

A study of experience expectations of museum visitors

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ABSTRACT

Visitor studies including studies of experience and expectations of visitors are important for museums in terms of management and development, however few studies have been designed to explore the components of experience expectations for museum visitors. This research tried to analyze the experience expectations of museum visitors. Using content analysis of diaries written by museum visitors, a questionnaire of experience expectations of museum visitors was developed. After a survey with 425 valid returns, factor analysis was used to extract 5 types of experience expectations, which included: easiness and fun, cultural entertainment, personal identification, historical reminiscences, and escapism. Moreover, this research analyzed visitors' preferences for visiting museums and their demographic factors among different types of experience expectations. Finally, some related discussion and suggestions were proposed.

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1. Introduction

In modern times, museums serve the functions of collection, research and exhibition, as well as education and recreation. They have gradually acquired visitor-based roles instead of museum-based roles. Thus, the need for visitor studies has emerged (Weil, 2000). According to the Committee of Audience Research and Evaluation in the American Association of Museums, visitor studies use a systematic approach, including knowledge related to on-site and potential visitors, which is used to assist museums with planning and executing public related activities (CARE, 2009). Housen (1987) suggested three dimensions to acquire visitor knowledge: to learn visitors' demographic data, attitudinal information, and developmental situations and varied factors. Hood (1983) urged museum professionals to focus on the psychographic characteristics of both current and potential visitors and particularly their values, attitudes, perceptions, interests, expectations, satisfactions.

In studies on visitor attitude, Falk and Dierking (1992) proposed an interactive experience model, and suggested that visitor experience is not necessarily passive. In the physical environment of museums (the physical context), it is influenced both by personal context and social context, which results in visitor experience. Moreover, Falk and Dierking suggested that visitor experience is not a static state, but is a dynamic process including experiences before, during and after the visit. Therefore, in order to probe visitor

experience, it is necessary to probe visitor expectations before the visit. During the visit, interaction among the three contexts could be studied, and after the visit, the experience could be examined according to the visitors' memories.

The interactive experience model proposed by Falk and Dierking (1992) emphasizes that experience is the process (before, during and after the event), which results in interaction with influences of different contexts. However, they did not clearly define "experience" which usually includes visitors' opinions of functions (e.g., food and transportation), sensory stimulation (e.g., attraction of buildings), and emotional description (e.g., bored or interesting). In marketing fields, after Schmitt (1999) proposed the term "experiential marketing", management scholars have started discussions about the content of experience. They have a common consensus: experience usually includes various elements, and it provides an emotionally, physically, intellectually and spiritually mixed feeling (Shaw & Ivens, 2002).

It is important to clearly define visitor experience. Although a clear definition might narrow visitor experience, the operation can become easier; thus, measurement tools can be developed and modified. In addition, regarding the interactive experience model of Falk and Dierking (1992), a measurement of visitor experience or visitors' expectations for experience will enhance the study on the relationship between it and the three contexts. Through this, managerial practices of museums can be enhanced. Therefore, this study designed a questionnaire on museum visitor experience using a qualitative approach according to the definition of experience by Shaw and Ivens (2002). It further analyzed museum visitors on types of experience expectations by taking measurements in

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advance, and compared the relationship among different expectations and demographic factors.

2. Literature review

Falk (1998) acknowledges that human behavior, including museum-going, is a complex subject and that measurements of demographic categories alone cannot offer any insights into understanding visitors and particularly non-visitors. Therefore, Liu (2008) suggested that in order to offer exhibitions and services suitable for visitors, museums have to conduct visitor studies and systematically acquire knowledge related to visitors, and apply it to planning and decision-making. Liu also divided museum visitor studies into three categories: 1) visitor evaluation studies: emphasizing the purpose of application, with the evaluation of museums, activities and exhibitions conducted according to the results; 2) visitor market studies: collecting visitors' reactions and probing into visitors' views and emotions; 3) exploratory studies of theoretical validation: precise academic research upon different subjects, such as psychology and sociology.

This study falls between the second and third categories of visitor study, and probes into content of museum experience expectations of visitors from the perspectives of marketing, psychology and cultural sociology. The experience expectation of visitors refers to the museum-visiting experience expected by visitors. It is similar to the visiting experience; however, visitors' expectations are investigated in advance. Literatures on visitor study are elaborated below. Trauer (2006) suggested that tourism involves an experiential and emotional nature. Many tourist studies have probed the causes and results of tourist experiences (Cohen, 2008; Weaver, Weber, & McCleary, 2007). Tourist experience in these studies is similar to visitor experience in museum studies. Thus, related literature will also be discussed.

Many studies have indicated that museum visitors are diverse, and different visitors usually visit different museums at different times (Falk & Dierking, 1992; Hooper-Greenhill, 2006). For instance, during weekdays, student groups are the main visitors, but on holidays, small groups such as parents with children are the most common. However, Housen (1987) indicated that visitors' knowledge could still be obtained from three dimensions, including visitors' demographic data, attitudinal information, as well as their developmental situations. It is difficult to investigate visitors' development, since this entails investigating their logic and degree of comprehension. Visitors' demographic attributes include gender, age and educational level, and are traditional investigation items. However, Housen suggested further studying visitors' attitude.

Attitude means what people prefer, be it a thing, activity or character (Robbins & Judge, 2007), and can be divided into pre-attitude and post-attitude. However, most studies on attitude have probed into the relationship between attitude and action. In other words, pre-attitude is the main concern (post-attitude is usually replaced by satisfaction). Moreover, attitude includes three dimensions: cognition, affection and action (Aronson, Wilson, & Akert, 2007). Attitude measurement related to action, such as the possibility to visit museums, can best predict the relation between attitude and action. However, it is also the most restricted, since it measures attitude by action. Hood (1983) identified the following six criteria of a desirable leisure experience: (1). being with people or social interaction; (2). doing something worthwhile; (3). feeling comfortable and at ease in one's surroundings; (4). having a challenge of new experiences; (5). having an opportunity to learn; (6). participating actively.

Falk and Dierking (1992) indicated that museum visitors' pre-attitude toward the visiting experience is influenced by visitor expectations, and is a part of personal context. Since visitor

expectations significantly influence the visiting experience, and visitors' post-memory is usually related to pre-expectations (Loomis, 1993), it is important to probe into visitor expectations. Although Falk and Dierking proposed many factors of visitor expectation, including prior experience, information sources, types of museums and companions, all of which influence visitor expectations, they did not suggest the content of visitor expectations. According to their main statement, visitor expectations should be the visitors' expectations for the visiting experience. However, Falk and Dierking did not define the content of the visiting experience and thus the assumption above cannot be verified. The content or types of visitor experience expectations remain to be defined.

Although Falk and Dierking (1992) did not explain the content of visitors' experiences and visitors' experience expectations, they proposed an interactive experience model regarding factors of the experience. They suggested that visitor experience is the result of the interaction among personal, social and environmental contexts. The model has been cited by many studies and has led to further studies on museum visitors' interactive experiences. For instance, regarding the usage of theatre in museums, Liu (2008) probed into the interaction between visitors and museums, as well as the effect on visitors' learning. She suggested that museums are a place of exchange for telling and listening to stories. Thus, in a physical environment, guide tour or exhibition, there is usually a form of theatre in which visitors can participate. Visitors' participation could enhance their learning. Participation is important, and when visiting museums, visitors could be prepared for active participation. For instance, before the visit, they could absorb information and prepare notebooks. They could also wear comfortable clothes and shoes when visiting. Relaxation is particularly important for visitors who rarely visit museums, therefore, more participation during their visit would enrich their experience (Liu, 2008).

Sheng, Shen, and Chen (2008) treated museum visits as historic and artistic trips. Hertzman, Anderson, and Rowley (2008) indicated that with development of multimedia techniques, the boundaries between different museum trips, such as historic museums, historic parks and life museums have become insignificant. However, they revealed the effect of edutainment, which allow visitors to have active and passive experiences.

If museum visits are regarded as a kind of trip, the tourist experience in a tourism study will then be the same as the visitor experience in a museum study. Research on tourist experiences has been developed during the last fifty years, according to Uriely (2005), and during this time there have been four shifts. At the beginning, most studies indicated that a tourist experience is a unique experience different from daily life. The first shift that occurred emphasized the tourist experience as part of the daily consumption experience. The second shift indicated pluralizing the tourist experience; in other words, different tourists will have different experiences. In the third shift, that of the role of subjectivity suggested by Uriely, researchers started recognizing that tourists' active interpretation of situations will influence their experience. Finally, the fourth was called the shift of relative interpretations. Researchers began believing that experience is a person's interpretation of situations in the culture and times visited. The perspective is extremely similar to the interactive experience model proposed by Falk and Dierking (1992).

From the perspective of relative interpretation, Larsen and Mossberg (2007) suggested that experience is a kind of subjective and personalized process, which is related to society, culture and even different systems. Since visitors or tourists are diverse in various types of trips, including museum visits (Wang, 2008), the content of the tourist experience also changes. Therefore, Larsen and Mossberg suggested that study on the tourist experience should be have flexible and multiple perspectives, such as inter-discipline studies upon marketing, psychology, culture and sociology. O'Dell

(2007) agreed with the view from the perspective of cultural sociology, and indicated that in postmodern society, tourists are no longer pure receivers, observers or interpreters; instead, they are active experientialists and even meaningful creators and actors. Thus, study on visitors or tourists should focus on “being there” and be close to visitors or tourists instead of observing from a distance.

Regarding tourists’ active and passive experiences, Joseph and Gilmore (1998) suggested that both experiences are possible. According to tourists’ involvement, experience was divided into educational or escapist active participation. The tourists actively participated and were involved in situations, and they created varied experiences in the process. Passive tourist experiences includes esthetic or entertainment experience. These tourists have experiences using the varied esthetic or entertaining activities “provided”. However, Joseph and Gilmore indicated that active and passive experiences could co-exist. In other words, there is interaction between tourists and various systems. When tourists accept materials “provided”, they can actively participate in and form the experience during the visit. Thus, the tourists would have positive experiences.

In addition to O’Dell (2007), Borrie and Roggenbuck (2001), Larsen (2007) and Loomis (1993) also proposed a multi-stage experience model similar to the view of Falk and Dierking (1992). For instance, from the perspective of psychology, Larsen suggested that the tourist experience is not simply the feeling during the trip; instead, it is the accumulated psychological phenomenon, including mutual influences of the three stages. According to Larsen, tourists tend to expect possible events during the process because of planning in advance. It will influence the actual feelings and memories during and after the visit. Noticeably, Larsen emphasized that tourists’ memories will change the expectation for the next visit, creating a circular pattern. The points are mentioned but not emphasized in the research of Falk and Dierking.

Although Larsen (2007), and Falk and Dierking (1992) indicated that the expectations of tourists or visitors for experience is critical, they did not clarify the content of the experience, or indicate if they could extract common experience characteristics in multiple visitor experiences. The point is rarely mentioned in studies on museum visitors. However, without distinguishing any common characteristics of experience, it is difficult for related research to measure visitors’ expectations for experience, and they cannot perform a proper analysis. For instance, assuming that expectation A influences the actual experience. It is suggested (according to analysis) that expectation B and expectation A are the same type; otherwise, it is difficult to apply the findings to the relationship between other expectations and actual experiences. Thus, according to the experience definition of Shaw and Ivens (2002), this study designed a questionnaire by collecting qualitative data of museum visitor experiences. By investigating in advance, the researcher analyzed the different types of museum visitor expectations and conducted correlation comparison.

3. Research method

According to Chiou, Wan, and Lee (2008), and Larsen (2007), tourists’ expectations for experience are usually based on the interaction between tourists and trips or visiting systems, including reading brochures in advance, virtual experiences on the Internet or past tourism and visiting experiences. Using museum visitors’ past visiting experiences as texts, this study extracted the themes in an interactive record between visitors and visiting systems for content analysis, in order to design a questionnaire on museum visitor experiences. By investigating before the visit, and using factor analysis, different types of visitor experience expectations were developed (see Fig. 1).

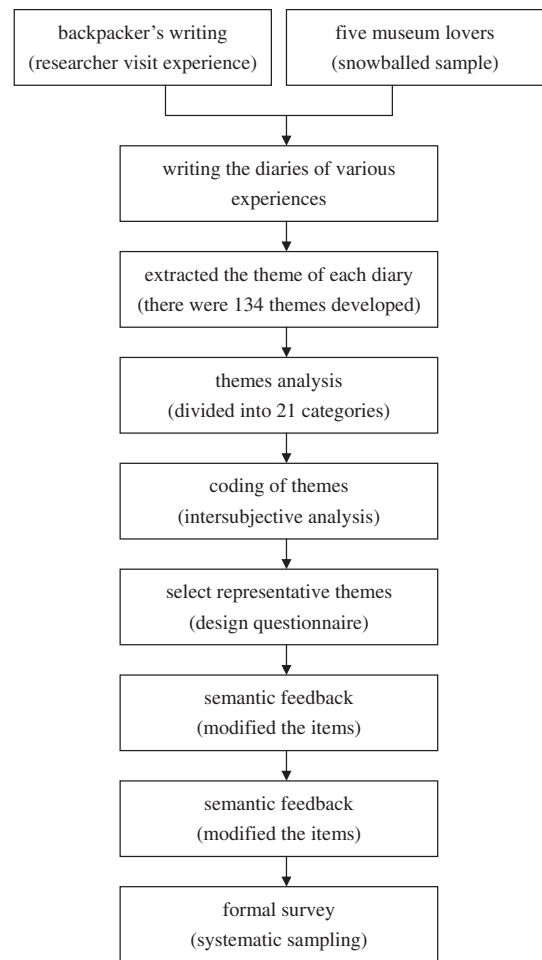


Fig. 1. Research method.

Regarding the questionnaire design, using the factor “being there” suggested by O’Dell (2007), the researcher visited five museums, including Taiwan Museum, The Museum of Drinking Water, National Museum of History, National Taiwan Science Education Center and Miniatures Museum of Taiwan, and wrote a museum diary using a backpacker’s writing style. These five museums were selected based on Burcaw (1997), who suggested three types of museum, including museums that collect or exhibit artistic works, museums that collect or exhibit human historical relics, and museums related to science and technology. After designing the questionnaire, this study would investigate visitors to these three types of museum. Therefore, the researcher visited the museums, recorded and designed the questionnaire by selecting a museum of artistic works (Miniatures Museum of Taiwan), museums of historical relics (Taiwan Museum and National Museum of History) and museums of science and technology (The Museum of Drinking Water and National Taiwan Science Education Center).

After writing the museum diary, this study invited five museum lovers to visit different museums either independently or with companions and write diaries. Snowballed sampling was adopted for the selection of subjects. This type of sampling was commonly used in early or exploratory researches. Among the samples, if there were a specific group that did not frequently interact with the external world, that sampling would be appropriate. This study first invited a Guzheng (Chinese zither) teacher who frequently visited museums to participate in and recommend three suitable subjects from different industries, who often visited museums. Thus, the

Table 1
Formative examples of items in the visitor experience questionnaire.

Categories	Related to culture or entertainment known by people	Coders			Scores of interceder agreement
		A	B	C	
Themes	1. Combine...Behind the Scenes of movies	×	○	○	0
	2. ...familiar name...the beauty resembles their gorgeous faces...	○	★	○	1
	3. Connect with the background of the story	★	○	★	1
	4. The fairy tales are displayed in this area...story, ...can be reflected.	★	★	★	1

Description:

1. ○ indicates agreement, × indicates disagreement, ★ indicates agreement and the most representative theme.

2. When all coders agree, interceder agreement is 1; otherwise, it will be 0.

3. Combine the third and fourth sentences of the most representative theme and names of the category into item 3 "When visiting the museum, I expect to experience familiar culture or entertainment, such as visiting children's world or hearing daily stories."

selection would meet the phenomenon of multiple museum visitors. The researcher then confirmed the candidates' intention by phone. In order to avoid homogeneity among friends, one candidate was invited upon each recommendation. The participants were then invited to recommend three other candidates. After repeating the method four times, four other participants were invited, including one graduate school student who had won a literature award in school, an assistant in a design company, a clerk in a tourism agency and an employee of a Japanese dessert company.

Besides following the above backpacker writing style, this study also invited participants (including the researcher) to write their various experiences during the visit as events in separate paragraphs. They were asked to describe each event plus their emotional, physical, intellectual and spiritual changes, including varied kinds of feelings, actions, thoughts or interactions and connections with others. For instance, the graduate school student wrote the following event:

The appearance of the building is a baroque style: there are four elegant and delicate big stone pillars standing out of the gate and a unique dome that can be recognized from a distance. With specially modeled streetlights at the entrance and a heavy steel door, the museum harmonizes with the classic old locomotive engine, gun platform and monumental archway in the park nearby. (Taiwan Museum)

After finishing writing the diaries, this study conducted content analysis on them. First, the researcher extracted the theme of each diary, collecting data with similar thoughts or feelings and expressing them by complete sentences. Thus, an event might include one or several themes. When different themes were similar, the researcher would only keep one of them. In total, there were 134 themes developed. According to the similarity degree, the themes were divided into 21 categories.

This study invited three visitors who were familiar with content analysis, frequently visited museums and had related books published, including a university professor, a writer and a member who had held a membership of one resort for more than ten years, to check the propriety of categorization and naming. According to the intersubjective principle, they assisted with coding of themes. After the description of definitions and coding rules, the researcher invited the three visitors to indicate their agreement with the categorization and naming of the categories and themes under the categories. After the coding, the researcher obtained an interceder agreement of 0.8 and further acquired a coding reliability of 0.92. It demonstrated that the three coders shared a similar view regarding the categorization, naming and classification of themes.

In addition, this study invited three coders to select 0–2 representative themes among those in the categories agreed according to the descriptions of the categories. The researcher selected the representative themes agreed on by at least two coders and combined the meanings of the categories to design 21 items of

a Likert visitor experience questionnaire. Subsequently, ten university students and two doctoral students read the first draft of the questionnaire and conducted semantic feedback. They modified the items with unclear meanings in order to enhance the validity of the questionnaire. Formative examples of items of the visitor experience questionnaire are shown in Table 1.

Besides a survey on the expectations for visitor experience, this study also inquired about the participants' demographic data, including gender, age, educational level, marital status and personal monthly income. The first three items are common data in surveys on museum visitors (Housen, 1987). Marital status was included because parents and children are usually museum visitors during holidays, and it also reflects a person's family life cycle. Thus, this study could probe the relationship between the family life cycle and the experience expectations of visitors. Personal monthly income was included based on Falk and Dierking (1992), who suggested that personal economic status will influence visitors' museum-visiting behavior. Therefore, this variable was included to compare the relationship between different economic status (monthly income) and visiting experience expectations. The complete questionnaire is shown in the appendix. However, items related to visitor experience have been changed into items of experience expectations of visitors.

After finishing the questionnaire design, this study started a formal survey. In order to include three types of museums as indicated by Burcaw (1997) and avoid presenting characteristics of

Table 2
Demographic distribution of samples.

Demographic variables		Number of samples	Percentage
Gender	Male	192	45.18
	Female	233	54.82
Marital status	Unmarried/single	238	56
	Married	187	44
Age	Below (including) 19 years old	70	16.47
	20–29 years old	139	32.71
	30–39 years old	115	27.06
	40–49 years old	77	18.12
	50–59 years old	21	4.94
	Above (including) 60 years old	3	0.70
Educational level	Below (including) junior high school	38	8.94
	Senior high school (vocational school)	99	23.29
	College/university	246	57.88
	Above (including) graduate school	42	9.88
Personal monthly income	Below (including) NTD 30,000	215	50.59
	NTD 30,001–50,000	136	32
	NTD 50,001–70,000	46	10.82
	Above (including) NTD 70,001	28	6.59

Table 3
Factor analysis and reliability test results of experience expectation.

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1. When visiting the museums, I expect to have positive life feelings, such as recognizing passion or people's serious attitudes.	0.684	0.278	0.341	0.321	0.311
2. When visiting the museums, I expect to experience physical objects with local cultural characteristics and have varied thoughts.	0.549	0.659	0.246	0.455	0.144
3. When visiting the museums, I expect to experience familiar cultures or entertainment, such as visiting a children's world or hearing daily stories.	0.440	0.749	0.340	0.387	0.387
4. When visiting the museums, I expect to be reminded of some experiences related to "myself".	0.321	0.630	0.246	0.516	0.262
5. When visiting the museums, I expect to find some interesting contrast and change.	0.739	0.189	0.327	0.477	0.441
6. When visiting the museums, I expect to be relaxed.	0.820	0.187	0.217	0.267	0.304
7. When visiting the museums, I expect to perceive local characteristics or exotic cultures.	0.775	0.281	0.168	0.260	0.362
8. When visiting the museums, I expect to be close to the "legend" in my mind or see the legendary character and scene.	0.384	0.297	0.268	0.806	0.255
9. When visiting the museums, I expect to experience some historic content or feelings.	0.516	0.215	0.255	0.799	0.302
10. When visiting the museums, I expect to have a dreamy experience.	0.395	0.337	0.354	0.298	0.822
11. When visiting the museums, I expect to have hope or vision.	0.357	0.371	0.270	0.293	0.810
12. When visiting the museums, I expect to collect many meaningful souvenirs and keep the memories.	0.263	0.473	0.602	0.469	0.502
13. When visiting the museums, I expect to have a rich shopping feeling, such as having fun, food and shopping.	0.084	0.687	0.388	0.090	0.372
14. When visiting the museums, I expect to see strange people and things.	0.250	0.659	0.524	0.231	0.437
15. When visiting the museums, I expect to be identified, such as having companions with similar interests.	0.393	0.205	0.786	0.142	0.336
16. When visiting the museums, I expect to be close to core characters related to the subjects, such as having conversations or taking pictures with the main character after watching the performance.	0.201	0.398	0.806	0.438	0.317
17. When visiting the museums, I expect to have a consistent experience, such as a hot spring museum with hot spring health food.	0.176	0.535	0.661	0.321	0.153
18. When visiting the museums, I expect to have mournful and even pitiful experiences, such as visiting the 921 Earthquake Museum of Taiwan.	0.003	0.298	0.278	0.560	0.207
Eigenvalue	7.337	1.945	1.259	1.026	1.021
Accumulated variance explained	0.349	0.442	0.502	0.551	0.600
Cronbach α	0.81	0.75	0.78	0.63	0.75
Mean of factor	4.264	3.834	3.909	3.617	3.912
Standard deviation of factor	0.550	0.691	0.696	0.735	0.781

Description:

- Factor 1: easiness and fun.
- Factor 2: cultural entertainment.
- Factor 3: personal identification.
- Factor 4: historical reminiscences.
- Factor 5: escapism.

visitors in only one area, this study selected four museums with different characteristics in northern, central, southern and eastern Taiwan using itineraries recommended on the Taiwan cultural trip webpage of the Tourism Bureau, Ministry of Transportation & Communication (Tourism Bureau, Ministry of Transportation & Communications, 2009). The museums included the National Palace Museum in Taipei (historical relics; itinerary A of a two-day trip in Taipei), the Wood Sculpture Museum in Miaoli (artistic works; itinerary of a two-day wood sculpture trip in Sanyi), the National Science and Technology Museum in Kaohsiung (science and technology; itinerary of a two-day cultural and historic relic trip in Kaohsiung) and the National Museum of Prehistory in Taitung (science and technology; itinerary of a two-trip aboriginal trip in Hualien and Taitung). On two weekends and two weekdays, with two or three people in a group, systematic sampling was conducted. One questionnaire was distributed to every fifteenth visitor from the opening to the closing time (apart from food and rest time) of the museums. Small gifts were provided to encourage participation. Since Yeh and Lawrence (1996) suggested that a sample size of factor analysis above 200 could significantly enhance reliability, this

study aimed to retrieve 400 valid questionnaires (100 questionnaires for each museum). In total, there were 425 valid samples.

4. Research results

This study reorganized the demographic variables of the participants with returned questionnaires, as shown in Table 2. The participants are mostly unmarried female visitors aged 20–40 years old. Most of the participants are graduated from universities or colleges and have personal monthly incomes below NTD 50,000.

A discrimination test was conducted according to the items of the experience expectation questionnaire, and t-test was conducted on the first 1/4 groups with higher scores and the latter 1/4 groups with lower scores in each item. If there is no significant difference, the discrimination power of the item is insignificant and the item would be eliminated. Items 11 and 15 are finally eliminated. In addition, factor analysis was conducted on the other 19 items of experience expectation in order to have maximum explanation of the total variance by the least common factors. Five latent factors with eigenvalue > 1 were extracted. The relationship between the items

Table 4
Analysis of experience expectation and preference for visiting.

	Easiness and fun	Cultural entertainment	Personal identification	Historical reminiscences	Escapism
A Prefer visiting museums	4.364	3.872	3.981	3.819	3.985
B Not prefer visiting museums	3.977	3.817	3.859	3.091	3.853
Test result	A > B***	A = B	A = B	A > B***	A = B

***p-Value < 0.001.

Table 5
One-way ANOVA of experience expectation and gender.

	Easiness and fun	Cultural entertainment	Personal identification	Historical reminiscences	Escapism
A Male	4.173	3.723	3.840	3.566	3.844
B Female	4.338	3.926	3.967	3.660	3.968
Test result	A < B**	A < B**	A = B	A = B	A = B

**p-Value < 0.01.

and factors was determined using varimax rotation. According to suggestion of Hair, Anderson, Tatham, and Black, (1998), when one item reveals a highest factor loading above 0.45, the item will be allocated in the factor. However, when the item is among different factors and the gap of factor loading is less than 0.1, the gap of the item in different factors is insignificant. The item should thus be eliminated. In total, five items were eliminated. 18 items were kept, and they were allocated to five factors.

After extracting the factors, based on the items with higher factor loading in different factors, this study named the factors. For instance, factor 3 was based on item 18 “When visiting the museums, I expect to be identified, such as having companions of similar interests” and Item 19 “When visiting the museums, I expect to be close to the core characters related to the subjects, such as having conversations or taking pictures with the main character after watching the performance”. Therefore, factor 3 was named “personal identification”. Other factors were named “easiness and fun”, “cultural entertainment”, “historical reminiscence” and “escapism”. The accumulated variance of the factor was 0.6. The factor analysis result is shown in Table 3.

Regarding reliability test of factors (see Table 3), this study examined internal consistency using Cronbach α . The α of easiness and fun was 0.81, cultural entertainment was 0.75, personal identification was 0.78, historical reminiscence was 0.63 and escapism was 0.75. Since α values are approximate to or above 0.7, the questionnaire revealed a certain degree of reliability (Cuieford, 1965; Nunnally, 1978).

Besides using factor analysis to develop the different types of museum experience expectations, the researcher also compared museum-visiting preferences with demographic data of the participants in the different types. The questionnaire asked the participants about their preferences for visiting museums and conducted One-way ANOVA on experience expectations. The results are shown in Table 4. Experience expectations and the participants' demographic factors were compared using One-way ANOVA on gender and marital status. The results are shown in Tables 5 and 6. The correlation analysis result of different types of experience expectations and participants' age, educational level and monthly income are shown in Table 7. Lastly, the visitors' experience expectations were compared, as shown in Table 8.

5. Conclusions and suggestions

5.1. Conclusions

Experience is a kind of mixed feeling including emotional and spiritual factors (Shaw & Ivens, 2002). A person's expectation for

experience is dynamic, with influences from varied factors (Chiou et al., 2008; Larsen, 2007). Therefore, it is not easy to probe into museum visitors' experience expectations. According to Larsen (2007), this study assumed that visitors' pleasant experiences will result in the following expectations. Based on visitors' text record of pleasant experiences of visiting museums, using content analysis, the researcher designed items to measure the visitor experience and analyze visitors' expectations by investigating in advance. Through factor analysis, five types of visitor experience expectations were developed: easiness and fun, cultural entertainment, personal identification, historical reminiscence and escapism. In addition, the factor analysis results in Table 3 demonstrate that among the five kinds of experience, the mean of expectation for easiness and fun is the highest and variance is the lowest. It shows that when visiting museums, most visitors highly expect an experience of easiness and fun.

In addition, this study compared the relationships among different types of experience expectations, different museum visitors, visitors' visiting preferences and visitors' demographic factors. The results are shown from Tables 4–8. It demonstrated that visitors who enjoy visiting museums usually highly expect easiness and fun and historical reminiscences (Table 4). The reason is that based on their impressions or past experiences, museums could satisfy their expectations. The phenomenon is consistent with the statement of Weil (2000). In modern museums, besides traditional collections and exhibitions that create historical reminiscences, the function is expanded to dimensions such as recreation, which meet the expectation of easiness and fun.

Different kinds of people tend to expect experiences of easiness and fun and historical reminiscences. Tables 5–7 indicate that females with a higher educational level usually expect a museum-visiting experience of easiness and fun; older and married participants with higher incomes often expect historical reminiscences. Since age and marital status reflects a person's family life cycle (Hsieh, 2003), it can be inferred that when a visitor's family life is in a later period, there will be a higher expectation of visiting experiences with historical reminiscences. In addition, a comparison between demographic factors and experience expectations supports the view of Falk and Dierking (1992). Visitor expectation is part of personal context, and is influenced by other personal factors, such as educational level, as well as social context, such as family life cycle. Wilkening and Chung (2009) emphasize that museum visitor as they do at different stages of their lives will have different needs and perceptions.

Table 8 presents the possible significant differences of experience expectations of museum visitors with different characteristics. The finding demonstrates that the National Palace Museum visitors'

Table 6
One-way ANOVA of experience expectation and marital state.

	Easiness and fun	Cultural entertainment	Personal identification	Historical reminiscences	Escapism
A Unmarried/single	4.272	3.882	3.936	3.485	3.985
B Married	4.253	3.773	3.876	3.786	3.818
Test result	A = B	A = B	A = B	A < B***	A > B*

*p-Value < 0.05; ***p-value < 0.001.

Table 7

Correlation analysis of experience expectation, age, educational level and personal monthly income.

	Age	Educational level	Personal monthly income
Easiness and fun	-0.042	0.136**	0.051
Cultural entertainment	-1.105*	-0.075	-0.149**
Personal identification	-0.087	-0.016	-0.056
Historical reminiscences	0.163***	-0.010	0.112*
Escapism	-0.101*	0.023	-0.101*

*p-Value < 0.05; **p-value < 0.01; ***p-value < 0.001.

expectations for cultural entertainment are significantly lower than visitor expectations of other museums. It reflects that visitors will visit different museums according to their different expectations and cognition of museums (Falk & Dierking, 1992; Hooper-Greenhill, 2006). Museum visitors' selection in advance is related to personal context. For instance, museum visitors who visit historical relics usually do not care about experiencing cultural entertainment. Younger participants with lower incomes tend to expect cultural entertainment (Table 7), and thus, they are less likely to visit museums of historical relics such as the National Palace Museum.

5.2. Research limitations

This study only focused on visitors of four museums in Taiwan; wherefore, the application scope of the findings is limited. In addition, the accumulated variance of factor analysis was 0.6. The factors can only explain part of experience expectations, and cannot include all types of expectations. This study uses factor analysis to develop the different types of museum experience expectations that as basis that follow-up analyses. So, it is not explored in terms of the non-obvious relationships. In addition, the questionnaire was based on the inference of visitors' pleasant experiences and the suggestion that pleasant experiences will be the next expectation. Thus, experiences in which visitors have strange and unpleasant experiences, such as adventure, tension, sorrow or regret, would be eliminated.

In addition, the subjects of this study all visit museums. Under the condition that the visiting or future visiting would happen at least once, this study assumed that museum visitors are the definite population; thus, systematic sampling was adopted. However, if the researcher treated people without visiting experience as future visitors, the number of museum visitors would be an infinite population. Therefore, future studies should be conducted using Non-parametric Statistics.

5.3. Research suggestions

According to the research findings, some suggestions on museum management are proposed:

- (1) The questionnaire designed by this study can be used to measure visitor expectations since it is extremely important to

probe this. Valid visitor studies usually result in better management (Liu, 2008).

- (2) When visiting museums, visitors mostly expect to experience easiness and fun. As long as they continue to fulfill their purpose, museums can present exhibitions or activities with easiness and fun, such as providing changeable contrasts, a relaxing environment or combining local features.
- (3) The positions of museums are different and cannot satisfy all visitors' expectations; thus, it is important to select an appropriate target market. For instance, museums offering easiness and fun can treat females with a higher educational level as a target market. Museums offering historical reminiscences can treat married and older people with higher incomes as an important target market.

Suggestions for future studies are as follows:

- (1) Since the statements of Falk and Dierking (1992) and Larsen (2007) lack a clear definition and measurement of experience, this study designed a questionnaire of museum visitor experiences and measured visitor expectations. The research finding not only serves as a measurement tool for future theoretical validation, but also indicates core factors of different expectations and further classifies and names them. It should enhance the development of related theories.
- (2) As mentioned in the research limitations above, the questionnaire developed by this study should be further tested and modified in order to enhance the reliability, validity and application scope.
- (3) Ek, Larsen, Hornskov, and Mansfeldt (2008) suggested that visitor experience is a dynamic framework, and visitors are active performers and producers. When recording texts of the visiting experience, this study had the same finding. Therefore, future studies on visitor experiences or experience expectations should "be there" and use the perspective of the visitors or be close to them.
- (4) This study demonstrated that visitors' family life cycles can be related to their museum experience expectations. Future studies can further probe this phenomenon. Besides, OP&A (2007) visitor studies and other research suggest that the social experience in a museum is very important to this generation. Research also suggests that effective marketing for this generation requires different approaches than those museums typically use.
- (5) Table 4 shows the differences and similarities of experience expectations between non-visitors (or potential visitors) who currently do not enjoy visiting museums, and visitors who enjoy visiting museums. Since this study did not aim to explore the reasons for any dislike of visiting museums, there are no more data to analyze non-visitors. However, in visitor studies, non-visitors are also critical (Liu, 2008), since museums should not only keep the original visitors, but also create new visitors, and cause high expectations for the next visit. Therefore, future

Table 8

One-way ANOVA of different museum visitors and experience expectation.

	Easiness and fun	Cultural entertainment	Personal identification	Historical reminiscences	Escapism
A National Palace Museum in Taipei (historical relics)	4.25	3.62	3.81	3.48	3.86
B Wood Sculpture Museum in Miaoli (artistic works)	4.25	3.84	3.95	3.68	3.87
C National Science and Technology Museum in Kaohsiung (Science and technology)	4.27	3.94	3.97	3.60	4.02
D National Museum of Prehistory in Taitung (Science and technology)	4.29	3.92	3.90	3.69	3.90
Test result	No difference	C = D > A**	No difference	No difference	No difference

*p-Value < 0.05; **p-value < 0.01.

studies can study non-visitors, including the gap between their experience expectations and actual perceptions, as well as causes of the gap.

- (6). The further research might well reveal that, within the general expectations revealed by the research, there is likely to be much greater complexity when looking at individuals, reflecting the personal, social and physical contexts discussed in the article.

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