

**ORIGINAL ARTICLE**

## A Study on Tourist shopping needs and its spatial characteristics

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### Abstract

Tourists travel demand can be divided into the watch the natural landscape, such as shopping, entertainment and other projects. Each travel demand with motivation for meet the requirements of appropriate tourism space environment in order to complete. In this paper, through questionnaire investigation and SD (Semantic Differential) method for the basic attributes of shopping tourists and spatial characteristics of commercial pedestrian street. And analyzes the basic attributes of shopping as the main demand of tourists characteristics and the spatial characteristics of the suitable shopping demand, to provide a scientific basis for the design of tourist shopping space.

**Key words** : Tourists, Shopping needs, Commercial pedestrian street, Spatial features

### 1. Introduction

Tourists travel demand can be divided into the watch the natural landscape, such as shopping, entertainment and other projects. Each travel demand with motivation for meet the requirements of appropriate tourism space environment in order to complete. So suitable travel demand and its spatial characteristics of tourism research is very important. Typical of commercial pedestrian street is to satisfy tourists shopping facilities, is to provide tourists shopping, leisure, entertainment places. This paper focuses on commercial pedestrian street of tourists shopping demand and its spatial characteristics, so as to provide scientific basis for the suitable shopping space design.

### 2. Research Methods

#### 2.1. Research content

Understanding through questionnaire, interviews and other forms in the basic properties of commercial pedestrian street shopping tourist and shopping space condition, etc. And analysis of the commercial pedestrian street in the appropriate shopping space characteristics and the evaluation of shopping space.

#### 2.2. Research method

In April 2014 to may in China, Jinan QuanCheng Road based on a questionnaire survey of the commercial pedestrian street and SD (Semantic Differential) (Zhang, 2004). 1000 questionnaire distributed, 1000 valid questionnaires, 82.1% efficient. SD 200 questionnaire distributed, 174 valid copies, 87% efficient. Using Excel data and analysis

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**Received** 22 February, 2015; **Revised** 10 April, 2015;

**Accepted** 12 April, 2015

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of SD.

QuanCheng Road commercial pedestrian street is located in the central business district of Jinan city, has "status of the cross street of gold" (Zhang and Zhou, 2005). Simon, it stretches from east to Jiefang bridge, the total length of 1600 meters, 50 meters wide street, famous on both sides of the road home, such as department store "Jinan", "shopping center" esteeming harmony etc.(Li and Chou, 2002), tourists visit one of the important places of shopping.

### 3. Results and Discussion

#### 3.1. The basic attributes of tourists

The tourists' age, gender, and shopping needs, life, level of education, occupation etc. The age is the main factors influencing people's behavior (Xu, 1996; Li, 2000). In order to facilitate research, tourists can be divided into teenagers (below 20 years old), youth (20 to 29 years old), young and middle-aged (30-40), middle-aged (41-55 years old), and old age (55 years of age or older).

Questionnaire showed that male tourists accounted for 54%, the female tourists accounted for 46%, gender constitute basic is 1:1. Young age structure for teenagers accounted for 12%, 61%, 17% of middle-aged and young and middle-aged (7%), the elderly accounted for 3%. Thus the commercial pedestrian street basic meet the basic needs of tourist group ages.

Visit commercial pedestrian street of tourists mainly employed staff and workers accounted for 47%, 30%, other 23% students. Tourists in terms of degree of university accounted for 49%, 23%, other 28% technical secondary school. Therefore, commercial pedestrian street design should to staff and students as the center for tourists shopping motivation rather than shopping space environment, the relationship between meet the shopping needs of tourists.

#### 3.2. visitors using the characteristics of commercial pedestrian street

Visitors to the use of commercial pedestrian street distance of 3 ~ 6 km. Transportation for buses (59.9%), walking, cycling accounted for 20.8% and 10.5%, taxi and self-drive accounted for 8.8%. It embodies the characteristics of the shopping tourists traveling way. Travel companions, see accounted for 49.6%, with friends and family accounted for 20.9%, 19.6%, other 9.9% separately. To street frequency according to the survey, often do not account for 43.0%, 22.0%, twice a week once a week to 14.0%, other 21.0%. Residence time of the survey, 1 ~ 2 hours (42.0%), 2 ~ 3 hours (30.0%, 2.0%, other 26.0% under half an hour. This shows that the length of the visitors stay time is closely related to places such as streets landscape, space environment. Through the interview form to vehicles, the environment there, toilet location is not clear, latrines, shade place less shopping environments such as the existing problems. This shows that visitors to the shopping environment is becoming more and more high quality requirements.

#### 3.3. Guest evaluation of commercial pedestrian street space

##### 3.3.1. The Analysis of the guest evaluation of commercial pedestrian street space

(1) Safety: The forms of height difference changed little on the commercial pedestrian street of QuanCheng Road, so it basically meets the needs of safety, but the setting of markers where elevation changes is not very obvious, accounting for 74.7%. The floor covering meets the basic needs of antiskid and antifreeze, besides, lighting is more adequate at night.

(2) Impressive: Most people thought the facade achieved the requirement of rich and beauty (43.7%). The ground pavement performances generally in the aesthetic aspects, billboards, street lamps, neon design was basically unified and beautiful, but degree of

recognition for the aesthetic appearance of sketches and sculptures is general (67.8%). The evaluation for aesthetics design of the water is poor (42.0%), and it's same with the greening landscape ornamental design, respectively, 31.0%, 32.8%.

(3) Approachable: Activities of entertainer on commercial pedestrian street is still relatively small in holiday, ground paving materials performances in general on the cordial design, but the tourists spoke highly of the width of the street, people thought that reflects the design of approachable (66.1%). Anyway, most people evaluates it general for the design of store style in the cordial, and the height of the building basically reflects the design of approachable.

(4) Readability: Design of building is not fully represent the traditional proportional relationship, symbols, scale, The design of Garden ornaments and sculpture basically reflects the cultural Springs, and cultural connotation. But the number is not sufficient. Store design lack of historical and cultural performance (69.5%). The store which reflect the geographical features is not enough.

(5) Convenience: Convenient transportation is a success to QuanCheng commercial pedestrian street design. A high rating with 64.9%, Guest evaluation of Kiosks, fast food shops, cafes, trash, billboards, guide map and description chart' convenience is general. Newspapers and magazines stalls' design meet the design requirements of convenience (49.4%). There are 60% more visitors saw no need to set up self-service deposit bags at the entrance.

(6) Comfort: There are 69.5% of the visitors think he seat meet the basic requirements for comfort. But less shade facilities at resting place (52.9%), Environmental color makes people feel not very comfortable (49.4%). The tourists' evaluation is not high to the design display space, avoid the space and Stewed Assorted Delicacies space, with thinking so little these space. This is not able to reflect the people's different behavior mental demand in the commercial

pedestrian street.

(7) Fairness: More than half of the visitors expressed dissatisfaction with the design of blind guiding facilities, blind road and ramp. This shows that the lack of Quancheng road in the design of social fairness. There are 67.2% of the visitors think that recreation space for children and the elderly is not enough, so that it can't meet the needs of these two groups. Upon this evaluation of personality equality free leisure space, there are 2.3% of the tourists were satisfied, 51.7% of the tourists were basically satisfied. There are 4% visitors find no such space to meet people's psychological needs in the commercial pedestrian street outdoor space.

#### 4. Conclusions

At present, jinan QuanCheng Road commercial pedestrian street shopping tourists are mainly employed staff and workers and students, mainly young people. But from the perspective of the commercial pedestrian street development of long-term, should strive to give attention to two or morethings arrives each age level needs of tourists. China is an aging population. Children are an integral part of space environment. So combining with the development of social economy, based on the environmental behavior psychology, to explore psychological behavior characteristics of the different age of tourists. This is very important to the design of human shopping space.

Visitors to the use of shopping facilities in the range of 3 ~ 6 km distance. And with more buses, as the main way to travel with friends. The retention time of the commercial pedestrian street is 1 ~ 3 hours more. With the development of history, walk street spatial form is muti\_function, many elements of the public building integrated development (Wang, 2004). Tourist shopping needs in the commercial pedestrian street extension for the combination of shopping and entertainment.

**Table 1.** Evaluation of outside the space of Commercial walking street

Evaluation Item	Much	General	Equal	General	Much	Evaluation Item
01 Mark of the ground height change is obvious	3	5	6	130	30	Mark of the ground height change is not obvious
02 Ground pavement is skid-proof and frost-proof	27	109	20	12	6	Ground pavement is not skid-proof and frost-proof
03 Adequate lighting at night	56	81	21	9	7	Lighting at night is not enough
04 Facade is rich, beautiful	76	27	31	26	14	Facade is not rich, beautiful
05 Floor covering is beautiful	26	111	33	3	1	Floor covering is not beautiful
06 Billboard design is unified, beautiful	56	50	27	22	19	Billboard design is not unified, beautiful
07 Streetlights and neon' styling are beautiful	50	26	57	25	16	Streetlights and neon' styling are not beautiful
08 Sketches and sculptures are beautiful, innovative	27	118	6	2	21	Sketches and sculptures are not beautiful, innovative
09 Water landscape is highly ornamental	6	51	21	23	73	Water landscape is not ornamental
10 Green landscape is rich, beautiful	29	56	26	54	9	Green landscape is not rich, beautiful
11 Floor Covering makes people feel warm	5	57	54	53	5	Floor Covering make people feel bad
12 Street width is suitable, comfortable	115	53	2	3	1	Street width is not suitable, comfortable
13 Store design style makes people feel kind	9	51	86	22	6	Store design style make people feel bad
14 The height of a building makes people feel kind	6	82	52	26	8	The height of a building makes people feel bad
15 many Artist activities during the holidays	4	49	89	5	27	Few artist activities during the holidays
16 Architectural modeling have symbolic relationship between traditional scale	10	24	26	58	56	Architectural modeling have not symbolic relationship between traditional scale
17 Sketch and sculpture are rich in culture	26	84	27	4	33	Sketch and sculpture are poor in culture
18 Shop signs advertising design is rich in history and culture	25	3	4	21	121	Shop signs advertising design is rich in history and culture
19 many shops with regional characteristic shop	4	87	21	57	5	Few shops with regional characteristic shop
20 Convenient transportation	113	27	27	3	4	The traffic is not convenient
21 The telephone booth is convenient	27	26	61	29	31	The telephone booth is not convenient
22 Fast food restaurants, cafes, Coffee seat is convenient to use	29	56	55	32	2	Fast food restaurants, cafes, Coffee seat is not convenient to use
23 Newspapers and magazines booth is convenient to use	86	27	3	56	2	Newspapers and magazines booth is not convenient to use

24 Toilet is enough	3	3	8	20	140	Toilet is not enough
25 The garbage is convenient to use	51	90	23	4	6	The garbage is convenient to use
26 The main entrance is necessary to set up the self-help checkrooms	3	26	26	9	110	The main entrance is not necessary to set up the self-help checkrooms
27 Graph introduction and guide map are convenient	4	84	80	4	2	Graph introduction and guide map are not convenient
28 Stool quantity, height, size are appropriate	19	121	17	7	10	Stool quantity, height, size are not appropriate
29 Seating space is shade	10	16	92	49	7	Seating space is not shade
30 Environment's color makes people feel kind	29	27	26	86	6	Environment's color makes people feel bad
31 Can display with a display space	19	36	11	87	21	Can't display without display space
32 Shelter space is suitable	9	21	20	67	57	Shelter space is suitable
33 Enough space for family	11	27	27	56	53	No space for family
34 Many "classic background" with rich layers and depth of field	10	1	9	33	121	Few "classic background" with rich layers and depth of field
35 Enough guiding facilities for blind person	1	20	31	90	32	Few guiding facilities for blind person
36 Blind road and ramp design is suitable	1	56	26	87	4	Blind road and ramp design is not suitable
37 Children and the elderly recreation space is enough	3	7	21	26	117	Children and the elderly recreation space is not enough
38 There is personality equality free leisure space	4	90	53	20	7	No personality equality free leisure space

From visitors to the jinan QuanCheng Road commercial pedestrian street, the evaluation of spatial analysis are used to get the commercial pedestrian street the successful experience of use of the space environment design and deficiency (table 1). This is according to the behavior of the tourists psychological characteristics design of commercial pedestrian street use space and facilities safety, cordial, readability, considerable, convenience and comfort and so on have important reference value.

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