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「新たな価値を創造する文化遺産活用の国際共同研究 ワーキングペーパー 1」

A Study of Tourist Orientation by Travel Purpose and Value Source by Travel
Type¹

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Discussion Paper Series

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Abstract

The purpose of the paper is to investigate the orientation formation mechanism in choosing particular types of travel defined by purpose. Using Japanese data on travel choice and the detailed information on consumption preferences and cultural experiences during young, we generated the variables on preference orientations of each individual and analyzed the relation between preference orientation and travel choice behavior. From this analysis, we can gain insights into the orientations of tourists who prefer different types of travel. For example, those who enjoy nature tourism tend to be my-way and outdoor oriented. It may be that one reason people choose nature tourism is that it enables unique travel planning. The uniqueness of our research is the analysis on the empirical relationship between the cultural experiences during young and tourist orientation. Our analysis is applicable to other consumption behavior such as cultural expenditure and social expenditure.

Keywords tourist orientation, travel purpose, preference formation, orientation formation

1. Introduction

Recently, the studies on tourists' preferences and motivation has been deemed as important (see i.e., Otoo et. al. (2020), Otoo et.al. (2021) on their analysis into the growing senior travel market). Conventionally, Travel Career Ladder model (S. Huang & Hsu (2009), Pearce (1988)) and Push-pull model (Otoo and Kim (2020)) are used to examine the motivation of travel. Travel career ladder model applies Maslow's five hierarchical need model, and argues that the motivation changes as one's need shifts from basic need to self-actualization. In Push-pull model, the most important pull factors are attractiveness of the travel destination, and push factors are reasons why travelers need to leave home. It should be noted that travel is a positive activity for optimizing well-being, and the optimal solutions are depended on the preferences for various need and environments surrounding travelers (Lyubomirsky & Layous (2013)). In this sense, the research on the process of forming preferences or orientations related with travel motivation would be important. Furuya and Zen (2014) study the relation between the orientation and the purpose of the travel, but they do not examine the generation mechanism of the orientation.

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The purpose of this paper is to investigate the process of forming orientations related with travel purpose. From this analysis, we can gain insights into the orientations of tourists who prefer different types of travel. For example, those who enjoy nature tourism tend to be my-way and outdoor oriented. It may be that one reason people choose nature tourism is that it enables original travel planning. The uniqueness of our research is the analysis on the empirical relationship between the cultural experiences in one's childhood and youth and preference orientation.

The composition of the paper is as follows. Section 2 summarized the survey data, and Section 3 analyzes the factors those constitute tourist orientations and their major explanatory experiences. Section 4 examines the relation between types of orientation and the travel purpose.

2. Summary of Survey Data

The data used in this research are from a "Travel Survey" conducted on the internet from January 14, 2020 to January 16, 2020. The survey is part of a study titled "International joint research on the use of cultural heritage to create new value: Deepening user involvement, regional development perspective," a research project supported by the 2019 Frontline Humanities and Social Sciences Research Project (Global Development Program – research theme open). The survey questionnaire was made accessible to 22,917 males and females, ages 14 to 88, nationwide. 3,499 questionnaires were returned, of which 3,152 were valid, for an effective return rate of 13.8%.

The data are summarized as follows. Of the 3,152 valid questionnaires returned, 576 failed to indicate annual household income, so the number of valid observations for annual household income used in the analysis is 2,576. Individual annual income was indicated on all valid questionnaires returned, so the effective number of observations for individual annual income used in the analysis is 3,152. The gender distribution of respondents is 57.7% male and 42.3% female. As shown in Table 1, the average age of respondents is 45.9 years; the median age is 46 years, and the standard deviation is 15.3 years. The mean age of the first quartile is 34; the mean age of the third quartile is 57.

The average annual household income of respondents is 6,173,100 yen; the median is 5,500,000 yen. The average annual income of individuals, including unemployed persons, is 3,539,000 yen; the median is 2,500,000 yen. The average value of respondents' financial assets is 21,167,000 yen; the median value is 3,500,000 yen.

Table 1 shows the distribution of respondents' educational backgrounds; 53.8% have Bachelors' degrees from university or higher. According to the Ministry of Education, Culture, Sports, Science and Technology's "Basic Survey on Schools," roughly 37% of Japanese enrolled in universities in the early 1980s. Today the university enrollment rate is around 55%, so 53.8% can be considered slightly greater than the actual percentage of Japanese with a university education or higher.

Table 1. Educational Attainment

	Number	Percentage	Cumulative percentage

Junior high school	101	3.2	3.2
High school	794	25.2	28.4
Vocational school	291	9.2	37.6
Junior college / Technical college	267	8.5	46.1
University	1504	47.7	93.8
Graduate school	191	6.1	99.9
Other	4	.1	100.0
Total	3152	100.0	

40.9% of respondents are unmarried and 53.0% married. 6.3% are bereaved or separated from their spouses. 31.4% of respondents are members of households with children.

3. Factors Constituting Tourist Orientations and Major Explanatory Variables

3.1 Tourist Orientation

In this study, factors those represent the tourists' orientation were extracted by factor analysis, using the principal factor method and the questionnaire used in Yagi (2018). Cronbach's alpha, which indicates how closely a set of items are as a group, was 0.894; it was therefore judged that no question items needed to be excluded from the question list. The questionnaire used is listed in Table 3.

Tables 2 and 3 present the results of the factor analysis. Table 3 shows the seven factors that were extracted as capturing the orientations of tourists. We call these "The Luxury Brand Oriented," "Thrift Oriented," "Reliability Oriented," "My-Way Oriented," "Outdoor Oriented," "Used/Rental Oriented," and "Night-Time Oriented."

Table 2. Total variance explained.

Total Variance Explained						
Factor s	Initial eigenvalues			Load sum of squares after extraction		
	Total	% of Variance	Cumulativ e %	Total	% of Variance	Cumulative %
1	7.512	25.039	25.039	7.011	23.368	23.368
2	3.495	11.651	36.689	3.032	10.108	33.476
3	1.951	6.503	43.192	1.531	5.105	38.581
4	1.730	5.766	48.958	1.283	4.277	42.858
5	1.385	4.615	53.573	.956	3.185	46.043
6	1.281	4.270	57.843	.897	2.990	49.033
7	1.047	3.489	61.331	.582	1.941	50.974
8	.885	2.948	64.280			

Factor extraction method: Main factor method
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Table 3. Factor matrix after rotation.

	Luxury Brand Oriented	Thrifty Oriented	Reliability Oriented	My-Way Oriented	Outdoor Oriented	Used/Rental Oriented	Night-time Oriented
Q13 Item 6. Luxury oriented	0.737	-0.11	0.017	0.162	0.185	0.208	0.046
Q13 Item 5. Likes branded things	0.722	-0.027	-0.008	0.13	0.194	0.198	0.061
Q13 Item 19. Likes the latest things	0.442	0.124	0.238	0.229	0.189	0.176	0.201
Q13 Item 16. Likes imported products	0.441	-0.048	-0.002	0.143	0.154	0.475	0.063
Q13 Item 30. Shops in the city	0.441	0.129	0.224	0.187	0.212	0.109	0.155
Q13 Item 8. Focuses on discounts	0.044	0.898	0.024	0.044	0.003	0.084	0.044
Q13 Item 7. Low-price oriented	-0.153	0.705	0.059	0.053	-0.057	0.112	0.07
Q13 Item 9. Focuses on earning points	0.159	0.653	0.165	0.1	0.078	0.063	0.068
Q13 Item 26. Thrifty	-0.153	0.518	0.379	0.163	-0.065	-0.003	-0.044
Q13 Item 17. Likes domestic products	0.14	0.211	0.598	0.231	0.057	-0.042	0.121
Q13 Item 28. Likes natural things	-0.041	0.15	0.532	0.325	0.247	0.147	0.024
Q13 Item 29. Shops locally	0.013	0.265	0.497	0.165	0.082	0.167	0.033
Q13 Item 18. Likes “good old days” things	0.061	0.1	0.474	0.269	0.11	0.289	0.083
Q13 Item 13. Buys new products	0.401	0.198	0.44	0.192	0.02	-0.182	0.156
Q13 Item 10. Likes healthy things	0.093	0.278	0.439	0.333	0.29	0.05	-0.042
Q13 Item 2. Chooses reliable things	0.24	0.242	0.435	0.309	-0.004	-0.068	0.032
Q13 Item 23. Values time with family	0.156	0.168	0.409	0.028	0.367	0.061	0.006
Q13 Item 4. My-way type	0.118	0.111	0.088	0.717	0.039	0.16	0.119
Q13 Item 3. Likes-challenges type	0.214	0.004	-0.001	0.613	0.365	0.225	0.071
Q13 Item 1. Chooses based on quality	0.397	0.054	0.377	0.427	0.032	-0.049	0.11
Q13 Item 31. Likes self-study	0.197	0.069	0.247	0.417	0.28	0.243	0.08
Q13 Item 25. Independent type	-0.015	0.271	0.255	0.398	-0.381	0.067	0.127
Q13 Item 24. Social type	0.267	-0.045	0.113	0.14	0.606	0.267	0.061
Q13 Item 12. Likes outdoor leisure & sports	0.149	0.057	0.168	0.231	0.6	0.191	0.011
Q13 Item 22. Likes events	0.329	0.11	0.126	0.157	0.462	0.234	0.181
Q13 Item 14. Buys second-hand goods	-0.028	0.139	0.028	0.089	0.033	0.725	0.051
Q13 Item 15. Rents things	0.129	0.087	0	0.045	0.125	0.649	0.049
Q13 Item 27. Tends to waste money	0.38	-0.086	-0.051	0.118	0.094	0.356	0.192
Q13 Item 20. Morning person	0.169	0.169	0.304	0.16	0.122	0.174	-0.543
Q13 Item 21. Night person	0.087	0.123	0.099	0.098	0.013	0.155	0.921
Q13 Item 11. Indoor type	0.151	0.252	0.226	0.134	-0.515	0.123	0.174
Factor extraction method:							

Main factor method							
Rotation method: Equamax method with Kaiser normalization							

Values (factor scores) were calculated from the respondents' responses, and the statistics calculated from those values are shown in Table 4. Although the mean values are 0 because the factor generation was normalized, it is possible to see how the distributions are skewed by looking at the median values. "Luxury brand oriented," "outdoor oriented," and "used/rental orientation" are seen to be skewed in a positive direction. Looking at the standard deviations, we see that the factor scores are most widely dispersed for "thrifty oriented" and "night-time oriented," followed by "luxury brand oriented."

Table 4. Orientation factor statistics.

Statistics							
	Luxury Brand Oriented	Thrifty Oriented	Reliability Oriented	My-Way Oriented	Outdoor Oriented	Used/Rental Oriented	Night-time Oriented
Frequency	3152	3152	3152	3152	3152	3152	3152
Mean	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Median	0.066	-0.126	-0.048	-0.071	0.134	0.156	-0.036
Mode	0.286	-0.220	-0.332	-0.118	0.183	0.545	-0.036
Standard deviation	0.886	0.930	0.855	0.837	0.859	0.855	0.953
Lowest value	-2.939	-2.788	-3.693	-3.006	-2.981	-2.900	-2.586
Largest value	3.440	2.558	3.625	2.955	3.377	2.934	2.799

3.2. Factors those affect the formation of orientation

In this section, we examine the factors that affect the formation of orientation. We pick up three orientations (Luxury, My-Way, Outdoor), those are quite distinctive from each other. We conducted the multivariate regression analysis to regress preference on various past and current experiences. Figure 1 shows the standardized coefficients of significant important factors derived by the regression analysis. Our analysis suggests the there are many past and current experiences those are significant in explaining the formation of orientation.

Figure 1-a shows the influential factors for forming luxury preference. The strongest factor is the current practice of playing musical instruments. Learning dance or ballet during childhood also has the strong influence on the formation of luxury preference. Good emotional experiences such as enjoying beauty, spending time with a special person, enjoying delicious foods and things contribute to forming the luxury preference.

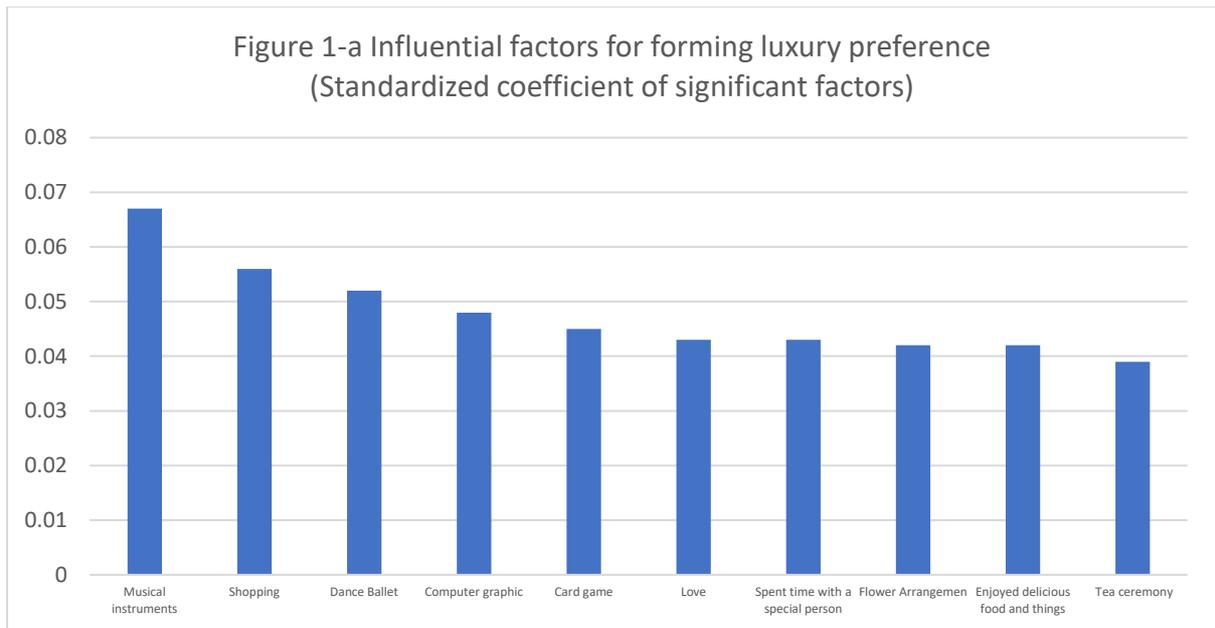


Figure 1-b shows the influential factors for forming the my-way preference. It is interesting that photography, sports during childhood, reading, cultural experiences, outdoor leisure contribute to form the my-way preference. This could be interpreted that stimuli generated from cultural activities are diverse and these stimuli affect the pattern of making logic and the way of thinking in various manner. These experiences promote the emotional thinking abilities, and this may form the my-way preference.

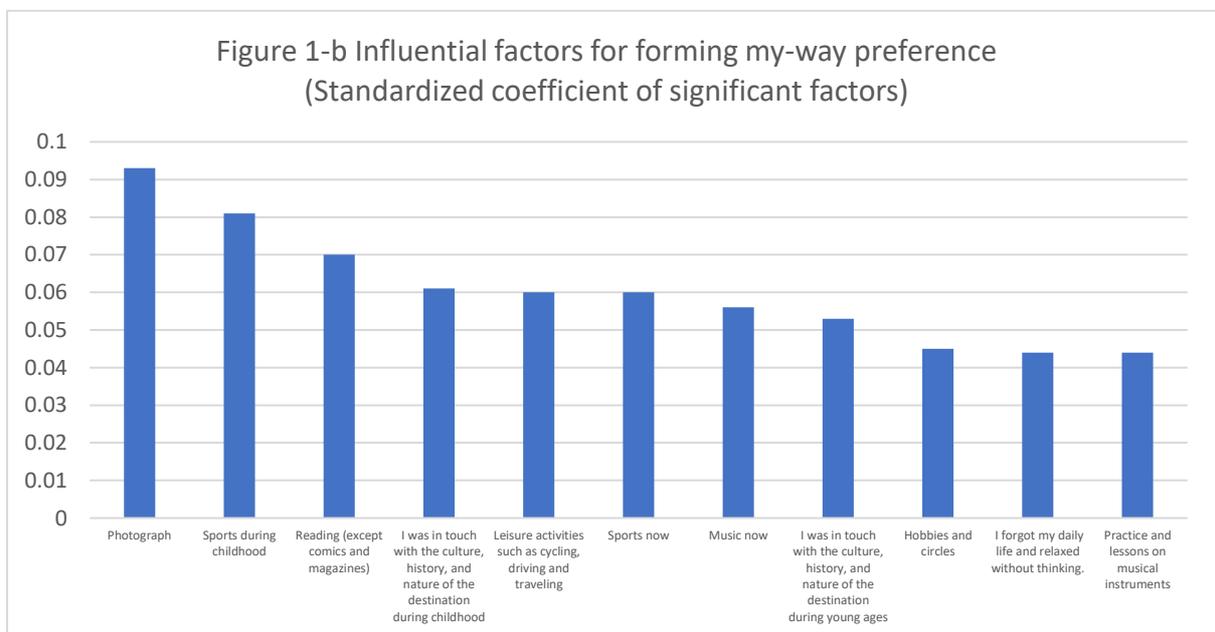
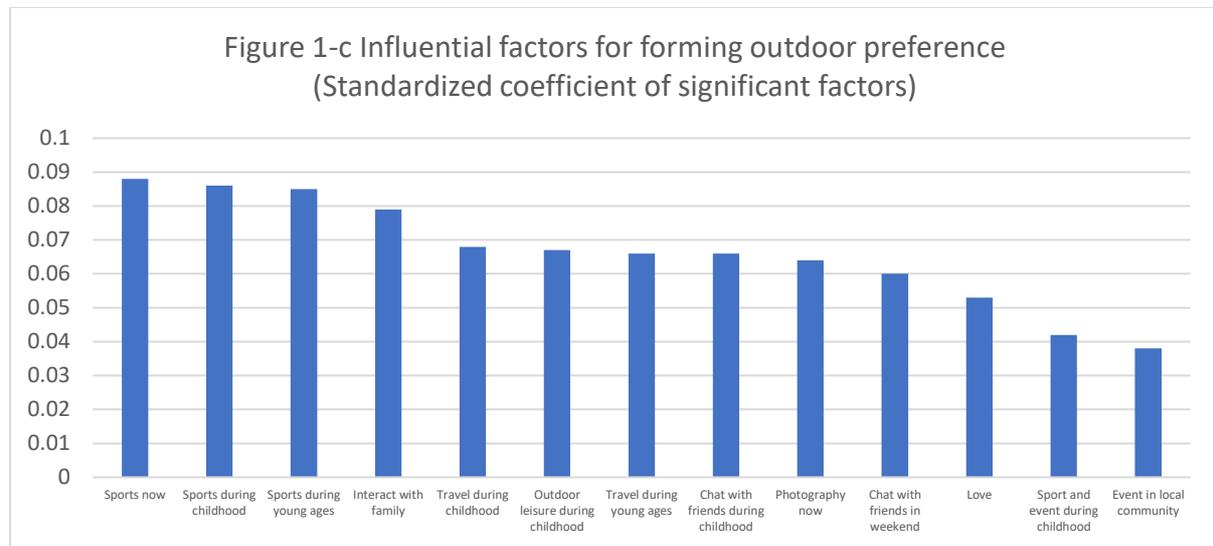


Figure 1-c shows the influential factors for forming the outdoor preference. Mainly sports experiences and outdoor leisure experience during childhood and young ages forms the outdoor preference. It is interesting that interaction with family and friends forms the outdoor preference. This is interpreted that

the outdoor preference includes the preference for interacting with various types of people, not only family or friends, but also people in community or circles.



In this section, we examined the factors those affect the preference formation by focusing on the three distinctive preferences, and it is concluded that experiences during childhood and young ages are important factors. It is noteworthy that the luxury preference and the outdoor preference are distinctive, and different factors affect the formation of preference. The luxury preference is strongly affected by the artistic experience and the outdoor preference is strongly affected by the sports experience. It is important to stress that the current preference is based on the past and current experiences in a certain systematic manner.

4. Type of orientation and the travel purpose

4.1 Travel Purpose and Tourist Attributes by Purpose

The survey conducted was of persons who “had made at least one domestic trip (excluding business trips) during the past two years.” Respondents were asked to indicate the #1, #2, and #3 purposes for their trip(s) from 38 listed items. For the analysis of this paper, as shown in Table 5, the 38 items were classified into seven categories: "nature tourism," "history/culture/city tourism," "theme park/events," "sports tourism," "shopping," "hotel/inn stay," and "eco-tourism."

Table 5. Travel purpose categories.

Category	Item number	Purpose
Nature tourism	1	Nature tourism (sightseeing tours of nature and scenic spots)
Nature tourism	3	Seaside resorts (leisurely trips at the seaside)
Nature tourism	4	Highland resorts (leisurely trips in highland areas)
Nature tourism	14	Sea bathing (travel to enjoy swimming in the ocean)

Nature tourism	18	Visits to famous flower spots (e.g., trips to see cherry blossoms or herb gardens)
Nature tourism	19	Appreciation of natural phenomena (trips to see rare natural phenomena)
Nature tourism	20	Exploration tours (travel to visit unexplored areas)
Nature tourism	27	“Power spots” (trips to places where mysterious powers or energy reside)
Nature tourism	35	Geo-tourism (travel to deepen understanding of geology and topography)
History/culture/city tourism	2	History/cultural tourism (sightseeing trips to historical and cultural attractions)
History/culture/city tourism	5	City tourism (travel to enjoy towns or cities)
History/culture/city tourism	9	Zoos and aquariums (trips to enjoy zoos or aquariums)
History/culture/city tourism	10	Gourmet (trips to eat delicious food)
History/culture/city tourism	16	Art appreciation (travel to enjoy theater, music, exhibitions, etc.)
History/culture/city tourism	21	Walking around towns (trips to enjoy beautiful towns and streets)
History/culture/city tourism	24	“Talking trips” (trips to have fun with friends and family)
History/culture/city tourism	25	World Heritage tours (travel to/around World Heritage Sites)
History/culture/city tourism	32	Industrial tourism (tours to see or experience manufacturing)
History/culture/city tourism	33	Industrial heritage tourism (travel to once-flourishing industrial sites, such as mines or spinning mills)
History/culture/city tourism	34	Warlords tourism (visiting famous sites and battlegrounds related to Sengoku-era warlords)
Theme park/ events	7	Festivals/events (travel to enjoy festivals and events)
Theme park/ events	8	Theme parks (trips to enjoy theme parks or amusement parks)
Theme park/ events	36	Anime tourism (travel to enjoy anime- and manga-related places and events)
Sports tourism	11	Skiing/snowboarding (trips for skiing or snowboarding)
Sports tourism	12	Marine sports (travel to enjoy marine sports)

Sports tourism	13	Mountaineering/mountain hiking (trips to enjoy mountaineering and mountain hiking)
Sports tourism	17	Watching sports (travel to enjoy watching sports)
Shopping	15	Shopping (travel to enjoy shopping)
Hotel/inn stay	6	Hot springs trips (trips to enjoy hot springs)
Hotel/inn stay	22	Resort hotel (travel staying at a resort hotel)
Hotel/inn stay	23	Japanese-style ryokan (a trip to stay in a laid-back Japanese-style inn)
Hotel/inn stay	26	Long stay (travel to enjoy a long stay somewhere)
Hotel/inn stay	28	Hotel stay (a trip whose main purpose is to stay in a hotel or inn)
Hotel/inn stay	37	Sightseeing train travel (train travel for the purpose of the train ride itself – e.g., enjoying the train’s interior, the outside views, the food, etc.)
Eco-tourism	29	Environmentally-friendly travel (such as trips with fees that go toward reducing CO2 emissions during travel)
Eco-tourism	30	Eco tours (trips to enjoy nature and learn about nature and the environment)
Eco-tourism	31	Agricultural experience (trips to enjoy the environment of and experience life in farming, mountain, and fishing villages)

Figure 2 shows the distribution of travel purposes. The purpose selected most frequently was "history/culture/city tourism," followed by "nature tourism" and "hotel/inn stay." The number of respondents who selected these as their #2 or #3 purpose is not very different from the number who selected them as their #1 purpose. This indicates that "history/culture/city tourism," "nature tourism," and "hotel/inn stay," are all important travel purposes, even though there are some differences in the order of selection.

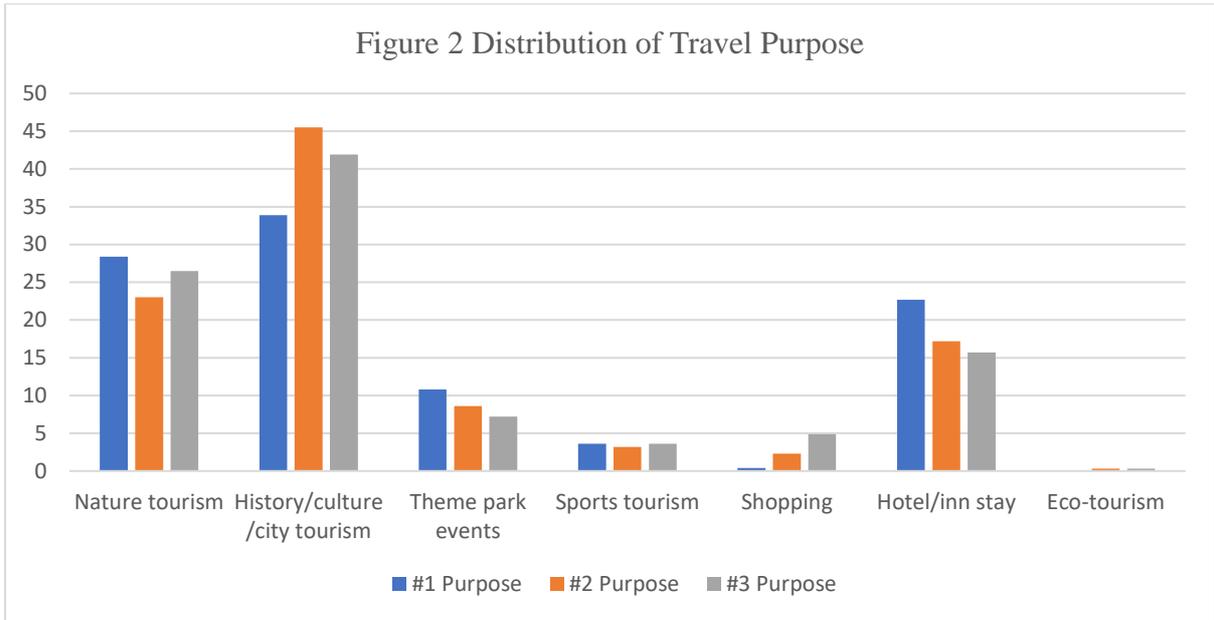


Figure 3 shows the average age of respondents by #1 travel purpose. One can see that the average age of persons choosing eco-tourism as their top purpose is quite high. Second-highest average age is for those who chose hotel/inn stay, but their average age is significantly lower than that for eco-tourism. Third-highest average age is for those who chose sports tourism, while the lowest average age is for those who chose theme park/events.

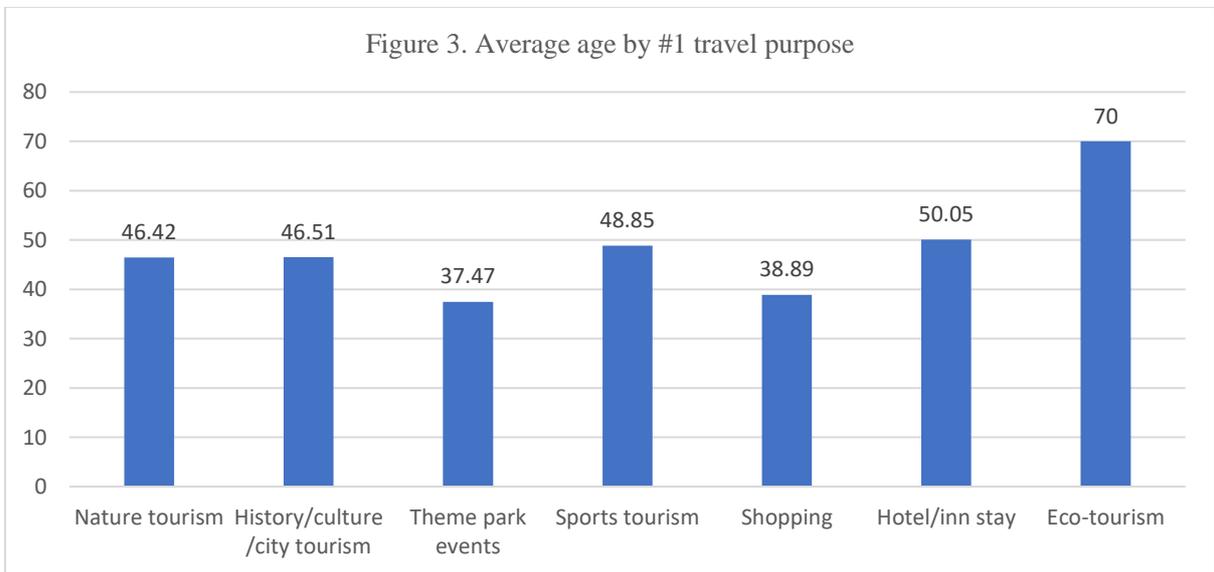


Figure 4 shows the average household and individual annual income by #1 travel purpose. Respondents choosing sports tourism as their #1 travel purpose have both the highest household annual income and the highest individual annual income. Respondents choosing staying at hotels or inns as their #1 travel purpose have the second-highest household and individual annual income. Respondents choosing eco-tourism as their #1 travel purpose have low annual household income, but not-so-low individual annual

income. For respondents choosing shopping as their #1 travel purpose, the difference between household and individual annual income is large; this suggests that this group includes a large number of married women who are not working or unmarried women who live with their parents. The data suggest that nature tourism and history/culture/city tourism are the top choices for many middle-income people.

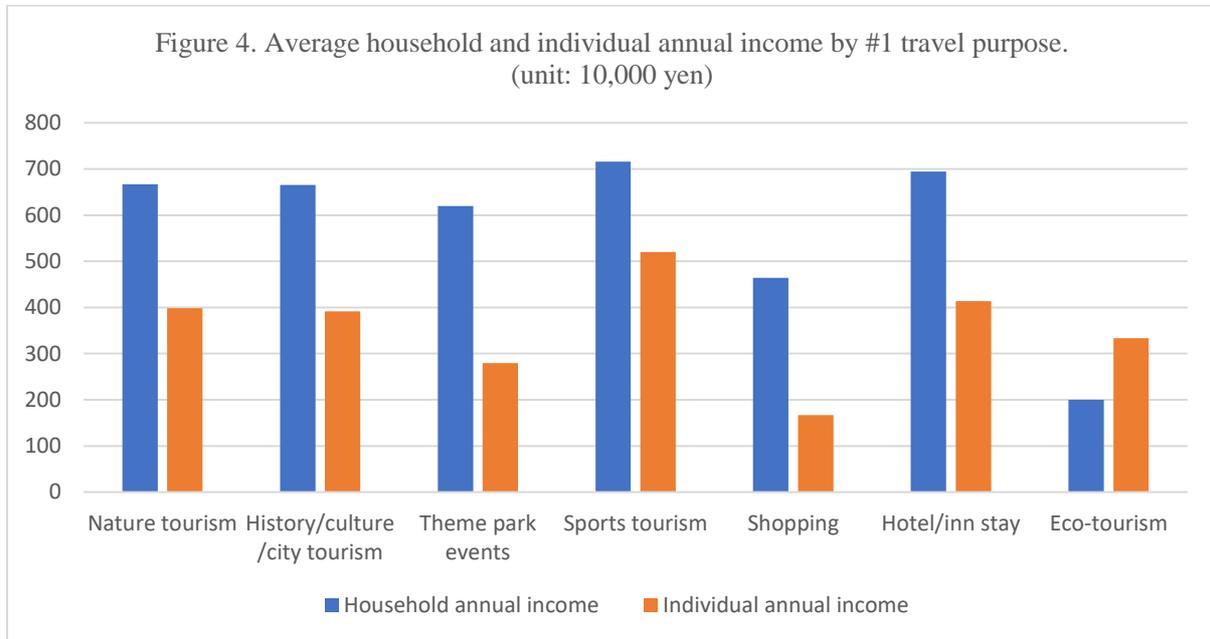
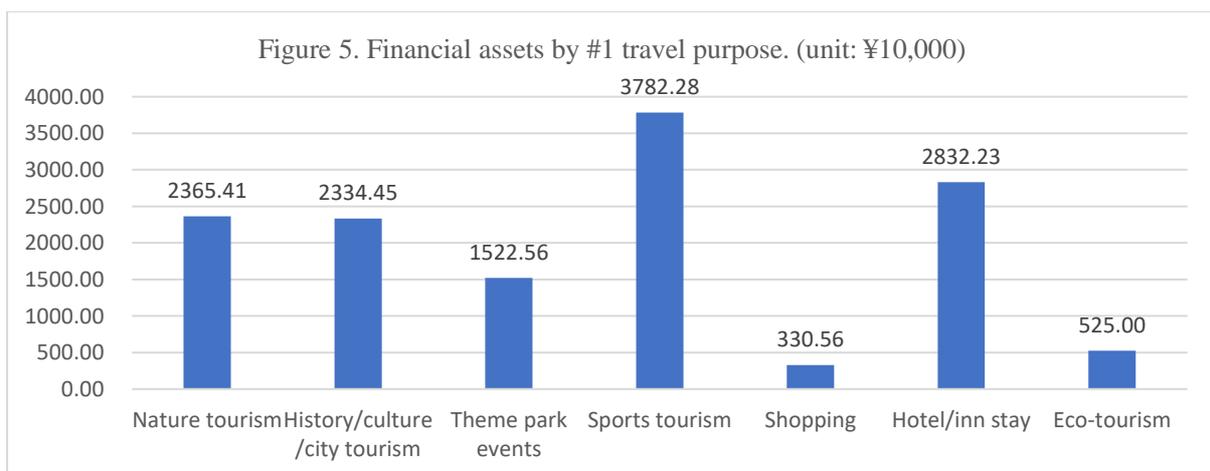


Figure 5 shows the value of respondents' financial assets by #1 travel purpose. Those who named sports tourism as their top travel purpose had the highest average assets value, and those who chose hotel/inn stay had second-highest value. This suggests that those who prefer sports tourism and hotel/inn stays are relatively wealthy.



4.2 Differences in travel behavior by travel purpose

Figure 6 shows the average amount of travel expenditure per trip by #1 travel purpose. Eco-tourism expenditures are markedly higher than for other kinds of travel, suggesting that eco-tours are expensive as

they are often to areas Remote and not easily accessible. Second-highest travel expenditures are for history/culture/city tourism, which may reflect high admission fees at the destination. Although sports tourism is favored by the wealthy class, travel expenditures are not so high.

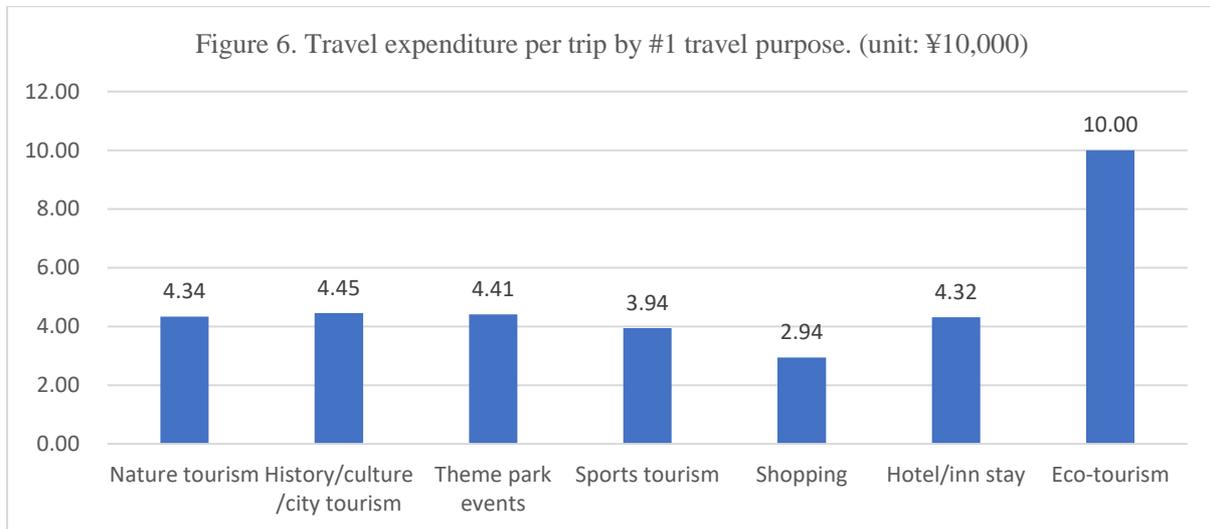


Figure 7 shows the number of trips involving one or more overnight stays during the past year. Those who named hotel/inn stay as their #1 travel purpose took the highest number of such trips. This suggests that repeat demand is relatively high for these travelers. The same can be said for sports tourism travelers, who took the second-highest number of such overnight trips. Respondents naming shopping as their #1 travel purpose took the fewest overnight trips; this may be because they have less money to spend, as Figures 3 and 4 suggest. Respondents naming nature tourism and history/culture/city tourism as their top travel purpose were third and fourth, respectively, in terms of number of trips with overnight stays.

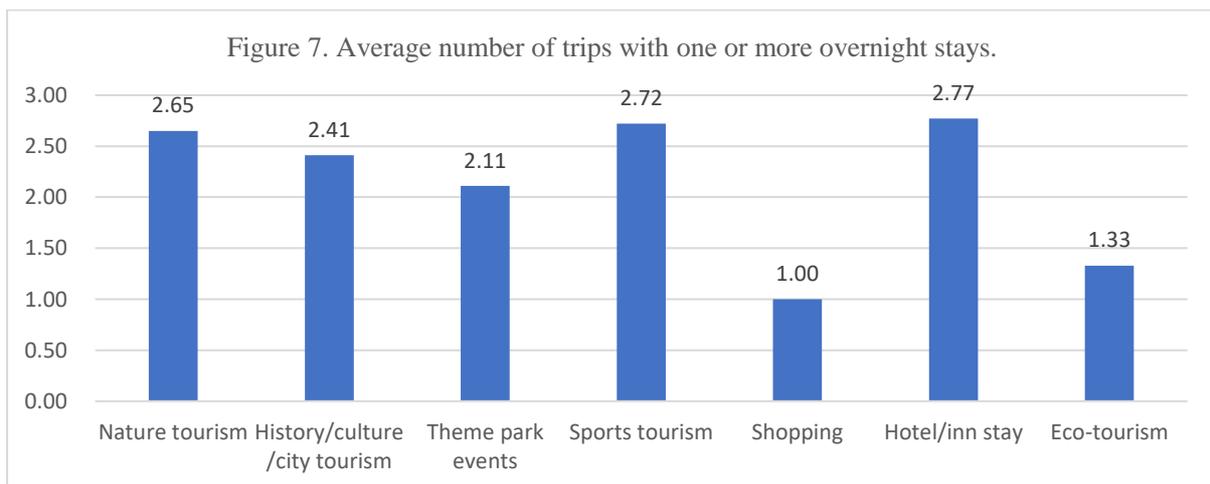


Figure 8 shows the frequency of museum visits by #1 travel purpose. This question reveals the artistic background of the travelers. The questionnaire item read: "Please answer this question thinking back to your school days, from elementary school to high school. How often did you visit a museum? (1) never, (2) rarely, (3) sometimes, (4) often." The figure shows the average values of the answers to this answer.

From this figure, we can see that those who have a relatively large amount of experience visiting museums tend to prefer eco-tourism, nature tourism, history/culture/city tourism, and shopping. One might hypothesize from this that an aesthetic appreciation of things like nature, culture, and the arts is cultivated by the experience of visiting museums. With regard to the relationship between museum experience and shopping, it may be that a person with a well-developed aesthetic eye for products feels that shopping is especially enjoyable. On the other hand, people who like theme park/events and sports tourism tend to have little museum experience, and may be less receptive to cultural things and activities.

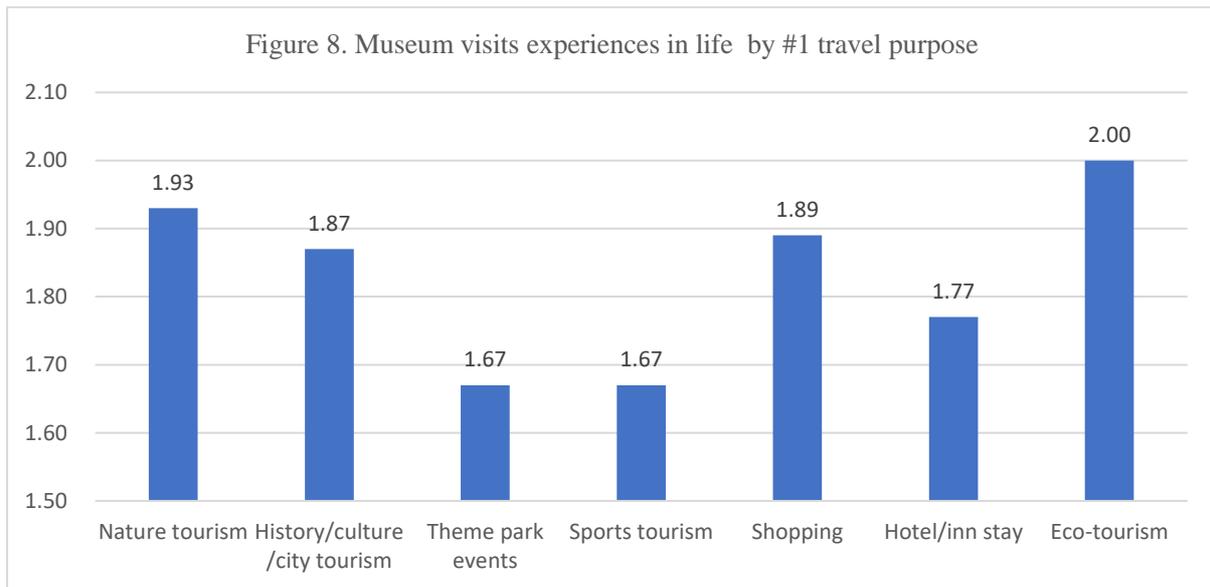
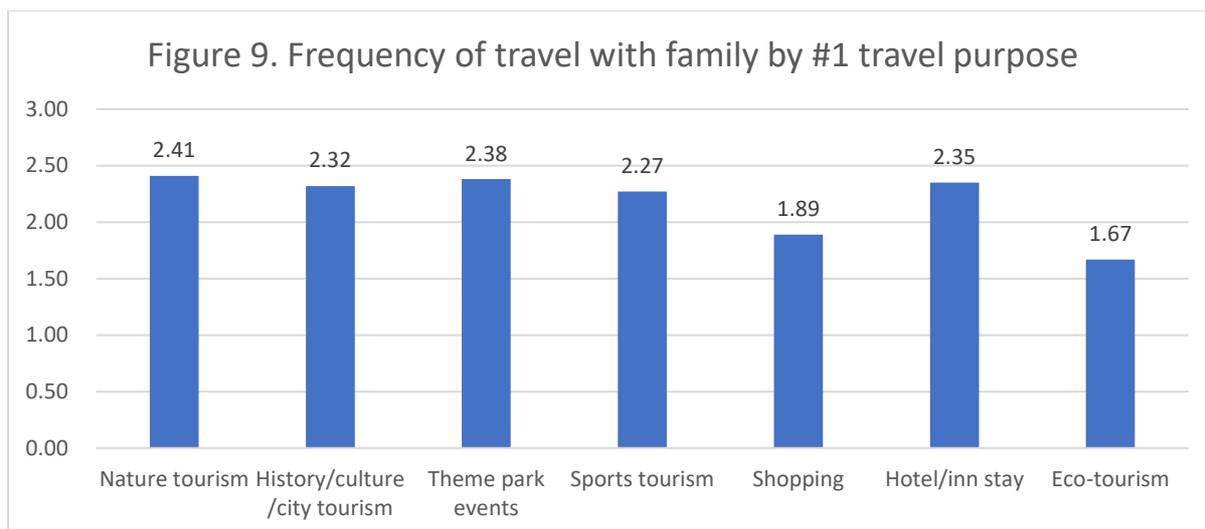


Figure 9 shows frequency of travel with family by #1 travel purpose. The questionnaire item read: "During your school days, from elementary school to high school, did you frequently go on trips with your family? (1) no, (2) not very often, (3) sometimes, (4) often." The figure shows the average values of the answers to this answer.

A person's travel experiences as a child can be expected to influence his/her travel enjoyment and travel preferences in later years. Demand for nature tourism, theme park/events, hotel/inn stays, and history/culture/city tourism is thought to result from the accumulation of enjoyable travel experiences earlier in life. Demand for eco-tourism, on the other hand, originates from experiences a person has as an adult.



4.2 Tourist Orientation and Travel Purpose

Figure 10 shows the average tourist orientation with different types of travel as their #1 travel purpose. As the score of each orientation is statistically standardized so that the average is normalized to 0, a score which is close to 0 means that tourist orientation is close to the average. On the other hand, high score orientation means that the orientation is distinctive characteristics.

The score of luxury brand orientation is high for the travelers whose purposes are theme park/events and shopping, and low for sports tourism. The score of thrift orientation is high for the travelers whose travel purposes are shopping and eco-tourism. The score of reliability orientation is high for the travelers whose travel purposes are eco-tourism and low for shopping. The score of my-way orientation is high for the travelers whose travel purposes are shopping, history/culture/city tourism, eco-tourism, and nature tourism. The score of outdoor orientation is high for the travelers whose travel purposes are eco-tourism, sports tourism, and nature tourism. The score of used/rental orientation is high for the travelers whose travel purpose is eco-tourism. The score of night-time orientation is high for the travelers whose travel purpose is high for theme park/events and lowest for shopping.

Considering Figure 10 from the perspective of what the values attained through the travel, we can gain insights into the orientations of tourists who prefer different types of travel. For example, those who enjoy nature tourism tend to be my-way and outdoor oriented. It may be that one reason people choose nature tourism is that it enables travelers to plan their unique and original travel.

History/culture/city tourism appears to be unrelated to orientation, suggesting that it appeals to people of various orientations. For example, visiting historical and cultural cities is enjoyed both by people who are highly attracted to luxury brands and people who are less interested in luxury brands. This suggests that history/culture/city tourism is potentially attractive to a great many people. The relatively high travel purpose value of history/culture/city tourism for tourists with a my-way orientation suggests that history/culture/city tourism providers can appeal to such tourists with travel plans that are highly customized to match individual tastes.

It is notable that travelers who like theme park/events tend to be luxury brand oriented. The value created by theme park/events and tourism is experience value. Experience value is created from various emotional experiences that are sought by tourists. Pine and Gilmore (2005) name Entertainment, Education, Esthetic, and Escapist as the “4 Es” that create experience value. These elements are all provided by theme parks events, and luxury brand oriented tourists are thought to be particularly able to enjoy such elements. For example, it is believed that appreciation of a theme park decorated with beautiful illumination and demand for entertainment and the extraordinary have something in common with the feeling of seeking a luxury brand.

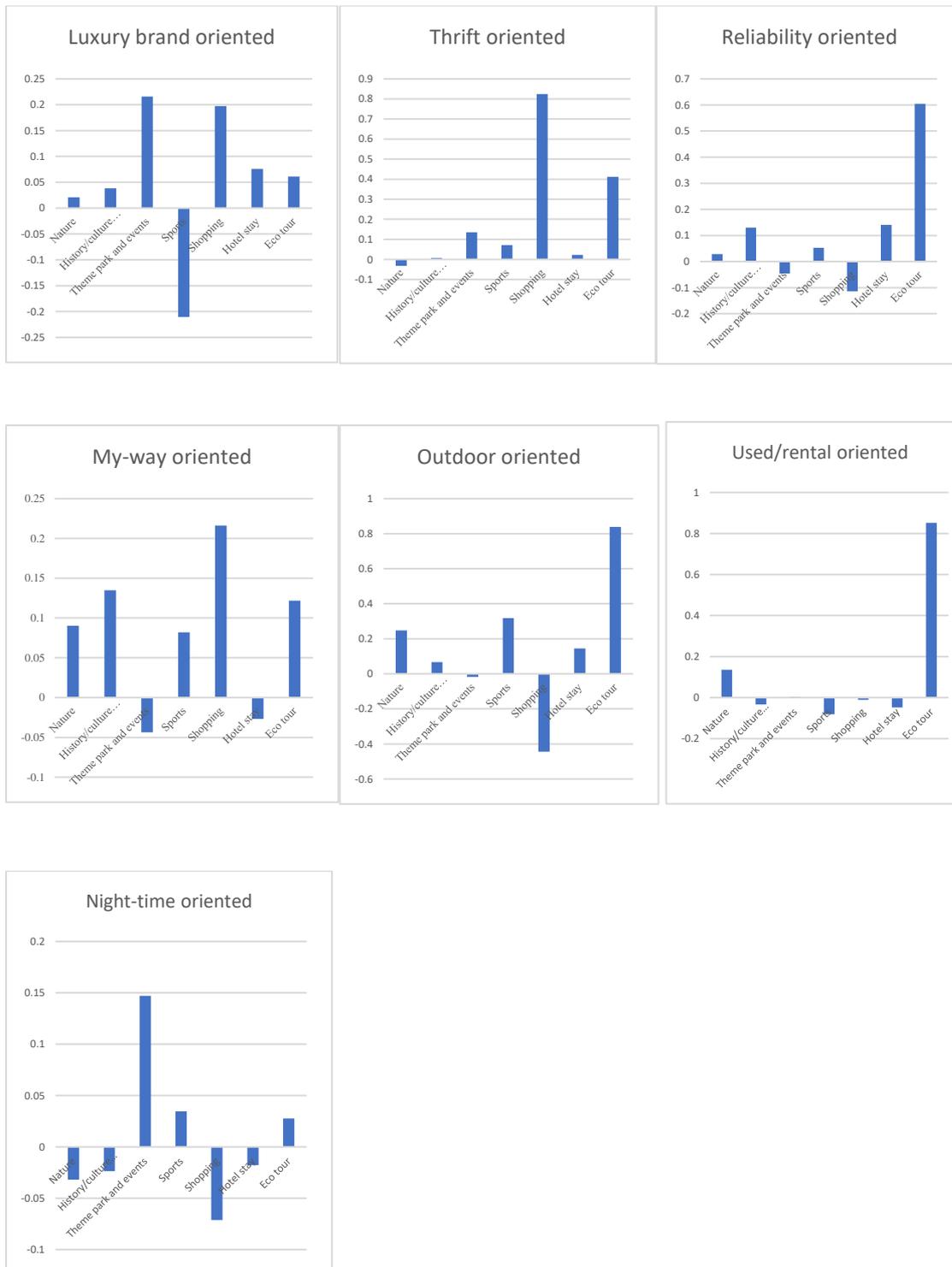
Sports tourism preference and luxury brand orientation, on the other hand, are strongly negatively related. Intuitively, sports tourism and theme park/events would seem to be similar in that both involve many people participating in events with many other people. But the data point to a significant difference: sports tourism has a strong affinity with the outdoors, and is an active, not passive, activity. This helps explain why the more passive theme park event tourism is negatively related to my-way oriented while sports tourism is positively related to a my-way oriented.

The data show that shopping is a popular travel purpose for both luxuries brand oriented people and thrift-oriented people. While this might seem contradictory, it can be explained by the fact that shopping can have two different purposes: to buy luxury brand products, or to get something one wants at a low price. Travelers seeking luxury brand products aim to buy products that are available only at the travel destination, while travelers desiring to buy products at low prices go to destinations where prices are relatively low. The reason that my-way oriented tourists show high values for several different travel purposes is that they have a variety of preferences and tastes that require different travel plans.

Hotel/inn stay has values close to 0 for all tourist orientations, indicating an even distribution of traveler types. This suggests that the market supply of hotels and inns is structured in a way that satisfies the needs and preferences of all types of travelers.

Eco-tourism travelers tend to be strongly thrift oriented, reliability oriented, my-way oriented, outdoor oriented, and used/rental oriented, suggesting that this group includes many who have particular or unique travel preferences. The fact that the average age of eco-tourism travelers is high can be interpreted as showing that these people, as they have aged, have increasingly sought travel that matches their individual tastes and personalities, and that this has finally led them to eco-tourism.

Figure 10. Average tourist orientations by #1 travel purpose.



5. Personalized travel package design

Liu, et al. (2011) proposed Tourist-Area-Season Topic (TAST) model, which recommend the topics to the tourists conditioned on both the locations and travel seasons in travel packages. Liu et. al. developed the model by including a cocktail approach that incorporates some additional factors such as the seasonal behaviors of tourists, the prices of travel packages, and the cold start problem of new packages.

When designing a travel package, the following issues should be considered. First, some attributes such as age group and family type, the travel seasons, and the travel places should be determined. Second, topics such will be chosen for the travel package. Each package can be viewed as a mixture of a number of topics and landscapes. Finally, some additional information, such as the information about price, transportation, and accommodations, should be included.

By applying the method developed in this paper, it becomes possible to link several topics and other information such as accommodation and price. This possibly develops the TAST model. We derived some relation between the type of experiences and the type of tourist orientation in section 3.2, and the relation between the type of tourist orientation and the travel purpose in section 4.2. The information obtained from these analyses make us possible to link the optimal combination of topics, price and accommodation. For example, the travel package that contains musical concert with staying in luxury hotel in visiting city possibly attract luxury orientation tourists. The travel package that includes shopping tour could be coupled with reasonable hotel accommodation. This type of travel package would be appealing to thrift orientation tourist. Other possible utilization of our analyses would be focusing the target group of the travel package containing outdoor adventure. This package would appeal to the members of sport gym or sports club.

6. Concluding remark

In this paper, we considered the relation between travelers' orientation and travel purpose. In considering this issue, we analyzed the effects of the past and the present experiences by examining the effects of experiences on forming travelers' orientation. By this process, it becomes possible to derive various types of interpretation because orientation categories make us possible to classify the travelers in designing travel plan. It is possible to analyze the direct effects of the past and present experiences on the selection of travel purpose. This, however, is not applicable to designing travel plan because it is not easy to collect the information of travelers' experiences.

Our analysis suggests that long-run accumulation of various experiences forms travelers' orientation. This fact would be important for designing the travel promotion or educating travelers. In addition, our results could be applicable for predicting the demand for the travel packages in focusing the specific travelers' group matched with the package.

References

- Huang, S., & Hsu, C. H. (2009). Effects of travel motivation, past experience, perceived constraint, and attitude on revisit intention. *Journal of Travel Research*, 48(1), 29-44.
<https://doi.org/10.1177/0047287508328793>
- Liu, Qi, et al. (2011). "Personalized travel package recommendation." IEEE 11th International Conference on Data Mining. IEEE, 2011.
- Lyubomirsky, S., & Layous, K. (2013). How do simple positive activities increase well-being? *Current Directions in Psychological Science*, 22(1), 57-62. <https://doi.org/10.1177/0963721412469809>

- Otoo, Felix Elvis, & Kim, S. (2020). Analysis of studies on the travel motivations of senior tourists from 1980 to 2017: Progress and future directions. *Current Issues in Tourism*, 23(4), 393-417.
<https://doi.org/10.1080/13683500.2018.1540560>
- Otoo, Felix Elvis, Seongseop (Sam) Kim and Youngjoon Choi (2020). “Understanding senior tourists' preferences and characteristics based on their overseas travel motivation clusters,” *Journal of Travel and Tourism Marketing*, VOL. 37, NO. 2, 246–257,
<https://doi.org/10.1080/10548408.2020.174013610963480211012762>.
- Otoo, Felix Elvis, Hwang, Y., Kim, S., & Morrison, A. M. (2021). Understanding the Dimensionality and Underlying Nature of Senior Overseas Travel Motivations. *Journal of Hospitality & Tourism Research*, 10963480211012762.
- Pearce, P. L. (1988). *The Ulysses factor: Evaluating visitors in tourist settings*. Springer-Verlag.
- Pine, B. Joseph and James H. Gilmore, *The Experience Economy* (Harvard Business School Press, 1999).
Japanese edition: (*Shin'yaku*) *Keiken Keizai*, translated by Keiichi Okamoto and Naoko Kodaka (Diamond-sha, 2005).
- Yagi, Tadashi (2018), “Analysis of Preference Formation Using Experience Information,” *Modern Economy*, Special issue on Marketing and Strategy, Vol. 9, No. 3, pp.484-509.
- 古屋秀樹, & 全相鎮. (2014). 旅行者の志向と宿泊観光旅行との関連性分析. 土木学会論文集 D3 (土木計画学), 70(5), I_267-I_277.