Scale Development of Non-Smoking Theme Park Visitors' Emotion and Its Connation

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Objectives: To advance consumer emotion research in tourism, it is necessary to develop practical and context-relevant emotion measures. This paper aims to discover the connation of consumer emotion of non-smoking theme park visitors and develops emotion scale and provides theoretical and practical suggestions for theme parks. This paper adopted two studies and combined qualitative and quantitative research methods with Shanghai Disneyland as the research objective. In study one, this paper develops theme parks visitors' emotion scale based on literature review and three focus group interviews. In study two, this paper verifies the scale based on 215 on-site effective questionnaires. The final emotion scale has four dimensions, love（cared, loved, romantic, happiness and warm-hearted）, joy（content, happy, satisfied and joy）, surprise（surprise, exciting, indulged and fantastic）and unpleasantness（anger, sad, disappointed and worried）. This emotion scale can be used as an effective tool to measure theme park's visitor emotion since it considers theme park's character and consumer experience.

Tourism is hedonic consumption, and emotions that bring happiness and joy to visitors are key drivers.[1] Theme park tourism is growing industry contributing to the economic development. In the theme park industry literature, more research focus on visitors' motivations and experience, ignoring visitors' emotions and the impact of emotions on visitors' behavior. In the decision-making process, people have limited information processing capabilities, so emotions play an important role.[2]When researchers study on consumers' experience and emotions, it's necessary to consider the specific context.[3]

Advancing our knowledge of consumer emotions is critical for theme park managers.

Smoking issue in public areas, especially with the use of electronic cigarettes, influences visitors' experience and emotions. Before May 1st 2019, visitors are allowed to smoke in certain places of Disneyland. Since more people are turning to electronic cigarettes, now smoking including electronic cigarettes are fully banned in many public spaces including Disneyland.[4]

This paper aims to fill these literature gaps by provide a better understanding of non-smoking theme park visitors' emotions. Results are based on three focus group interview and 215 valid

questionnaires obtained from onsite survey in Shanghai Disneyland. The results and findings of this pater contribute to theme park literature and to theme park managers' understanding visitors' emotions. This study also manages to include theme park environment.

This paper aims to investigate the connotation and dimensions of theme park visitors' emotions, and build effective measurement methods: (1) integrate existing research results to explore park visitors' emotional connotation; (2) develop a scale to capture the unique range of emotions in theme parks; (3) examine the validity evidence of this new scale.

Experience is a subjective reaction of consumers, which is psychological feeling created by consumers amid full contact with the company. Experience can be a process or a result. Ye divides experience into cognitive experience and emotional experience.[5] Cognitive experience assumes that consumers are rational, which is the satisfaction formed after quality assessment of products and services. Emotional experience includes emotion experience and symbolic experience. Consumers pursue unforgettable experience, enjoyment and sensory pleasure. Enjoyment is the optimal experience. Only when there is mixed and intense pleasure, when the individual feels psychological growth and sense of accomplishment, the pleasure can be turned into enjoyment.

Distinguishing emotion from other words with high similarity such as affection, sentiment, feeling, and mood.[6] The most important difference between emotion and other words is that emotion iscreated by external environmental stimuli, and people often say "I feel...". Emotions are triggered by environmental stimuli, with a subconscious mental evaluation of the stimuli, producing behavioral intentions.[7]The appraisal theory of emotions is frequently used to explain why particular environmental stimuli can trigger certain emotions.[8]

The academic field lacks consensus on the definition of emotions. Researchers can investigate consumers' emotional connotation based on their research context, but they should pay attention to the following points when defining the connotations. First, emotion should include physiological awakening, subjective experience, and behavioral responses.[9] Second, emotion is the emotional response with emotion valence.[10] Third, in the field of consumer behavior, the definition of emotion should take social and cultural constructs into consideration. In the marketing field, most scholars regard consumer emotions as bias and heuristics.[1,11]

Now there are mainly two methods for emotion classification, category orientation and dimension orientation.[3]

Category orientation categorizes emotions into certain limited and independent "basic emotions." This model originates from Darwin's evolution theory in which Darwin proposed that emotions are adaptive responses to the outside world and are preserved in evolution, and each basic emotion has its own physiological mechanism.[12] Different scholars give disparate definitions of basic emotions.[10]Almost all scholars' definition of basic emotions includes the five basic emotions of happiness, grief, anger, fear and disgust.

Contrary to category orientation, dimensional orientation believes that emotions are interrelated. In real life, people generally will not use only one word to describe their emotions, but multiple wordsare often used. The dimensional model regards emotions as a spectrum, a fuzzy continuum where specific emotions are hardly distinguishable.

Pleasure-arousal model and positive-negative circumplex model are frequently used in marketing research to measure consumer emotions.[13]The measurement of pleasure runs from "pleasant" to "unpleasant." Arousal refers to the degree of activation of an individual's physical and psychological alertness. The circumplex model assumes that all emotions have overlapping neurophysiological mechanisms, and that emotions are combinations of varied valence and levels of arousal. Happiness consists of high valence of pleasure and moderate arousal, while fear consists of high arousal and low valence. The dimensional model foregrounds the valence and level of arousal of emotions.

In the research of leisure and tourism, visitor emotion is regarded as the core of hedonic experience, which is the result of visitors' experience and evaluation of the destination.[14]Visitors' emotions shape their experience, and visitors' emotional experience is very subjective, intense and significant.[15] Positive emotional experience can bring good psychological feelings and improve visitor satisfaction and loyalty. Visitors' emotional response is an important determinant of post-consumer behavior.

Until now most scholars' research on the visitor emotion scale focuses on historical sites, leisure travel, and high-end hotels. Most of the researchcopies existing emotion theories, such as Izard's basic emotions, Russel's PAD three-dimensionality and Plutchik's eight basic emotions, ignoring the characteristics of the tourism industry itself.

Pearce believes that happiness is the core of travel experience, which contains enjoyment, integration and motivation.[11] The happiness experienced by visitors is reflected in their positive emotions, such as happiness, interest, satisfaction and love. Voigt et al. put forward two dimensions of visitor emotions, enjoyment (happiness) and education (including personal growth and meaning of life).[16] Their research found that some leisure activities, such as hydro-massage, are purely hedonic experiences, but some leisure activities also have educational meaning. Hosany et al. developed an emotion scale for visitors in tourist destinations, which contains three dimensions: happiness, love and positive surprise.[15]It is pointed out that research on visitor emotions should consider the characteristics of the visitors themselves as well as the characteristics of the destination.

METHODS

This paper adopted two studies and combined qualitative and quantitative research methods with Shanghai Disneyland as the research objective.This paper applies focus group interviews to determine the dimensional framework of theme park emotion scale and on-site survey research to verify scale. The scale is validated by confirmatory factor analysis to provide an effective tool for measuring theme park visitors' emotions.

Establishment of Questionnaire Pool

The development of theme park visitors' emotion scale herein is based on emotion exploration method proposed by Lee.[17]

In the first step, this paperconducted three focus group interviews, with a total of 18 interviewees. All interviewees have visited Shanghai Disneyland in the past 3 months. The purpose of the focus group interviews is to collect the visitors'emotional feelings in Shanghai Disneyland and pave the way for the development of relevant scales. In the focus group interview, the author inquired the interviewees about their emotions when visiting the park, and asked them to use adjectives to describe their feelings. After collecting a large number of emotional description words related to the park, it was found that 30 positive emotional words and 6 negative emotional words were used most frequently.

The second step is to combine the Positive-Negative Emotion Scale, the Pleasure-Arousal Scale, and the Consumer Emotion Scale to compile a candidate list of emotion vocabulary, with a total of 45 emotional words.

In the third step, some words were deleted. 1)Words related to physical conditions, such as tiredness, hunger, etc. 2) Words over-subjective, such as self-confidence. 3) Words with behavioral tendencies, such as hesitant and adventurous. After screening, 36 emotion were collected.

In the fourth step, 20 subjects who had been to Shanghai Disneyland in the past three months were asked to rate these emotion vocabularies and tell how often they felt these emotions in the park. 5 represents highly frequent, 4 represents frequent, 3 represents occasional, 2 represents very few, and 1 represents almost never. Through word frequency analysis, those words with an average use frequency of less than 3 were deleted, leaving 17 words. Finally, 17 words were screened out, which belong to four emotional dimensions: love, happiness, surprise, and unhappiness. The preliminary version of the theme park visitors' emotion scale is shown in Table 1.

Table 1
Questions of Scale

Dimensions	Items	Emotions	Dimensions	Items	Emotions
Love	LV1	cared	Surprise	SP1	surprise
	LV2	loved		SP2	exciting
	LV3	romantic		SP3	indulged
	LV4	happiness		SP4	fantastic
	LV5	warm-hearted			
Happiness	JOY1	content	Unhappiness	UP1	anger
	JOY2	happy		UP2	sad
	JOY3	satisfied		UP3	disappointed
	JOY4	joy		UP4	worried

Scale Verification

In order to verify the emotion scale for theme park visitors, this paper collects data through on-site surveys. The survey was conducted in December 2017. The author and trained assistants interviewed 250 visitors at the entrance of Shanghai Disneyland in three weeks. The 250 completed questionnaires were screened based on the criteria proposed by Devellis.[18] Finally, 215 valid questionnaires were received, with an effective rate of 86%. Then the 215 questionnaires were analyzed by SPSS software. For details of the results, please refer to Table 2. The mean and standard deviation analysis of the questionnaires reveals that the results have no abnormal data.

Table 2
Social-demographic Characters of Sampling Participants

Questions	Answers	Frequencies	Percentage
How many times have you ever visited Shanghai Disneyland?	One to two times	186	86.5%
	Three to four times	20	9.3%
	Five times and more	9	4.2%
Who are travelling with you during the Disney trip?	Alone	6	2.8%
	Couple	42	19.5%
	With friends	89	41.4%
	Family	78	36.3%
Gender	Female	128	59.5%
	Male	87	40.5%
Age	15-24	77	35.8%
	25-34	108	50.2%
	35-44	22	10.2%
	45-54	8	3.7%
	Above 55	0	0
Education	High school	18	8.4
	Bachelor	182	84.7

	Graduate		15	7
Monthly Income	0-5000 RMB		65	30.2
	5000-9999 RMB		95	44.2
	10000-19999 RMB		31	14.4
	Above 20000 RMB		24	11.2

Overall Degree of Fitting

Confirmatory factor analysis was performed on the emotion scale based on Amos software.

The model fitting results are shown in Table 3, and all the standards meet the requirements.

Table 3
Results of Confirmatory Factor Analysis

	χ^2	df	χ^2/d.f.	RMSEA	GFI	AGFI	NFI	IFI	CFI
Results	301.4	113	2.67	0.092	0.914	0.902	0.907	0.921	0.92
Standards			<3	<0.1	>0.9	>0.9	>0.9	>0.9	>0.9

Reliability and Validity Analysis

The AVE values of love, happiness, surprise, and unpleasantness all exceed the standard of 0.5, indicating that the concept of emotion has good convergence validity. The correlation coefficient of each dimension is between 0.33 and 0.70, which is smaller than the root mean square of AVE, indicating that the concept of emotion has good discrimination validity. The composite reliability indicators of the four dimensions are all above 0.8. Please see Table 4 for specific results.

Table 4
Results of Reliability and Validity Analysis

Dimensions	Items	Standardized loadings	CR	AVE	Square of AVE
Love	LV1	0.74	0.896	0.634	0.79
	LV2	0.80			
	LV3	0.81			
	LV4	0.89			
	LV5	0.73			
Joy	JOY1	0.89	0.896	0.684	0.83
	JOY2	0.88			
	JOY3	0.87			
	JOY4	0.74			
Surprise	SP1	0.83	0.903	0.702	0.84
	SP2	0.87			
	SP3	0.91			
	SP4	0.73			

Unpleasant	UP1	0.71	0.842	0.576	0.76
	UP2	0.92			
	UP3	0.67			
	UP4	0.71			

DISCUSSIONS

This empirical study has great contribution to understand theme park visitors' emotions. A holistic view of consumer emotions in the theme park industry is also enhanced. The present study may help managers from theme park industry to apply emotion-focused marketing strategies. Disneyland is famous for its high-quality services, but no matter how hard the park operators work, visitors' negative emotions are unavoidable. During the interview, many visitors mentioned that Shanghai Disneyland is crowded and make people feel frustrated. Crowding is the degree of visitors' perception towards the number of people around, which can bring negative emotions to visitors. However, the friendly speech, appropriate expression, and timely handling of problems by the staff in the park offset the negative emotions.

In the service recovery situation, it is more important to calm consumers' emotions than remedy services.[19] Emotions help consumers adjust the pressure they feel when complaining about services in complaints. If consumer emotions are well controlled, even if they complain, they are still loyal consumers and will not leave. It is suggested that when dealing with consumer complaints, companies should train their employees' ability to calm consumers' emotions.

Secondly, under specific consumption scenarios, consumers pursue different core emotions. Faullent et al. believe that in some adventure tourism, happiness and thrills are the core emotions pursued by consumers.[20] Companies providing mountaineering services should reasonably know about the consumers' mountaineering proficiency and give them certain degree of thrills, but should avoid too difficult items which will scare visitors. In some experiences such as kayaking, consumers will feel some negative emotions (such as fear, horror, etc.), but they will show high satisfaction, because these emotions are exactly what they expect. For another example, viewers hope to experience intense emotions nonexistent in daily life, rather than common emotions in daily life such as calmness, so calmness as a positive emotion is also negatively correlated with satisfaction. Conversely, if consumers do not expect to experience emotions, but experience intense emotions in reality, regardless of positive or negative emotions, it will reduce satisfaction. This scale instructs theme park operators to pay attention to certain part of visitors' emotions. Just making visitors happy is insufficient. The ultimate goal of park operators is to create surprises for visitors and make them feel love and warmth.

CONCLUSIONS

This paper advances current literature by research on consumer emotions based on specific context and provides insights on tobacco regulation on public areas.[21] In the context of non-smoking theme park, this paper has developed and verified theme park visitors' emotion scale, which contains four dimensions: love (cared, feeling loved, romance, happiness, and warmth), happiness (joy, pleasure, satisfaction, and delight), surprise (astonishment, excited, fascinated and dreamy) and displeasure (angry, frustration, disappointment and worry). This scale can be applied to related tourism, entertainment, and leisure industries after appropriate adjustments.

The ultimate goal in scholars' emotion studies is to understand consumer behaviors. Emotions affect satisfaction and in turn affect consumer behaviors, including behaviors such as word-of-mouth communication and repeated purchases. In the research context of theme park industry, understanding visitors'

emotions has important implications for in-depth understanding of visitors' behavioral intensions.[1] Non-smokers generally prefer smoking bans within theme parks while smokers prefer in oppositions. Overall, it was found that all visitors prefer a non-smoking them park environment.

Although the results of the study help solving many existing problems in consumer emotions context, some limitations should be mentioned and future research could aim at them. This study collected the data when visitors finished their days in Disneyland. But the visitors' emotions during the day change. It is necessary to view consumers' emotions from a dynamic perspective. Consumers' emotions at a certain stage will affect their expectations towards service of the next stage, and positive emotions will bring more positive events. Even if there is no change in the actual service, consumers' perceived service quality will still change. In this paper, the interviewees express their emotions through recalling. This method may fail to capture the visitors' emotional changes during the tour. In the future, experience sampling method can be taken to capture visitors' emotions during the tour. That is, by repeated sampling, to capture the cognition, feelings and emotions of the interviewees during the experience.

Conflicts of Internet Disclosure Statement

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