92	0.793			
Not far away from my usual place	2.95	0.739			
Cultural similarities to my usual place	2.91	0.662			
Repeat visit due to the positive image of past experience	2.86	0.544			
Self-enhancement	2.54		1.254	9.3	0.729
Complete studies/work commitments	2.87	0.705			
In search of employment	2.05	0.590			
In search of the right partner	2.15	0.545			
Gain a feeling of belonging	2.89	0.528			
Improve status	2.74	0.515			
Escape/relax	2.85		1.134	7.8	0.705
Escape from everyday work, home/escape from the daily routine	2.83	0.777			
Shopping	2.87	0.459			
Total variance extracted (%)				66.4	
Cronbach's alpha of all items					0.750

Note: 1 = not at all important; 5 = very important; Kaiser-Meyer-Olkin measure of sampling adequacy = 0.869. For more information of this table, refer to the Appendix A (Table A1).

Factor 2 constituted the items of visiting friends and family and having a good time with them, relaxing, making new friends, and facing challenges. This factor made up 11.4% of the total variance

with a reliability coefficient of 0.706. This factor represented that tourists had or wanted to have a relationship with others, including: (1) family members; (2) existing friends; or (3) new friends made during their trips. Tourists felt relaxed with family members and friends and liked to be with them when facing challenges in an unfamiliar environment. Therefore, this factor was referred to as the kinship/relax factor.

Factor 3 could be labelled as proximity; it was identified to recall the memories of a travel destination. The items included: (1) attending a festival; (2) not far from the usual place; (3) cultural familiarities; and (4) repeated travel because of the positive experience. In total this factor accounted for 11.4% of the variance and the Cronbach's coefficient alpha score was reliable (0.707). Based on this factor, the travel experience, including an event or cultural experience, could be regarded as what tourists wanted to look back on.

Factor 4, identified as self-enhancement, made up 9.3% of the total variance with a reliability coefficient of 0.729. Tourists were motivated by the promotion of their education and working levels, improvements of their status, and feelings of belonging.

The final factor, Factor 5, defined as escape/relax, including escape and shopping, accounted for 7.8% of the total variance with a reliability coefficient of 0.705. It indicated that tourists needed to experience solitude and indulge in luxury.

4.3. Motivational Differences between Three Different National Groups

The motivational differences between the three different national groups, Chinese, Japanese and Westerners, were uncovered by use of a one-way analysis of variance (ANOVA), as demonstrated in Table 4. First, the means of the three national groups within each factor grouping have been computed. Then the means would be used to compare for each motivation factor. On top of that, the post hoc test has been applied to verify that three motivational factors, including "self-development/ novelty (host-site-involvement motivation)", "kinship/relax" and "escape/relax" exhibited significant differences between each national group. Chinese tourists were more likely to be motivated by "self-development/novelty" as well as "kinship/relax" factors than the other two groups. However, Japanese tourists were more likely to be motivated by "escape/relax" factor while they were the least susceptible group to the "kinship/relax" factor. In addition, North American and European tourists were least likely to be motivated by factors of "self-development/novelty (host-site-involvement motivation)" and "escape/relax".

Table 4. Results of one-way ANOVA on motivational factors to travel Xi'an.

Motivation	Three Different National Groups			*F*-Value	*p*-Value
	Chinese	**Japanese**	**Westerners**		
Factor 1: Self-development/Novelty (host-site involvement)	2.82	2.76	2.30	45.9	0.000 *
Factor 2: Kinship/relax	3.10	2.85	2.93	11.8	0.000 *
Factor 3: Proximity	3.17	3.23	3.10	2.3	0.103
Factor 4: Self-enhancement	3.22	3.18	3.22	1.2	0.308
Factor 5: Escape/relax	3.17	3.19	2.89	18.9	0.000 *

Note: * indicates $p < 0.05$; difference is significant when significance level < p value.

4.4. The Status of Perceived Crowding

The result shows that the mean of perceived crowding rated by the tourists is 6.31, higher than the moderate level of crowding (6) [58], and a one-sample *t* test was used to test whether this difference is significant enough. The *t* test resulted in a *p*-value of 0.005, which is less than 0.05. Therefore, the rated mean crowding (6.31), was significantly higher than the moderate crowding (6), indicating that crowding had really occurred in Xi'an. Therefore, crowding management should be developed to control the issue of crowding.

4.5. The Relationship between Nationality and Perceived Crowding

Statistical analysis confirmed the nationality's influences on perceived crowding (see Table 5). The *F* test showed that there were significant differences between these three groups of tourists visiting Xi'an. For these groups, the significant level was smaller than 0.05. It was important that the post hoc test identified a significant difference of the perceived crowding between Chinese and Westerners ($p = 0.003$), and between Japanese and Westerners ($p = 0.033$), whereas the difference between Chinese and Japanese ($p = 0.948$, $p > 0.05$) was not significantly proved. Tourists from Japan had the strongest feeling of crowding, whereas those from Europe and North America had the weakest feeling (see Table 4). Moreover, the mean and median values of the perceived crowding (5.53 and 5.00) of Westerners were below the value of moderate crowding specified by [58]. In other words, tourists from Europe and North America felt significantly less crowded than Asians (Chinese and Japanese) in the same situation. This was generally consistent with results of previous studies [4–6], but contrasted with the finding of Gillis et al. [7,28–30,32], which implied that individuals of Asian origin had more tolerance with crowding than Europeans and North Americans.

Table 5. Results of the statistical analysis of perceived crowding in Xi'an depending on the key tourist nationalities.

Nationality of Tourists	Mean Value of Perceived Crowding	Median Value of Perceived Crowding	Compared with	Standard Error	*Sig.*
Chinese	6.82	7.00	Westerners	0.041	0.003 *
Japanese	7.05	7.00	Chinese	0.061	0.948
Westerners (Europeans and North Americans)	5.53	5.00	Japanese	0.061	0.033 *

Note: * indicates $p < 0.05$; difference is significant when significance level (*Sig.*) < *p*-value.

4.6. The Relationship among Motivation, Nationality and Perceived Crowding

The results of multiple regression analysis were indicated in Table 6. Self-development/novelty was supported ($β = 0.409$, $p = 0.000$) as a motivation factor positively associated with perceived crowding. The results also identified that the motivation factors kinship/relax ($β = 0.236$, $p = 0.002$) and proximity ($β = 0.188$, $p = 0.003$) were positively associated with perceived crowding. Among the three motivation factors, self-development/novelty had a stronger effect than the other two factors. However, the motivation factors including self-enhancement and escape/relax were not proved to have any significant relationship with perceived crowding. The second objective of this study was as follows: to find out the differences of motivations and perceived crowding between these groups of visitors to Xi'an; to identify the influences of nationality and motivation on perceived crowding; and to provide suggestions to crowding management practices in this destination. From this table, it is obvious that Chinese and Japanese tourists are more likely to feel crowded ($β = 0.327$, $p = 0.001$) compared to Western tourists. As for interaction term defined as "motivational factors×nationality", Chinese and Japanese tourists were more likely to be motivated by it compared with Western tourists. Among the five interaction terms, "self-development/novelty (host-site involvement) × nationality" ($β = 0.359$, $p = 0.003$), "proximity × nationality" ($β = 0.165$, $p = 0.095$) and "escape/relax × nationality" ($β = 0.174$, $p = 0.034$) were positively associated with perceived crowding. "Self-development/novelty (host-site involvement) × nationality" had a stronger effect than the other two factors. The interaction terms including "self-enhancement × nationality" and "escape/relax × nationality" were not proved to have any significant relationship with perceived crowding, which is consistent with our finding.

Table 6. Results of the statistical analysis of perceived crowding in Xi'an depending on the key motivational factors and nationality.

Motivational Factors and Nationality	Coefficient	Standard Error	*t*-Value	*p*-Value
Self-development/Novelty (host-site involvement)	0.409	0.103	3.970	0.000 *
Kinship/Relax	0.236	0.076	3.105	0.002 *
Proximity	0.188	0.065	2.892	0.003 *
Self-enhancement	0.154	0.076	2.026	0.052
Escape/Relax	0.128	0.072	1.778	0.087
Nationality	0.327	0.076	4.303	0.001 *
Self-development/Novelty (host-site involvement) × Nationality	0.359	0.124	2.895	0.003 *
Kinship/Relax × Nationality	0.164	0.123	1.333	0.216
Proximity × Nationality	0.165	0.096	1.719	0.095
Self-enhancement × Nationality	0.233	0.143	1.629	0.154
Escape/Relax × Nationality	0.174	0.084	2.071	0.034

Note: The dependent variable is perceived crowding. Nationality is a dummy variable that equals one if the tourist comes from China and Japan, and zero if the tourist is a Westerner. This regression model includes an interaction term named "motivational factor × nationality". * indicates $p < 0.05$; difference is significant when significance level < *p* value.

4.7. Implications for Tourism Crowding Management

The conceptual analysis was used to identify the themes and questions in the qualitative research. The major concepts included the concept of carrying capacity and the concepts related to crowding. The carrying capacity concept to be selected because the crowding concept was generated from carrying capacity. The interview results were coded and presented in Table 7.

Table 7. Questions and answers in interviews.

Question	Answer
1. What is crowding?	1. The space available cannot accommodate so many people at one time. 2. Too many people cause inconveniences, dissatisfaction, and other social effects. 3. The situation leads to pressure on social, economic, and long-term development.
2. When and where crowding occurs?	1. Crowding usually occurs during peak season especially in May and October. 2. Crowding is more likely to occur at the popular attractions especially at must-see attractions. 3. Sometimes it is too crowded to use the parking areas, main roads, toilets, and other facilities.
3. What are the influences of crowding?	1. Crowding causes damage and waste to the natural, socio-cultural, and financial resources. 2. Crowding puts pressure on the destination such as noise and conflict. 3. Crowding causes negative impacts on the long-term development of tourism. 4. A large number of tourists bring profit to the local business market and upgrade the profitability of the tourism industry.
4. What are the methods suggested to control crowding?	1. Promote communication between the destination and tourists (e.g., improve the information service). 2. Promote coordination between different organizations to control the tourist flow and arrivals. 3. Apply special plans during peak seasons, such as ticketing and pricing. 4. Educate tourism employees—specifically tour guides and tourists on how to avoid unfavourable situations. 5. Provide better natural and physical environment. 6. Manage popular areas particularly.

Five reviewers have checked the coded results and agreed with each other. The inter-coder reliabilities are all closed to 1.000. The administrative officers expressed their understanding of crowding. Based on their understanding, they recognized that crowding existed in Xi'an. The result was compatible with the quantitative results generated from the questionnaire survey.

The answers to Question 1 implied that the administrative officers regarded crowding as harmful to the long-term sustainable development of tourism since large numbers of tourists result in negative social effect. However, they had not recognized that crowding was not only a physical issue but also a psychological issue which was associated with a person's perception of the local environment.

Question 2 showed that crowding is more likely to happen in peak seasons and at popular tourist destinations. In addition, the physical facilities could not suffice when being used by a large number of tourists simultaneously. The impacts of crowding on the destination are demonstrated in Question 3.

Question 3 reported both negative and positive impacts of crowding. The positive impacts include short-term economic benefits and short-term market competition superiority. The interviewees recognized negative environmental, cultural, and economic impacts including damage of resources and social pressure. Crowding could cause negative psychological impact (e.g., negative images and perceptions) as well. Such negative images and perception might lead to tourists' dissatisfaction. Thus, tourists would not make repeated visits to the destination.

Finally, the answers for Question 4 offered suggestions on how to control the negative impacts of crowding. Measures included management of tourists, employees, organizations, and environment. Administrative officers recognized that crowding must be managed in an integrated procedure; however, they tended to ignore the psychological management perspective. As tourists perceived environments in various ways, it is essential to use different management strategies at different groups.

5. Discussion

The present study identified the occurrence of crowding in the destination by the one-sample *t* test complemented with coding analysis. Crowding had caused pressure on the local environment. Therefore, it was vital to develop crowding management to control the issues associated with crowding and promote tourist satisfaction.

In interviews, the administrative officers indicated that particular management, which can be considered similar to destination zoning [49], had been used to control crowding in popular tourist destinations. Employing a zoning strategy could help administrative officers define management objectives and standards for different areas clearly rather than only for the popular tourist destinations. Popular zones could be defined by the standard "tolerance" or "acceptability" with the objective to attract a large number of tourists; less popular zones could be defined by the standard "preference" with the objective to receive a small number of tourists. After clarifying management objectives and standards, natural resources and physical facilities could be allocated appropriately in different zones; in turn, tourists could be distributed in multiple attractions/destinations.

Based on the results of interviews, economic measures had been used to control the visitation in different seasons and subsequently control crowding during the peak season. The economic measures employed included ticketing and pricing, applying higher prices for some programs and services, as well as limiting sales volume of tickets during peak seasons.

The reservation and booking system have been set up in most attractions in Xi'an to control the number of tourists and reduce the queuing time for buying tickets. Educational approaches as well as information management were conducted to improve the service quality for both employees and tourists in Xi'an [54]. Improving services such as delivering appropriate messages at the right time and place was critical to the control of tourist flow and crowding. Tourists who were sensitive to large numbers of encounters could be aware of crowded situations and thereby would avoid them. Educating both tourists and employees could improve communication efficiency between the two groups to avoid crowding-related issues (e.g., noise). For example, tourists sometimes considered tour guides as a factor to cause noise. Educating tour guides on how and when to keep quiet was beneficial for

inducing tourists' positive evaluation of encounters and alleviate their feelings of crowding. Educating tourists to understand tour guides could minimize their negative feeling of unfavourable situations.

Additionally, the identified relationship among motivation, nationality and perceived crowding could provide more suggestions on effective crowding management. Nationality of tourists seemed to be an important indicator of perceived crowding. This result reveals the difference in perception between Asians (Chinese and Japanese) and Westerners (Europeans and North Americans) and was consistent with several previous studies [6,7,64]. The results indicated that the generated perception of collectivism/individualism might be the most important factor causing the significant difference of perceived crowding between tourists from Europe and North America and tourists from China and Japan. The three groups of tourists perceived crowding at different levels. Chinese and Japanese tourists perceived the destination as very crowded, but tourists from Europe and North America perceived the destination as moderately crowded. This indicated that Western tourists were better at dealing with crowding than the Asians. Though this was consistent with the findings in a previous study on crowding conducted by Jin and Pearce [33], it contrasted with the findings of Gillis et al. [28–30], which found that individuals of Asian origin were more tolerable to crowding than Europeans and North Americans. These different perceptions of crowding between Western and Asian tourists might be attributed to two reasons: (1) Western tourists were more experienced travellers, and, thus, able to tolerate a larger number of tourists; and (2) Western tourists had the expectation of a crowded situation in China. Therefore, when they found themselves in a social environment they had expected, they evaluated it as more acceptable. In contrast, Chinese and Japanese tourists might have had the expectation of a less crowded situation. When they found themselves in asocial environment, for instance, Xi'an, they judged it more critically. Based on the results, marketing strategies and practices need to be more effective so as to influence Chinese and Japanese tourists' expectations and thereby minimize their crowded feeling.

Furthermore, the results of this study supported the previous finding that individuals' motivations influenced their evaluation of perceived crowding [40]. In contrast, the escape/relax motivation dimension, which included solitude and shopping, had not been proved to be a factor influencing perceived crowding [41]; instead, self-development/novelty (host-site involvement) ($\beta = 0.409$, $p = 0.000$), kinship/relax ($\beta = 0.236$, $p = 0.002$) and proximity ($\beta = 0.188$, $p = 0.003$) were proved to have a positive relationship with perceived crowding. Most of the influence on perceived crowding was from the motivation dimension of self-development/novelty (host-site involvement), which accounted for 50.1%. The finding indicated that tourists' motivation to experience the local traditional environment and culture profoundly influenced their evaluation and feelings toward a crowded situation. Tourists who were motivated by an authentic traditional and cultural experience were more likely to be disturbed by crowds. The finding further suggested that it was important to manage crowding by promoting an authentic experience of tourists in the historic and cultural destinations such as Xi'an.

Developing authenticity is a necessary mechanism to handle crowding at historic spots. The concept of authenticity has been associated with many factors pertaining to the psychological perspective, and authenticity foreshadows motivation [67–69]. In other words, authenticity is a medium of a visitor's cultural motivation and intended behaviours. Authenticity is also believed to affect tourists' satisfaction. Therefore, in crowding management, tourism administrative officers should promote tourists' authentic value. Administrative officers ought to focus on establishing the authentic value for individuals. For this purpose, the exhibited objects must be presented in a way that inspires different groups of individuals whose goals and values vary differently. Hence, administrative managers must fully understand the tourists' perspectives and provide various interesting elements that meet their needs and expectations. The enhanced authentic value can contribute to the alleviation of crowded feeling. In particular, the findings of this study contribute to the researches concerning tourism perceived crowding. It also indicates significance regarding tourist satisfaction and destination management, especially for the historical and cultural destinations. At historic or cultural destinations,

consideration of authenticity must be involved in tourism crowding management. Providing authentic travel experiences can mitigate feelings of crowding. Improving destination conditions, zoning, as well as the economic and organizational measures are also regarded as important factors to control perceived crowding.

6. Conclusions

With the number of tourists growing rapidly, crowding has become a critical problem in China. If tourists perceive a destination as crowded, their satisfaction will decrease, undermining sustainable development in the destination. This study takes advantage of the case in Xi'an, China, to identify the relationship between nationalities, motivations and perceived crowding. The results demonstrated that many tourists in Xi'an were motivated by the "self-development/novelty (host-site-involvement motivation)" factor. Among these tourists, Chinese and Japanese were more likely to integrate themselves into the local environment and culture than European and North American tourists. In addition, Chinese and Japanese tourists motivated by the "self-development/novelty (host-site involvement)" factor were more likely to feel crowded compared to tourists with other motivations.

Therefore, nationality and motivation can be regarded as critical determinants in tourism crowding management. Tourists with different nationalities and motivations tend to have diversified needs and expectations. If appropriate strategies are used to satisfy their needs and expectations, feelings of being crowded can be offset. In Xi'an, particular marketing practices need to be conducted towards Chinese and Japanese tourists. Practices may include provision of authentic experience integrated with zoning the destination and education in well-known historic and cultural attractions.

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Appendix A.

Table A1. Component matrix of tourists' motivations in Xi'an.

Factor	1	2	3	4	5
Self-development/Novelty (host-site involvement)					
Interests in history and culture	**0.782**	−0.040	−0.091	−0.301	−0.049
Broaden knowledge	**0.769**	−0.063	−0.137	−0.352	−0.139
Experience the local Chinese history and culture	**0.677**	−0.258	0.303	0.328	−0.195
Discover new places and things	**0.619**	−0.006	0.270	−0.118	−0.074
Visit a must-see attraction (e.g., the Terracotta Worries, Mt. Hua)	**0.522**	0.274	0.088	−0.318	0.322
Experience the local environment	**0.507**	−0.217	−0.344	−0.213	0.122
Learn more about myself, find myself, educate myself about the world	**0.505**	0.078	−0.078	−0.146	0.141
Kinship/relax					
Visit friends or relatives	−0.338	**0.720**	−0.015	0.143	−0.187
Have a good time with friends or relatives	0.103	**0.631**	−0.178	−0.178	0.068
Relax physically and mentally	0.188	**0.585**	0.090	−0.039	0.240
Make new friends	0.027	**0.576**	−0.389	−0.014	−0.061
Enhancement of abilities	−0.107	**0.570**	0.322	0.015	0.175
Proximity					
Attend a festival or fair	0.021	0.339	**0.793**	−0.142	−0.067
Not far away from my usual place	0.079	−0.144	**0.739**	−0.109	0.224
Cultural similarities to my usual place	0.104	0.114	**0.662**	0.087	0.061
Repeat visit due to the positive image of past experience	−0.057	0.349	**0.544**	−0.207	−0.272

Table A1. *Cont.*

Factor	1	2	3	4	5
Self-enhancement					
Complete studies/work commitments	0.244	−0.350	0.182	**0.705**	−0.060
In search of employment	0.308	−0.034	−0.101	**0.590**	−0.194
In search of the right partner	0.209	0.239	0.167	**0.545**	0.100
Gain a feeling of belonging	0.215	0.383	−0.202	**0.528**	0.293
Improve status	0.338	0.358	0.350	**0.515**	−0.370
Escape/relax					
Escape from everyday work, home/escape from the daily routine	−0.029	−0.357	0.127	0.379	**0.777**
Shopping	−0.189	0.025	0.281	0.285	**0.459**

Note: factor 1 = Self-development/Novelty (host-site involvement), factor 2 = Kinship/relax, factor 3 = Proximity, factor 4 = Self-enhancement, factor 5 = Escape/relax. Numbers in boldface belong to the corresponding five major factors.

References

1. Tse, A.C.B.; Sin, L.; Yim, F.H. How a crowded restaurant affects consumers' attribution behavior. *Int. J. Hosp. Manag.* **2002**, *21*, 449–454. [CrossRef]
2. Pons, F.; Laroche, M. Cross-cultural differences in crowd assessment. *J. Bus. Res.* **2007**, *60*, 269–276. [CrossRef]
3. Kim, D.Y.; Wen, L.; Doh, K. Does cultural difference affect customer's response in a crowded restaurant environment? A comparison of American versus Chinese customers. *J. Hosp. Tour. Res.* **2010**, *34*, 103–123. [CrossRef]
4. Xi'an Municipal Tourism Administration. The Report of Tourism Industry in Xi'an. Available online: http://www.at0086.com/XianMTA/ (accessed on 5 May 2016).
5. Jin, Q.; Pearce, P. A Tourism Crowding Management for the Cultural Sites in China. In Proceedings of the 8th Asia Pacific Forum for Graduate Students Research in Tourism Conference, Seoul, Korea, 7–9 July 2009.
6. Gülgün, B.; Türkyılmaz, B.; Bolca, M.; Özen, F. An examination of the effects of land use changes on nature conservation rulings in Çeşme peninsula, Turkey. *Environ. Monit. Assess.* **2009**, *151*, 457–476. [CrossRef] [PubMed]
7. Yagi, C.; Pearce, P.L. The influence of appearance and the number of people viewed on tourists' preferences for seeing other tourists. *J. Sustain. Tour.* **2007**, *15*, 28–43. [CrossRef]
8. Pearce, P.L. *The Social Psychology of Tourist Behaviour: International Series in Experimental Social Psychology*; Elsevier: Amsterdam, The Netherlands, 2013.
9. Kim, C.; Lee, S. Understanding the cultural differences in tourist motivation between Anglo-American and Japanese tourists. *J. Travel Tour. Mark.* **2000**, *9*, 153–170. [CrossRef]
10. Kozak, M. Comparative analysis of tourist motivations by nationality and destinations. *Tour. Manag.* **2002**, *23*, 221–232. [CrossRef]
11. Kim, S.S.; Prideaux, B. Marketing implications arising from a comparative study of international pleasure tourist motivations and other travel-related characteristics of visitors to Korea. *Tour. Manag.* **2005**, *26*, 347–357. [CrossRef]
12. Weaver, D.; Lawton, L. *Tourism Management*; John Wiley & Sons: Sydney, Australia, 2009.
13. Wang, Y.; Davidson, M.C.G. Pre-and post-trip perceptions: An insight into Chinese package holiday market to Australia. *J. Vacat. Mark.* **2010**, *16*, 111–123. [CrossRef]
14. Zhang, L.; Chung, S.S. Assessing the social carrying capacity of diving sites in Mabul Island, Malaysia. *Environ. Manag.* **2015**, *56*, 1467–1477. [CrossRef] [PubMed]
15. Manning, R.E. *Parks and Carrying Capacity: Commons without Tragedy*; Island Press: Washington, DC, USA, 2013.
16. Lankford, S.V.; Inui, Y.; Whittle, A. Exploring social carrying capacity based on perceived levels of crowding: A case study of Hanauma Bay, Hawaii. *Tour. Mar. Environ.* **2008**, *5*, 43–53. [CrossRef]
17. Whittaker, D.; Shelby, B.; Manning, R.; Cole, D.; Haas, G. Capacity reconsidered: Finding consensus and clarifying differences. *J. Park Recreat. Adm.* **2011**, *29*, 1–20.
18. Hammitt, W.E.; Cole, D.N.; Monz, C.A. *Wildland Recreation: Ecology and Management*; John Wiley & Sons: Hoboken, NJ, USA, 2015.

19. Alazaizeh, M.M.; Hallo, J.C.; Backman, S.J.; Norman, W.C.; Vogel, M.A. Crowding standards at Petra Archaeological Park: A comparative study of McKercher's five types of heritage tourists. *J. Herit. Tour.* **2015**, *11*, 364–381. [CrossRef]

20. Newsome, D.; Moore, S.A.; Dowling, R.K. *Natural Area Tourism: Ecology, Impacts and Management*; Channel View Publications: Bristol, UK, 2012.

21. Manning, R.; Lawson, S.; Newman, P.; Laven, D.; Valliere, W. Methodological issues in measuring crowding-related norms in outdoor recreation. *Leisure Sci.* **2002**, *24*, 339–348. [CrossRef]

22. Pearce, P.L. *Tourist Behaviour: Themes and Conceptual Schemes*; Channel View Publications: Bristol, UK, 2005.

23. Bowen, D.; Clarke, J. *Contemporary Tourist Behaviour: Yourself and Others and Tourists*; Cabi: Wallingford, UK, 2009.

24. Woodside, A.G.; Martin, D. *Tourism Management: Analysis, Behaviour and Strategy*; Cabi: Wallingford, UK, 2008.

25. Fleishman, L.; Feitelson, E.; Salomon, I. The role of cultural and demographic diversity in crowding perception: Evidence from nature reserves in Israel. *Tour. Anal.* **2004**, *9*, 23–40. [CrossRef]

26. Lee, G.; Lee, C.K. Cross-cultural comparison of the image of Guam perceived by Korean and Japanese leisure travellers: Importance-performance analysis. *Tour. Manag.* **2009**, *30*, 922–931. [CrossRef]

27. Lee, C.K. A comparative study of Caucasian and Asian visitors to a cultural expo in an Asian setting. *Tour. Manag.* **2000**, *21*, 169–176. [CrossRef]

28. Kim, D.; Lee, C.K.; Sirgy, M.J. Examining the differential impact of human crowding versus spatial crowding on visitor satisfaction at a festival. *J. Travel Tour. Mark.* **2016**, *33*, 293–312. [CrossRef]

29. Gillis, A.R.; Richard, M.A.; Hagan, J. Ethnic susceptibility to crowding: An empirical analysis. *Environ. Behav.* **1989**, *18*, 683–706. [CrossRef]

30. Neuts, B.; Nijkamp, P. Tourist crowding perception and acceptability in cities: An applied modelling study on Bruges. *Anal. Tour. Res.* **2012**, *39*, 2133–2153. [CrossRef]

31. Neuts, B.; Nijkamp, P.; Van Leeuwen, E. Crowding externalities from tourist use of urban space. *Tour. Econ.* **2012**, *18*, 649–670. [CrossRef]

32. Hofstede, G. *Cultural Consequences*; Sage Publications: Thousand Oaks, CA, USA, 2001.

33. Jin, Q.; Pearce, P. Tourist perception of crowding and management approaches at tourism sites in Xi'an. *Asia Pac. J. Tour. Res.* **2011**, *16*, 325–338. [CrossRef]

34. Wong, I.K.A. A multimethod multilevel study of heritage transmission. *J. Travel Res.* **2015**, *54*, 672–685. [CrossRef]

35. Poria, Y.; Butler, R.; Airey, D. The core of heritage tourism. *Ann. Tour. Res.* **2003**, *30*, 238–254. [CrossRef]

36. Frauman, E.; Norman, W.C. Mindfulness as a tool for managing visitors to tourism destinations. *J. Travel Res.* **2004**, *42*, 381–389. [CrossRef]

37. Bell, P.A.; Fisher, J.D.; Baum, A.; Greene, T.E. *Environmental Psychology*; Holt, Rinehart & Winston, Inc.: Philadelphia, PA, USA, 1990.

38. Gurkaynak, M.R. *Human Consequences of Crowding*; Springer Science & Business Media: Berlin, Germany, 2013.

39. Pearce, P.L.; Lee, U. Developing the travel career approach to tourist motivation. *J. Travel Res.* **2005**, *43*, 226–237. [CrossRef]

40. Vaske, J.J.; Donnelly, M.P. Generalizing the encounter-norm-crowding relationship. *Leisure Sci.* **2002**, *24*, 255–269. [CrossRef]

41. Wickham, T.D.; Kerstetter, D.L. The relationship between place attachment and crowding in an event setting. *Event Manag.* **2000**, *6*, 167–174.

42. Kim, S.L.; In, O.N. A Study on the impact of perceived crowding on emotional response and revisit intention. *J. Korea Soc. Comput. Inf.* **2015**, *20*, 141–150. [CrossRef]

43. Vaske, J.J.; Fedler, A.J.; Graefe, A.R. Multiple determinants of satisfaction from a specific waterfowl hunting trip. *Leisure Sci.* **1986**, *8*, 149–166. [CrossRef]

44. Shelby, B.; Vaske, J.J.; Donnelly, M.P. Norms, standards, and natural resources. *Leisure Sci.* **1996**, *18*, 103–123. [CrossRef]

45. Manning, T. Indicators of tourism sustainability. *Tour. Manag.* **1999**, *20*, 179–182.

46. Hammitt, W.E.; Rutlin, W.M. Use encounter standards and curves for achieved privacy in wilderness. *Leisure Sci.* **1995**, *17*, 245–262. [CrossRef]

47. Manning, R.E.; Valliere, W.A.; Wang, B. Crowding norms: Alternative measurement approaches. *Leisure Sci.* **1999**, *21*, 97–115.

48. Mowen, A.J.; Vogelsong, H.G.; Graefe, A.R. Perceived crowding and its relationship to crowd management practices at park and recreation events. *Event Manag.* **2003**, *8*, 63–72. [CrossRef]

49. Coccossis, H.; Mexa, A. *The Challenge of Tourism Carrying Capacity Assessment: Theory and Practice*; Ashgate Publishing Ltd.: Aldershot, UK, 2004.

50. Hensley, R.L.; Sulek, J. Customer satisfaction with waits in multi-stage services. *Manag. Serv. Qual.* **2007**, *17*, 152–173. [CrossRef]

51. Butcher, K.; Heffernan, T. Social regard: A link between waiting for service and service outcomes. *Hosp. Manag.* **2006**, *25*, 34–53. [CrossRef]

52. Pearce, D.G. *Tourist Development*; Longman Scientific & Technical: Essex, UK, 1989.

53. Rassam, G.A.; Hosseini, V. Recreation carrying capacity estimations to support forest park management (case study: Telar Forest Park, Ghaemshahr, Iran). *World Appl. Sci. J.* **2014**, *29*, 421–425.

54. Marion, J.L.; Reid, S.E. Minimizing visitor impacts to protected areas: The efficacy of low impact education programs. *J. Sustain. Tour.* **2007**, *15*, 5–27. [CrossRef]

55. Ram, Y.; Björk, P.; Weidenfeld, A. Authenticity and place attachment of major visitor attractions. *Tour. Manag.* **2016**, *52*, 110–122. [CrossRef]

56. Montaguti, F.; Mingotto, E. Ecotourism in natural parks: An assured sustainable success? Tourist behavior, attractiveness and sustainable development issues in two Italian parks. *Aust. J. Zool.* **2015**, *12*, 99–110. [CrossRef]

57. Patterson, I. Baby boomers and adventure tourism: The importance of marketing the leisure experience. *World Leisure J.* **2002**, *44*, 4–10. [CrossRef]

58. Sayan, S.; Krymkowski, D.H.; Manning, R.E.; Valliere, W.A.; Rovelstad, E.L. Cultural influence on crowding norms in outdoor recreation: A comparative analysis of visitors to national parks in Turkey and the United States. *Environ. Manag.* **2013**, *52*, 493–502. [CrossRef] [PubMed]

59. Vaske, J.J.; Shelby, L.B. Crowding as a descriptive indicator and an evaluative standard: Results from 30 years of research. *Leisure Sci.* **2008**, *30*, 111–126. [CrossRef]

60. Patterson, I. Information sources used by older adults for decision making about tourist and travel destinations. *Int. J. Consumer Stud.* **2007**, *31*, 528–533. [CrossRef]

61. Orams, M.B.; Page, S.J. Designing self-reply questionnaires to survey tourists: Issues and guidelines for researchers. *Anatolia* **2000**, *11*, 125–139. [CrossRef]

62. Child, D. *The Essentials of Factor Analysis*; A&C Black: London, UK, 2006.

63. Nunnally, J.C.; Bernstein, I.H. *Psychometric Theory*; McGraw-Hill: New York, NY, USA, 1994.

64. Smith, S.L.J. *Tourism Analysis: A Handbook*; Longman: Harlow, UK, 1995.

65. Pallant, J. *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS for Windows*; Open University Press: Maidenhead, UK, 2010.

66. OECD. Labor Force Participation Rate. Available online: http://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS?view=map&year=1993 (accessed on 1 June 2016).

67. Doorne, S. Caves, cultures and crowds: Carrying capacity meets consumer sovereignty. *J. Sustain. Tour.* **2000**, *8*, 116–130. [CrossRef]

68. Kim, H.; Woo, E. An examination of missing links between quality of life and tourist motivation. *Tour. Anal.* **2014**, *19*, 629–636. [CrossRef]

69. Klenosky, D.B. The "pull" of tourism destinations: A means-end investigation. *J. Travel Res.* **2002**, *40*, 396–403. [CrossRef]